

# GENERAL CATALOG 2020



SHENZHEN EVERBEST MACHINERY INDUSTRY CO., LTD. www.cem-instruments.com





# ROBUST & DURABLE STRONG OVER ANY REQUIREMENTS

For over 29 years, CEM, SHENZHEN EVERBEST MACHINERY INDUSTRY CO.,LTD has been a leading Chinese manufacturer specialized in Thermal imager, Infrared Thermometer, Digital Multimeter, Clamp-on Meter, Insulation Tester, Electrical Tester, Light Meter, Sound Level Meter, Thermo-Anemometer, Gas Detector, Manometer and Various measuring instruments.

More than 29 years of manufacturing experience has given us the confidence to guarantee the quality of all our exports. Our factory in Shenzhen China, occupies 3 buildings with area of 24,000.00 square meter. 2 R & D centers are on hand for customers' requirements, constantly working on new products to meet the ever changing demand of our customers' needs.

More than 1200 employees and five production departments ensure to provide prompt and timely delivery to our customers.

All our management is organized according to ISO9001. As a result, our products are approved by UL, GS, CE and RoHS. In 2009 CEM has passed medical ISO13485 quality certificate for medical products. In 2019, CEM SMART AIR QUALITY LABORATORY has passed CNAS audit, it is a CNAS standard testing laboratory, conforming to ISO/IEC 17025 standards.

Let Everbest 29 years of export experience work for you. Find out more about our range of products and services. For inquiries, contact us now.



# RESEARCH & DEVELOPMENT

CEM engineers constantly work on innovative new products, that combine the features and functions that our customers asking for. Two R&D centers are on hand to meet the ever changing demand of customers' needs.





## **HEAD QUARTER**

29 years of experience in the production and marketing, professional development, design and scientific management, created high-tech, high-precision instruments.

Constantly working on new products to meet the ever changing demand from our customers.



Timely after-sale service: according to the different needs and feedback of customers, CEM provide quality and technical support to ensure fast and effecient after-sale service channel. Customers' satisfaction is the most important thing for our long good business relations.

All our management is organized according to ISO9001. As a result, our products are approved by UL, GS, CE and RoHS. In 2009 CEM has passed medical ISO13485 quality certificate for medical products.









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ISO13485

ISO9001

CE0197



# MANUFACTURING PROCESS

All our management of production is organized according to ISO9001 & ISO13485. As a result, our products are approved by UL, GS, CE and RoHS.































* 608/609 Series * 8807 * 886 Series * 806 Series * 807 * 8836/8836H * MT-1/MT-2 * 8809/8809H * 8817 * 137 * Blood Pressure Monitol * BP-96/102/106 Series Video Borescope * BS-860
Professional Digital Mt * 9889 * 898/889FC Series * 9987 * 9987 * 989/988H Series * 9990 * 9998 * Professional Digital Mt

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* AT-9135	Automotive Circuit Multi-Function Tester	P385
* CF-09	Automotive Current Short Tester	P385
* 9010	Automotive Circuit Voltage Tester	P385
* AT-9995/9995E	Professional Automotive DMM with USB	P386
* TP-5 Series	Tire Pressure Gauge	P387
* AT-5	Engine Tachometer	P387
* RT-05	Automotive Relay Tester	P388
* BT-12	Battery Analyzer	P388
* AT-05A/05B	Automotive Tachometer	P388
* RT-01	Refractometer for Anti-freeze & Battery Fluid testing	P388

377-388

277-376



Accessories

389-398

#### DT-9898/988 series Professional Thermal Imagers

P<sub>15/23</sub>



640x480 High Performance Thermal Imager with 3.5" high resolution TFT color LCD display

Built-in laser distance function

Capacitive touch screen is easier, productive and effective to operate it

Powerful Auto Fusion mode(AUF)
USB-mini, data transform between camera and PC
WiFi real time share, free Cloud storage and analyse

## T-50F Series Portable thermal camera







## Professional Thermal Imagers plus application

## P99/157/101/207



DT-9581 Professional AC/DC True RMS Clamp Meters with 80x80 InfraRed Thermal Imager DT-9889 Professional True RMS Industrial Multimeter with InfraRed Thermal Imager DT-898FC True RMS Compact Multimeter with InfraRed Thermal Imager DT-6509 3 in 1 Professional Insulation Tester with Thermal Imager & Micro-ohm meter

#### T-70/71/72

Handheld Thermal Vision Monocular

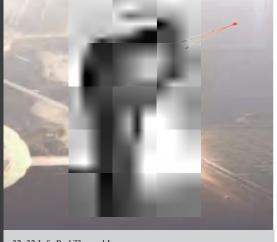




384x288 focal plane array (FPA), uncooled microbolometer with Wi-Fi connectivity 50Hz image frequency and Focus free

USB-micro, data transform between camera and PC

## DT-9868H Professional 32 x32 InfraRed Imager Thermometer



32x32 InfraRed Thermal Imager Infrared Thermal Temperature Range -20°C  $\sim 600^{\circ}C$ 2 million pixel video camera Single point infrared temperature Range -50°C  $\sim 1000^{\circ}C$ 

Wide Field of View

320x240 Thermal Sensor

Durable, withstand up to a 2m drop

WiFi real time share, free Cloud storage and analyse

#### DT-7760/7761 Three-phase Power Quality Analyzer with InfraRed Thermal Imager

P<sub>201</sub>



the best in power quality analysis and the ability to monetarily quantify energy losses.

arge 240x320 3.5"RGB color 6000 counts LCD display

AC, AC+DC true-RMS measurements & 1kHz ACV.

Lock power on function for hands-free operation

DT-6508B

**Professional Insulation Tester** 

P<sub>209</sub>

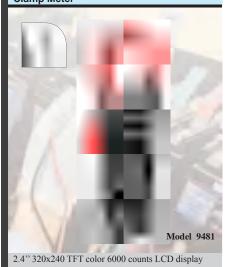
Analyzer with InfraRed Thermal Imager offers

Bluetooth (BLE) instant share function Power inverter efficiency PowerWave data capture Waveform capture Automatic Transient Mode

Troubleshoot Automatic Trending System-Monitor Logger function View graphs and generate reports

#### P<sub>157</sub> DT-9481 Professional 1500V AC/DC True RMS **Clamp Meter**

Fully Class-A compliant



1500V AC/DC True RMS Clamp Meter Flexible current probe (320B/320BS optional) expands the measurement range to 3000 ACA Peak capture as fast as 500µS & Inrush current

#### P<sub>127</sub> **DT-927** Compact True RMS Multimeter with **Battery test**



True RMS Autoranging measurement Data Hold/REL measurement 1.5V and 9V battery test Drop test up to 2 meters

## Professional AC, AC/DC True RMS Clamp Meters + NCV with Bluetooth

## P171/159/161/175



#### 3369T-BT

6000 Counts digital display with 60 segments analog bar True RMS measurement Inrush current & Peak Voltage function

1.8"TFT color LCD display counts AC True RMS 100mS Inrush current Low input impedance prevents false

readings due to "ghost voltage" (LoZ)

9382 Series:

9282 Series: OLED display Low pass filter (VFD) 100mS Inrush current LoZ Voltage measurement Bluetooth interface

P237

3398 Series: CAT IV 1000V 2000A AC, AC/DC True RMS Inrush current measurement 25th harmonic THDf / THDr Low pass filter Bluetooth interface

#### DT-395/398

Bluetooth interface

P<sub>165</sub> Professional 600A AC, AC/DC True RMS Clamp Meters Built-in InfraRed Thermometers



600A True RMS Clamp Meter with IR temperature Backlight for LCD, knob Switch & Flashlight LoZ Voltage measurement AC True RMS 100ms Inrush current & ACV functon

DT-9018/9019 **Electrical Testers** 



1999 Counts LCD display(9019) Test AFCI& GFCI devices Capable of detecting a dual-open wiring fault with ultaneous open neutral and open ground wires

#### DT-9964H **Heavy Duty True RMS Industria Multimeters with VFD Measurement**



frequency drive (VFD) signals Low input impedance prevents false readings due to "ghost voltage" (LoZ) 3000A ACA flexible clamp, Peak Value

Model 320B

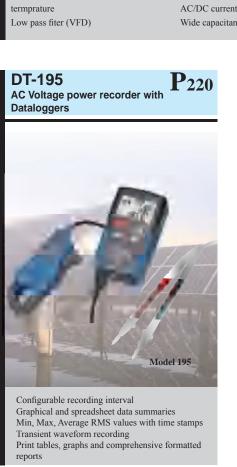
PI/DAR timed ratio tests

## P<sub>151/117/137/229</sub> **Professional Digital Multimeter** Model 9626 Model 180A Model AC-11H Model 9915H



CT-260A



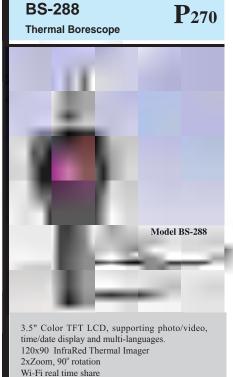














Store 10000 records of date, time, counts, relative

humidity, temperature, sample volumes, alarms etc

Bluetooth interface with Smart phone APP

DT-73S mini noise sound level meter.

DT-73L precision Light meter.









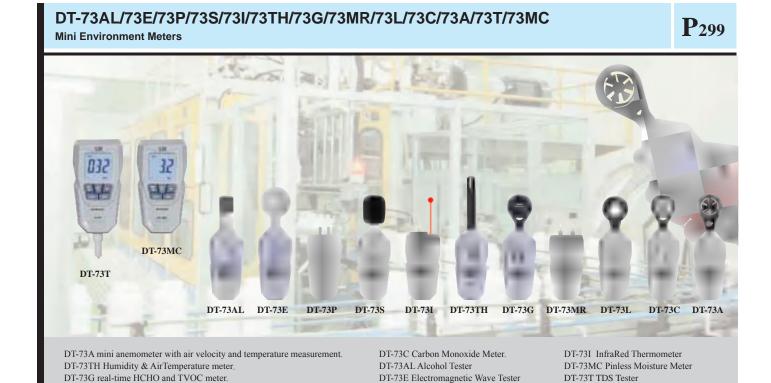




DT-93U HCHO & TVOC & temperature & humidity meter. DT-97U high-precision CO2 and CO & temperature & humidity meter.

DT-93HW is a Mini Hot Wire anemometer with temperature & humidity measurement.

DT-96 Mini Particle Counter EMF-90 Multifunction EMF Meter



DT-73P Pressure Meter

DT-73MR Moisture Meter

Bluetooth interface (Optional)









## DT-9896/9897/9898/9899

#### Professional Thermal Imagers with Laser range finding function



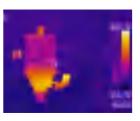


















1500°C

Temperature range up to 1500°C

640x480 3.5" capacitive touch screen



Laser distance

measurement





Wi-Fi Connectivity

50mk

NETD 50mk





Large aperture lens



Professional analyse software

5M visible light digital camera

Specifications		9896	9897	9898	9899
Imaging and optical data					
IR resolution	focal plane array (FPA), uncooled microbolometer	160x120	384x288	640x480	1024x768
Field of View (FOV)	$29.8^{\circ} \times 22.6^{\circ}$	17.3°x13°	19.7°x14.7°	18.9°x14.2°	30.2°x22.6°
Spatial resolution	(IFOV)	1.89mrad	0.89mrad	0.51mrad	0.51mrad
Thermal sensitivity/NETD	< 0.05°C @ +30°C (+86°F) / 50 mK	*	*	*	*
Image frequency	50Hz	*	*	*	*
Focus	Manual	*	*	*	*
Laser range finding function	0.05 to 30m(0.15ft to 98ft) Typically: ±2mm(±0.06in)	*	*	*	*
Image presentation					
Display	3.5" 640x480TFT, capacitive touch screen	*	*	*	*
Image modes	IR image, visual image, picture in picture, AUF, Distance	*	*	*	*
Color palettes	IRON, Rainbow, Grey, Grey Inverted, Brown, Blue-red, hot-cold, Feather, Above alarm, Below alarm, Zone alarm, vision zone	*	*	*	*
Measurement					
Object temperature range	Low range: -20°C to +150°C (-4°F to +302°F) High range: 0°C to +650°C (+32°F to +1202°F) Extend to 1500°C (2732°F) (optional)	*	*	*	*
Accuracy	$\pm 2^{\circ}$ C ( $\pm 3.6^{\circ}$ F) or $\pm 2\%$ of reading	*	*	*	*
Measurement analysis					
Emissivity adjustable	0.01~1.0 Adjustable	*	*	*	*
Automatic hot /cold detection	Auto hot or cold spotmeter marks line analyse, area analyse	*	*	*	*
Set-up					
Laser / floodlight	< class2 / white LED floodlight	*	*	*	*
Language selection	English, Chinese, French, German, Spanish	*	*	*	*
Storage of videos/images					
Storage media	16Gbytes Micro SD card	*	*	*	*
Video storage format	Standard MPEG-4, 640x480@30fps, on memory card > 60 minutes	*	*	*	*
Digital camera					
Built-in visible light digital camera	5M Pixels	*	*	*	*
Data communication interfaces					
USB interfaces	USB-micro, data transform between camera and PC	*	*	*	*
COD interfaces	remote control, live video	*	*	*	*
Wi-Fi connectivity	Wi-Fi connectivity allows to send images and data to mobile devices remote control, live video	*	*	*	*
Power system					
Battery	Lithium polymer battery, 4 hours operating time	*	*	*	*
Input voltage	DC 5V	*	*	*	*
Charging system	In camera (AC adapter)	*	*	*	*

Size(HxWxD): 268mm x 100mm x 125mm Weight: 820g

Accessories: Carrying case, 7.5mm lens, Sun Visor, Tripod base, AC charger/Power supply, Battery, software CD-ROM, Handstrap, micro SD card, USB cable & RCA cable, Gift box.

www.cem-instruments.com E-mail:cemyjm@cem-instruments.com

#### Short Wave High Temperature Thermal Imager

DB-740 Short wave thermal imager is high performance for 800-1100nm infrared image, which is for temperature measurement above 600°C. Short wave thermal imager is widely used for continuous inspection of High temperature industrial furnace, such as petrochemical industry, paper pulp & papermaking etc.

#### Features

**DB-740** 

- High resolution 640x512 pixels
- Wide Temperature Range from 600 to 2000°C targeting electrical and industrial applications
- ±2% Accuracy for reliable temperature measurement
- Thermal imaging through the glass or other transparent medium
- HDMI output
- Capacitive touch screen is easier, productive and effective to operate it
- Lithium polymer Rechargable Battery lasts >4hrs continuous use; replaceable
- High performance with built-in Linux system

Specifications	
Imaging and Optical Data	
Field of view (FOV) / Minimum focus	
distance	22°x 17.6°
Spatial resolution (IFOV)	0.6mrad
Thermal sensitivity/NETD	< 1°C @ +600°C
Image frequency	30Hz
Focus mode	Fixed
Focal length	25mm
Focal Plane Array (FPA)/ Spectral range	Wide Dynamic Range CMOS / 0.8–1.1 μm
IR resolution	$640 \times 512$ pixels
Image presentation	
Display	Capacitive Touch screen, 3.5 in. LCD, 640 × 480 pixels
Image modes	IR image
Color palettes	IRON, Rainbow, Grey, GreyInverted, Sepia, Blue_Red, Hot_Cold, Humidity
Measurement	
Object temperature range	600°C to 2000°C (1112°F to +3632°F)
Accuracy	$\pm 2^{\circ}$ C ( $\pm 3.6^{\circ}$ F) or $\pm 2\%$ of reading
Measurement Analysis	
Spotmeter	3
Line	2 lines(horizontal and vertical)
Area	3 boxes with max. /min. /average
Automatic hot /cold detection	Auto hot or cold spotmeter markers
Emissivity correction	Variable from 0.01 to 1.0
Measurement corrections	Emissivity, ambient temperature, distance, relative humidity, offset temperature
Storage of videos	
Storage media	4Gbytes Micro SD card
Video storage format	Standard MPEG-4, 640x480@30fps, on memory card >60 minutes
Video storage mode	IR/visual images; simultaneous storage of IR and visual images
Storage of images	
Image storage format	Standard JPEG, including measurement data, on memory card >1000 pictures
Image storage mode	IR images
Set-up	
Set-up commands	Local adaptation of units, language, date and time formats, information of camera
Languages	multinational
Data communication interfaces	
Interfaces	USB-mini, audio, HDMI video, Micro SD slot
USB	Data transform between camera and PC
Video out	HDMI
Power system	
Battery	lithium polymer battery, 4.5 hours operating time
Input voltage	DC 9V to 12V
Charging system	In camera (AC adapter)
Power management	Automatic shutdown and sleep mode (user selectable)



Weight: 920g

Accessories: Lens, Battery, software, USB cable, Gift box.









EN: 61326-1 EN: 61010-1 The Thermal Imager is designed for Non-contact detection and calculation of apparent surface tempera-







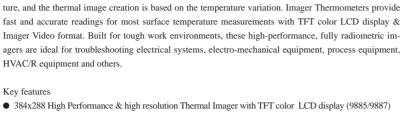
Wi-Fi Connectivity/ **Bluetooth Communication** 







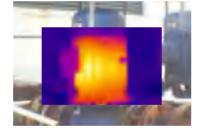
38mm Lens 22mm Lens **RL-38 RL-22** 



- 160x120 High Performance Thermal Imager with high resolution TFT color LCD display (9873 Series)
- Professional IR-optical focus system ensures that images are in good focus for optimum image clarity and scanning convenience.
- Capture additional measurements fast and conveniently with wireless modules (9887 only)
- Meterbox analysis system—quickly identify and keep track of inspection locations by adding digital images of important information and surrounding areas
- Find problems faster and easier with accurately identify potential issues by combining digital and IR images
- Picture in Picture function Displays thermal image super-imposed over a digital image
- LED Flashlight allows the visual camera and fusion to be used in poorly lit environments
- Wide Temperature Range from -20 to +400°C targeting electrical and industrial applications
- ±2% Accuracy for reliable temperature measurement
- The image rotation has the ability to automatically rotate the active image
- Audio recorded with the video image acts a speaker to listen to audio recorded with the
- Capacitive touch screen is easier, productive and effective to operate it
- Lithium polymer Rechargable Battery lasts >4hrs continuous use; replaceable
- An easy-to-access thumbnail image gallery helps you to quickly review and find your thermal images.
- Area (Min/Max) mode shows the Minumum or the Maximum Temperature reading in the selected area
- A conveniently located button activates the laser pointer that will help you associate the hot or cold spot in the thermal image with the real physical target in the field.
- In order to adapt the device to every situation, both wide angle and tele-lenses are available.
- Equipped with standard video, USB outputs as well as a removable SD card.
- The IR video can be streamed to a PC via USB or wifi (DT-9887 only).



Full Infrared



Picture-in-Picture







Full visible light

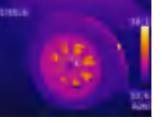


**Size(HxWxD):** 243mm x 103mm x 160mm **Weight:** 920g Accessories: Hard transport case, 22mm lens, Sun Visor, Tripod base, AC charger/Power supply, Battery, Camera lens cap, software CD-ROM, Handstrap, micro SD card, USB cable & RCA cable, Gift box.

Specifications		9871	9873B	9873	9875	9877	9885	9887
Imaging and optical data								
IR resolution	160x120pixels, focal plane array (FPA), uncooled microbolometer	80x80	*	*	*	*	384x	288
Field of View (FOV)	29.8° × 22.6°	17°x17°	*	*	*	*	24.6°x	
Minimum focus distance	0.2m (0.66ft.)	0.3m (0.99ft.)	*	*	*	*	*	*
Spatial resolution	(IFOV) 3.33 mrad	3.78mrad	*	*	*	*	2.28 1	mrad
Thermal sensitivity/NETD	< 0.08°C @ +30°C (+86°F) / 80 mK	< 0.1°C	*	*	*	*	*	*
Image frequency	50Hz	*	*	*	*	*	*	*
Focus	Manual	*	*	*	*	*	*	*
Zoom	1-20x continuous, digital zoom	*	*	*	*	*	32x	32x
Rotate	0-360°, continuous change by 1°	*	*	*	*	*	*	*
Image presentation								
Display	3.5" TFT, capacitive touch screen	*	*	*	*	*	*	*
Image modes	IR image, visual image, picture in picture	IR image		*	*	*	*	*
Picture in Picture	IR area on visual image or visual image area on IR	None	-	*	*	*	*	*
Color palettes	GRAY/GRAY IRON/IRON/RAINBOW/FEATHER	*	*	*	*	*	*	*
Measurement	GRAT/GRAT IKOTVIKOTVKATIVDOW/I EATTEK							
	Low range: -20°C to +150°C (-4°F to +302°F)							
Object temperature range	High range: 0°C to +400°C (+32°F to +752°F)	*	*	*	*	*	*	*
Accuracy	$\pm 2^{\circ}$ C ( $\pm 3.6^{\circ}$ F) or $\pm 2\%$ of reading	*	*	*	*	*	*	*
Measurement analysis	, , ,							
Spotmeter	3	*	*	*	*	*	*	*
Emissivity adjustable	0.01~1.0 Adjustable	*	*	*	*	*	*	*
Emissivity table	Emissivity table of predefined materials	*	*	*	*	*	*	*
Line	2 lines(horizontal and vertical)	None		*	*	*	*	*
Area	3 boxes with max. /min. /average	None		*	*	*	*	*
Automatic hot /cold detection	Auto hot or cold spotmeter marks	*	*	*	*	*	*	*
Isotherm	Detect high/low temperature/interval	None		*	*	*	*	*
Measurement corrections	Emissivity, ambient temperature, distance, relative humidity, offset temperature	*	*	*	*	*	*	*
Set-up								
Laser / floodlight	< class2 / white LED floodlight	None		*	*	*	*	*
Set-up commands	Local adaptation of units, language, date and time formats, information of camera	*	*	*	*	*	*	*
Language selection	English, Chinese, French, German, Spanish	*	*	*	*	*	*	*
Storage of videos/images								
Storage media	4Gbytes Micro SD card	*	*	*	*	*	*	*
Video storage format	Standard MPEG-4, 640x480@30fps, on memory card > 60 minutes	*	*	*	*	*	*	*
Image storage format	Standard JPEG, including measurement data, on memory card $>$ 1000 pictures	*	*	*	*	*	*	*
Storage mode	IR/visual images; simultaneous storage of IR and visual images	IR image	only	*	*	*	*	*
Digital camera								
Built-in visible light digital camera	640x480 Pixels	None		*	*	*	*	*
Data communication interfaces								
Tion: c	USB-mini, data transform between camera and PC	*	*	*	*	*	*	*
USB interfaces	remote control, live video		None			*	*	*
Wi-Fi connectivity	Wi-Fi connectivity allows to send images and data to mobile devices remote control, live video	None			*	*	*	
Video out	Composite(PAL and NTSC)	*	*	*	*	*	*	*
Power system								
Battery	Lithium polymer battery, 4 hours operating time	*	*	*	*	*	*	*
Input voltage	DC 9V to 12V	*	*	*	*	*	*	*
Charging system	In camera (AC adapter)	*	*	*	*	*	*	*
Power management	Automatic shutdown and sleep mode (user selectable)	*	*	*	*	*	*	*
Environmental data								
Encapsulation Encapsulation	IP65	*	*	*	*	*	*	*
Drop test	2m	*	*	*	*	*	*	*













988 Series new generation High Performance Thermal Imagers are compact design with powerful Auto Fusion mode(AUF), AUF is a dynamic image enhancement-algorithm for infrared cameras. 988 Series are esay to help you to find the potential problems with innovation features and powerful Apps.

#### **Key features**

- 384x288 High Performance Thermal Imager with high resolution TFT color LCD display (9887)
- 3.5" 640x480 big brilliant touch screen, a clear view from any angle.
- Capture additional measurements fast and conveniently with wireless modules
- Find problems faster and easier with accurately identify potential issues by combining digital and IR images
- Image fusion function displays thermal image super-imposed over a digital
- An easy-to-access thumbnail image gallery helps you to quickly review and find your thermal images.
- Powerful Auto Fusion mode(AUF)
- Equipped with standard video, USB outputs as well as a removable SD card.



DT-987/988/9886/9887











640x480 3.5" capacitive touch screen

Auto Fusion mode (AUF)

Wi-Fi Connectivity

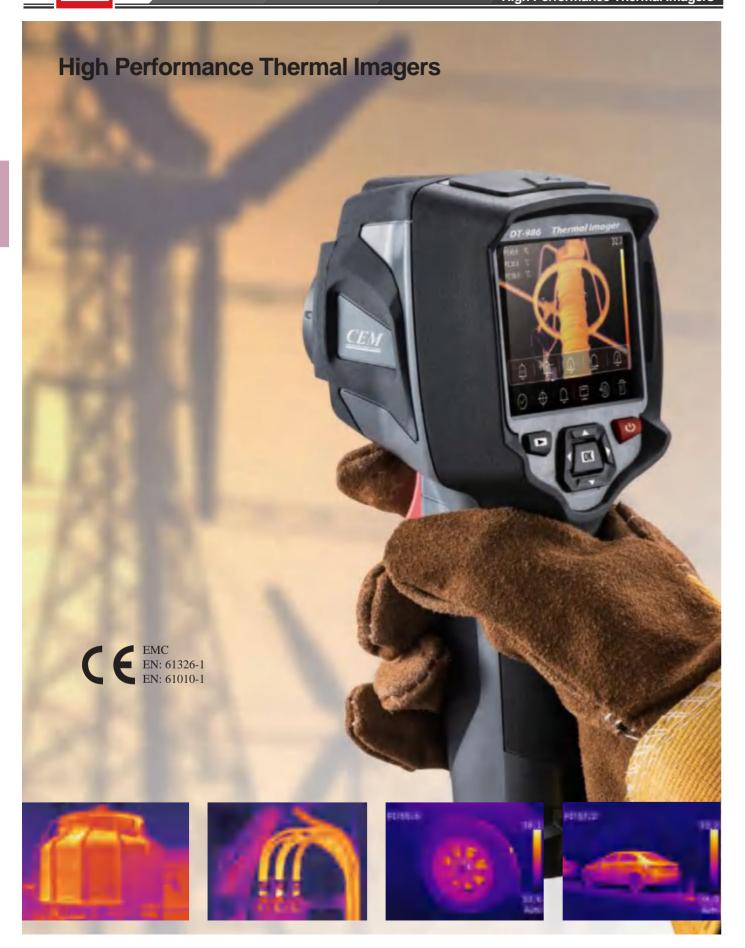
650°C temperature 2M visible light digital range

IP54

Specifications		987	988	9886	9887
Imaging and optical data					
IR resolution	Focal plane array (FPA), uncooled microbolometer	160x120	160x120	256x192	384x288
Field of View (FOV)	$29.8^{\circ} \times 22.6^{\circ}$	21°x15.6°	20.7°x15.6°	40.2°x30.1°	41.5°x31.1°
Spatial resolution	(IFOV)	2.26mrad	1.88mrad	2.74mrad	1.89mrad
Thermal sensitivity/NETD	< 0.05°C @ $+30$ °C ( $+86$ °F) $/ 50$ mK	*	*	*	*
Image frequency	50Hz	25Hz	*	*	*
Focus	Manual	*	*	*	*
Image presentation					
Display	3.5" 640x480 touch screen	*	*	*	*
Image modes	IR image, visual image, picture in picture, AUF	*	*	*	*
Color palettes	IRON, Rainbow, Grey, Grey Inverted, Brown, Blue-red, hot-cold, Feather	*	*	*	*
Measurement					
Object temperature range	Low range: -20°C to +150°C (-4°F to +302°F) High range: 0°C to +650°C (+32°F to +1202°F)		*	*	*
	$0^{\circ}\text{C}$ to $+450^{\circ}\text{C}$ (+32°F to $+842^{\circ}\text{F}$ )	*			
Accuracy	$\pm 2$ °C ( $\pm 3.6$ °F) or $\pm 2\%$ of reading	*	*	*	*
Set-up					
Set-up commands	Local adaptation of units, language, date and time formats, information of camera	*	*	*	*
Language selection	English, Chinese, French, German, Spanish	*	*	*	*
Storage of videos/images					
Storage media	4Gbytes eMMC	*	*	*	*
Video storage format	Standard MPEG-4, 640x480@30fps, on memory card > 60 minutes	*	*	*	*
Digital camera					
Built-in visible light digital camera	2M Pixels	*	*	*	*
Data communication interfaces					
USB interfaces	USB-micro, data transform between camera and PC	*	*	*	*
USB interfaces	Remote control, live video	*	*	*	*
Wi-Fi connectivity	Wi-Fi connectivity allows to send images and data to mobile devices remote control, live video	*	*	*	*
Power system					
Battery	Lithium polymer battery, 4 hours operating time	*	*	*	*
Input voltage	DC 5V	*	*	*	*
Charging system	In camera (AC adapter)	*	*	*	*

Size(HxWxD): 228mm x 100mm x 98mm Weight: 520g

Accessories: Hard transport case, 7.5mm lens, Tripod base, AC charger/Power supply, Battery, software CD-ROM, Handstrap, micro SD card, USB cable & RCA cable, Gift box.



#### Key features

- 320x240 High Performance Thermal Imager with high resolution TFT screen (986S)
- Smart design with big screen occupation ratio
- Capture additional measurements fastly and conveniently with wireless modules
- Find problems faster and easier and accurately identify potential issues by combining digital
- Image fusion function displays thermal image super-imposed over a digital image and easyto-access thumbnail image gallery helps you to quickly review and find your thermal images.
- Powerful Auto Fusion mode(AUF)
- Equipped with standard video, USB outputs as well as a removable SD card.
- · Realtime analyse and picture analyse function





Specifications		983	984	985A	986	986S
Imaging and optical data						
IR resolution	Focal plane array (FPA), uncooled microbolometer	80x80	120x90	256x192	220x160	320x240
Field of View (FOV)		21°x21°	50°x38°	80.4°x60.3°	36°x27°	36°x27°
Spatial resolution	(IFOV)	4.53mrad	2.74mrad	5.48mrad	3mrad	3mrad
Thermal sensitivity/NETD	< 0.05°C @ +30°C/(+86°F) < 0.1°C/100mK	*	*	*	*	*
Image frequency	9Hz	*	*	*	*	*
Focus	Focus free	*	*	*	*	*
Image presentation						
Display	3.5" 640x480 touch screen	*	*	*	*	*
Image modes	IR image, visual image, picture in picture, AUF	*	*	*	*	*
Color palettes	IRON, Rainbow, Grey, Grey Inverted, Brown, Bluered, hot-cold, Feather	*	*	*	*	*
Measurement						
Object temperature range	Low range: -20°C to +330°C (-4°F to +302°F)	*	*	*	*	*
Accuracy	±5°C (±3.6°F) or ±3% of reading	*	*	*	*	*
Measurement analysis						
Emissivity adjustable	0.01~1.0 Adjustable	*	*	*	炒	*
Automatic hot /cold detection	Auto hot or cold spotmeter marks	*	*	*	*	*
Set-up						
Laser / floodlight	< class2 / white LED floodlight	*	*	*	*	*
Language selection	English, Chinese, French, German, Spanish	*	*	*	*	*
Storage of videos/images						
Storage media	4Gbytes eMMC	*	*	*	*	*
Video storage format	Standard MPEG-4, 640x480@30fps, on memory card > 60 minutes	*	*	*	*	*
Image storage format	Standard JPEG, including measurement data, on memory card > 1000 pictures	*	*	*	*	*
Storage mode	IR/visual images; simultaneous storage of IR and visual images	*	*	*	*	*
Digital camera						
Built-in visible light digital camera	2M Pixels	*	*	*	*	*
Data communication interfac	es					
USB interfaces	USB-micro, data transform between camera and PC	*	*	*	*	*
OSD interfaces	Remote control, live video	*	*	*	*	*
Wi-Fi connectivity	Wi-Fi connectivity allows to send images and data to mobile devices remote control, live video	*	*	*	*	*
Power system						
Battery	Lithium polymer battery, 4 hours operating time	*	*	*	*	*
Input voltage	DC 5V	*	*	*	*	*
Charging system	In camera (AC adapter)	*	*	*	*	*
Power management	Automatic shutdown and sleep mode (user selectable)	*	*	*	*	*

Size(HxWxD): 228mm x 100mm x 90mm Weight: 520g

Accessories: Hard transport case, 7.5mm lens, Tripod base, AC charger/Power supply, Battery, software CD-ROM, Handstrap, micro SD card, USB cable & RCA cable, Gift box.



The Thermal Imager is designed for Non-contact detection and calculation of apparent surface temperature, fully radiometric imagers are ideal for troubleshooting electrical systems, electro-mechanical equipment, process equipment, HVAC/R equipment and others.

**Auto Fusion mode (AUF)** 80x80 pixels, FPA, uncooled microbolometer Annotate images with Voice **Picture in Picture** 32X Continuous Zoom 5 Megapixels Digital camera

HDMI High resolution video output Built-in 100M Memory for 80 pictures or one minute video record Wi-Fi connectivity
Transfers images and data to mobile devices to
share reports and critical information quickly





Probe air Temp. & %RH

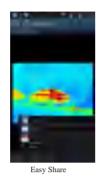


980 (80x80), 982 (160x120) Thermal Imagers are designed to make your work easier, more productive and effective. 980 series have power auto fusion mode which is a dynamic image enhancement-algorithm for infrared cameras.  $160 \times 120$  resolution at 50 Hz for real-time capture; Temperature range from  $-20^{\circ}$ C to  $650^{\circ}$ C ( $-4^{\circ}$ F to  $1202^{\circ}$ F), 32X continuous zoom, picture-in-picture, voice comment recording and text annotation on images. Hot/Cold spot marker automatically finds the hotest and coldest spots. It includes memory card, Lithium polymer battery & power supply, and USB cable. Wi-Fi connectivity allows the Infrared Thermal Camera to send images and data to mobile devices.

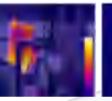


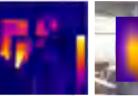














Auto Fusion mode (AUF) A dynamic image enhancement algorithm for infrared cameras Full Infrared







32X continuous 5 Megapixels APP support

Product characteristics	
High Resolution IR Images	19,200 pixels (160x120) Infrared resolution(982)
Visible Light Digital Camera	5 Megapixels Digital camera resolution with flash provides sharp images regardless of lighting conditions
Picture in Picture	Displays thermal image super-imposed over a digital image
LED Flashlight	Allows the visual camera and fusion to be used in poorly lit environments
Wide Temperature Range	From -20 to +650°C targeting electrical and industrial applications
±2% Accuracy	reliable temperature measurement
Thumbnail view	Easy to view and analyze images quickly
Audio recorded with the video image	A speaker to listen to audio recorded with the video image
Li-Ion Rechargable Battery	>4hrs continuous use; replaceable
HDMI	HDMI High resolution video output
Inside 100M Memory	About 80pictures or one minute video record
Copy to USB	Easy uploads images from camera to USB memory card
Area (Min/Max) Mode	Shows the Minumum or the Maximum Temperature reading in the selected area
Wi-Fi connectivity	Transfers images and data to mobile devices to share reports and critical information quickly (DT-980A/981B/981)
Auto Fusion mode	AUF is a dynamic image enhancement-algorithm for infrared cameras



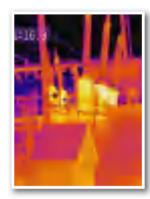
Specifications	980B	980/980H	980A	980L-8	981B	981	982/982H
Imaging and optical data							
IR resolution	80×80 pixels	80×80 pixels	80×80 pixels	80×80 pixels	120×160 pixels	120×90 pixels	160×120 pixels
Focal Plane Array (FPA) / Spectral range			Uncooled	microbolometer /	8–14 μm		
Focal length	7.5mm	9mm	9mm	19mm	7.5mm	6.2mm	9mm
Field of View (FOV)	21x21°	17x17°	17x17°	8x8°	20.7x15.6°	50x30.8°	22.6x29.8°
Minimum focus distance				0.2m			
Spatial resolution	4.53mrad	3.77mrad	3.77mrad	1.78mrad	2.26mrad	5.48mrad	3.33mrad
Thermal sensitivity/NETD				$<0.08^{\circ}C\:/80mK$			
Image frequency				50Hz			
Focus				Manual			
Zoom			1-32x	continuous, digita	l zoom		
Image presentation							
Image modes			IR image, visua	al image, picture i	n picture, AUF		
Picture in Picture			IR	area on visual ima	ige		
Color palettes			IRON/Ra	inbow/Grey/Grey	Inverted		
Measurement							
Object temperature range			0 to	o 150°C (-4 to 30 350°C (32 to 662 0 -20 to 650°C (98	°F)		
Accuracy			±2°C (±	$\pm 3.6$ °F) or $\pm 2$ % of	reading		
Measurement analysis							
Spotmeter			Center Sp	ot,Auto hot or col	d markers		
Set-up							
Language selection			English, Chi	nese, French, Ger	man, Spanish		
Storage of videos/images							
Inside Memory / Storage media		100M by	tes, 80pictures or	one minute video	record / 8G Micro	SD card	
Video storage format		Standar	d MPEG-4, 1280x	960@30fps, on m	nemory card > 60 n	ninutes	
Image storage format		Standard JPI	EG, including mea	surement data, on	memory card > 10	000 pictures	
Digital camera							
Built-in visible light digital camera	No		5Megapixels; 59°		2Megapi	xels; 61°	5Megapixels; 59°
Data communication interfaces							
Interfaces & Video output			USE	B-micro, audio, HI	OMI		
USB		Data &	Live video transfe	orm between came	era and PC or smar	tphone	
WIFI							
Live video between device and PC	No	No	Yes	No	Yes	Yes	No
Transfer images and data to mobile devices	No	No	Yes	No	Yes	Yes	No
Power system							
Battery / Input voltage / Laser		I	i-ion battery, 4 ho	urs operating time	e / DC 5V / < 1mW		
- may an ronage / Daser	Li-ion battery, 4 hours operating time / DC 5V / < 1mW						

Size(HxWxD): 224mm x 77mm x 96mm Weight: 500g

Accessories: Lens, Earphone(Optional), Battery, software CD-ROM, Wrist strap, micro SD card, Adaptor, USB cable & HDMI cable (Optional), Gift box.



890 (120x90), 892(160x120) Thermal Imagers are designed to make your work easier, more productive and effective.  $160x120 \ resolution \ at \ 50 \ Hz \ for \ real-time \ capture; Temperature \ range \ from \ -20^{\circ}C \ to \ 450^{\circ}C \ (-4^{\circ}F \ to \ 842^{\circ}F). \ Hot/Cold \ spotential \ for \ real-time \ capture; Temperature \ range \ from \ -20^{\circ}C \ to \ 450^{\circ}C \ (-4^{\circ}F \ to \ 842^{\circ}F). \ Hot/Cold \ spotential \ for \ real-time \ capture; Temperature \ range \ from \ -20^{\circ}C \ to \ 450^{\circ}C \ (-4^{\circ}F \ to \ 842^{\circ}F).$ marker automatically finds the hotest and coldest spots. It includes memory card, Lithium polymer battery & power supply, and USB cable. Bluetooth connectivity allows the Infrared Thermal Camera to send data to mobile devices.

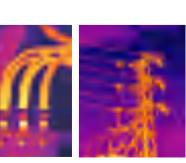






Specifications		890	892
Imaging and Optical Data			
Field of View		21x21	31x23
Spatial Resolution	4.53mrad	*	3.33mrad
NETD	<0.1°C@30°C(80°F)/100mK	*	*
Image Frequency	50Hz	*	*
Focus Mode	Focus free	*	*
Focal Plane Array(FPA)/Spectral Range	Uncooled microbolometer/8-14um	*	*
IR Resolution		120x90	160x120
Image Presentation			
Display	2" TFT LCD, 240x320 pixels	*	*
Color Palettes	IRON, RainBow, Grey, GreyInverted	*	*
Measurement			
Object Temperature Range	-20°C to 450°C (-4°F to 842°F)	*	*
Accuracy	±2°C(+/- 3.6°F) or ±2% of reading	*	*
Measurement Analysis			
Spotmeter	Center Spot	*	*
Automatic Hot/Cold Detection	Auto hot or cold markers	*	*
Emissivity Correction	8 pre-define level and Variable from 0.01 to 1.0	*	*
Storage of Images		*	*
Storage Media	8 Gbytes Micro SD card	*	*
Image Storage format	Bitmap(BMP),including measurement data.	*	*
Data Communication Interfaces			
Interfaces	USB-micro, Data transform between camera and PC	*	*
Bluetooth		*	*
Power System			
Battery	Li-ion battery, 8 hours operting time	*	*
Input Voltage	DC 5V	*	*
Charging System	In camera(AC adapter)	*	*
Power Management	Automatic shutdown	*	*
Environmental Data			
Operating Temperature Range	-20°C to 50°C (-4°F to 122°F)	*	*
Storage Temperature Range	-40°C to 70°C (-40°F to 158°F)	*	*
Humidity(operating and storage)	10% to 90%	*	*
Drop test	2m	*	*





Size(HxWxD): 180mm x 58mm x 70mm

Weight: 480g

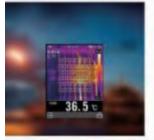
Accessories: Lens, Battery, software

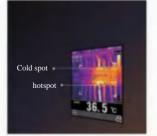
CD-ROM, Wrist strap, micro SD card, Adaptor,

USB cable, Gift box.

Model: 892













Cold spot hotspot automatic capture

Bluetooth transfer data in real time

Imported high quality sensors



Specifications		871	870	870L-8
Imaging and Optical Data				
Field of View	21x 21°	50x38°	*	8x8°
Spatial Resolution	4.53mrad	5.4mrad	*	1.79mrad
NETD	<0.1°C@30°C(80°F)/100mK	*	*	*
Image Frequency	50Hz	*	*	*
Focus Mode	Focus free	*	*	*
Focal Plane Array(FPA) Spectral Range	Uncooled microbolometer/8-14um	*	*	*
IR Resolution		120x90	80x80	80x80
Image Presentation				
Display	2" TFT LCD, 240x320 pixels	*	*	*
Color Palettes	IRON, RainBow, Grey, GreyInverted	*	*	*
Measurement				
Object Temperature Range	-20°C to 380°C (-4°F to 716°F)	*	*	*
Accuracy	+/- 2°C(+/- 3.6°F) or +/-2% of reading	*	*	*
Measurement Analysis				
Spotmeter	Center Spot	*	*	*
Automatic Hot/Cold Detection	Auto hot or cold markers		*	*
Emissivity Correction	8 pre-define level and Variable from 0.01 to 1.0	*	*	
Storage of Images		*	*	*
Image Storage format	Bitmap(BMP),including measurement data.		*	*
Data Communication Interfaces				
Bluetooth		*	*	*
Power System				
Battery	Li-ion battery, 4 hours operating time	*	*	*
Input Voltage	DC 5V	*	*	*
Charging System	In camera(AC adapter)	*	*	*
Power Management	Automatic shutdown	*	*	*
Environmental Data				
Operting Temperature Range	-20°C to 50°C (-4°F to 122°F)	*	*	*
Storage Temperature Range	-40°C to 70°C (-40°F to 158°F)	*	*	*
Humidity(operating and storage)	10% to 90%	*	*	*
Drop test	2m	*	*	*

Size(HxWxD): 175mm x 58mm x 70mm Weight: 450g

Accessories: Battery, APP software, Adaptor, Carrying case, USB cable, Gift box.

T-70/71/72 Handheld Thermal Vision Monucular provide clear images with high IR resolution, easy access to new features such as

T-71

160x120

< 0.05°C @ +30°C (+86°F) / 50 mK

< class2 / white LED floodlight

formats, information of camera

memory card > 1000 pictures

Remote control, live video

Data transform between camera and PC

29.8°x22.6°

video & image recording. WIFI connectivity offer video & image real time share to smartphone/tablet .

T-70

80x80

 $8x8^{\circ}$ 

50Hz

19mm F1.0

1.44" 640x480 EVF

4Gbytes eMMC

## T-70/71/72

Imaging and optical data

Thermal sensitivity/NETD

IR resolution

Field of View (FOV)

Spatial resolution

Image frequency

Image presentation

Len

Display

Set-up

Color palettes

Laser / floodlight

Set-up commands

Language selection Storage of videos/images

Video storage format

Image storage format

Data communication interfaces

Storage media

USB interface

Wi-Fi connectivity











Flashlight with thermal imager, phone function, Bluetooth and WIFI to smartphone/tablet .





NO. Group

Specifications	
Imaging and optical data	a
IR resolution	205x156 focal plane array (FPA), uncooled microbolometer
Field of View (FOV)	36°x27°
Spatial resolution	3mrad (IFOV)
Thermal sensitivity/NETD	< 0.05°C @ +30°C (+86°F) / 50 mK
Image frequency	9Hz
Focus	Focus free
Image presentation	
Display	2.4" 320x240 TFT
Image modes	IR image, visual image, picture in picture, AUF
Color palettes	GRAY/GRAY IRON/IRON/RAINBOW/FEATHER
Measurement	
Object temperature range	Low range: -20°C to +330°C (-4°F to +302°F)
Accuracy	$\pm 5^{\circ}$ C ( $\pm 3.6^{\circ}$ F) or $\pm 3\%$ of reading
Storage of videos/image	es
Storage media	4Gbytes eMMC
Video storage format	Standard MPEG-4, 640x480@30fps, on memory card > 60 minutes
Image storage format	Standard JPEG, including measurement data, on memory card > 1000 pictures
Storage mode	IR/visual images; simultaneous storage of IR and visual images
Digital camera	
Built-in visible light digital camera	2M Pixels
Data communication int	erfaces
USB interfaces	USB-micro, data transform between camera and PC
USD IIICHACES	remote control, live video
Wi-Fi connectivity	Wi-Fi connectivity allows to send images and data to mobile devices remote control, live video

Size(HxWxD): 75 x75 x 258mm Weight: 547g Accessories: Infrared camera with lens, CVBS cable, Gift box.



number Specifications

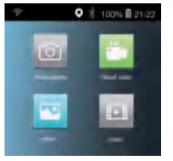






Weight: 370g





EMC

EN: 61326-1

EN: 61010-1



Portable thermal camera

T-09F/10/15F/20/25





The 3.5"640x480 touchscreen LCD offers Auto Fusion function to blend a visible image with an infrared image to more easily locate problems. It can scan the asset's QR code or barcode, help classifying the thermal images into predefined folders.with WiFi function, you can transfer realtime thermal video or images to the smart phone, easily analyse, report and share.

Model T-50F



**EMC** EN: 61326-1 EN: 61010-1



QR Code Scan

640x480 3.5"

capacitive touch screen



Auto Fusion mode (AUF)





Wi-Fi Connectivity

Electrical inspection



Specifications							
	T-50F	T-60F	T-55	T-65F	T-68		
IR resolution	120x90	160x120	206x156	256x192	320x240		
Image frequency	25Hz	25Hz	9Hz	25Hz	9Hz		
Pixel size	17μm	17μm	12μm	17μm	12μm		
Field of view (FOV) / Minimum focus distance	50°x38°/0.5m	34°x23°/0.5m	36°x23°/0.5m	80°x60°/0.5m	36°x23°/0.5m		
Object temperature range	-20°C to 150°C (-4°F to 302°F)	-20°C to 150°C (-4°F to 302°F)		-20°C to 400°C (-4°F to 752°F)			
Object temperature range	0°C to 400°C (32°F to 752°F)	0°C to 400°C (32°F to 7522°F)					
Built-in digital camera	2M						
Display	3.5" 640x480 Cap	pacitive touch scree	n				
Image modes	IR image, Visual	image, Picture in pi	cture, Auto fusion				
Color palettes		IRON, Rainbow, Grey, Grey Inverted, Brown, Blue-red, hot-cold, Feather, Above alarm, Below alarm, Zone alarm, vision zone					
Spot	Center Spot, Thre	e manual spots					
Automatic hot/cold detection	Auto hot or cold i	Auto hot or cold markers					
Area	Three areas analy	Three areas analyse					
Storage media	3.4GB internal El	3.4GB internal EMMC					
Video storage format	Standard MPEG-4	Standard MPEG-4 encode, 640x480@30fps, on memory card					
Image storage format	Standard JPEG,or card >6000 pictu						
Interfaces	USB type-C						
Wifi	802.11, transfer in						
Battery	Li-ion battery, 4 h	Li-ion battery, 4 hours operating time					

**Size(HxWxD):** 80 x 52 x 18mm

Weight: 130g

Accessories: USB cable, Gift box.

Building inspection

wilderness exploration

www.cem-instruments.com

industrial inspection

#### **Smart Thermview APP Function**

- Thermal image snap and record
- Show temperature data at real time.
- Point/Line/Area real-time analysis
- · History thermal image analysis
- Export PDF report
- · Share thermal image
- Real-time preview the results of 9 color palettes

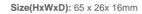


EN: 61326-1 EN: 61010-1



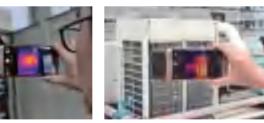
Model T-25





Weight: 80g

Accessories: Gift box.



Electrical inspection



Air conditioning inspection

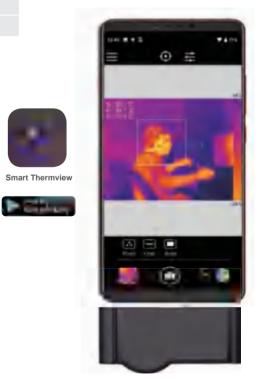


HVAC/R

Machine monitoring



Model T-10







Specifications						
	UIR80 UIR160 UIR384 UIR640					
Imaging and optical data	nd optical data					
IR Resolution	80x80	160x120	384x288	640x480		
Focal Plane Array	J	Incooled microbo	lometer/8~14um	1		
Field of View	17x17	29.8x22.6	24.6x18.6	24.6x19.8		
Focal length	9mm	7.5mm	22mm	22mm		
Spatial resolution	3.78mrad	3.33mrad	1.15mrad	0.77mrad		
NETD(@25°C,F#1.0)	<0.1°C 100mK	<0.8°C 80mK	<0.5°C 50mK	<0.5°C 50mK		
Image Frequency/ Focus		50Hz/ N	<b>I</b> anual			
Measurement						
Object temperature range	-20 to 150°C (-4 to 302°F) 0 to 350°C (32 to 662°F)					
Accuracy	$\pm 2^{\circ}$ C ( $\pm 3.6^{\circ}$ F) or $\pm 2\%$ of reading					
Image adjustment						
Color palettes	Grey/Grey Inverted/IRON/Rainbow					
Brightness & contrast adjust	Auto/manual					
Imageing Algorithm		Intelligent imag	e enhancement			
Interfaces						
Video output/ Digital output		Standard PAL/ 1	6 bit LVCMOS			
Communication interface		RS-232,UA	RT(3.3V)			
Power/ Power consumption	9~12 VDC/ <1.8W @25°C					
Options Lens						
11mm		20.6° x 15.5°	47.1°x 36.2°			
22mm	8° x 8°	10.4° x 7.8°				
33mm		6.9° x 5.2°				
38mm			14.4°x 10.8°			
Size (HxWxD)	48x48x71mm 48x48x83mm					
Weight	17	8g	19	3g		

#### DT-971S/971H/DB-640 Professional Thermal Imaging Camera

EN: 61326-1 EN: 61010-1



Model: 971S



#### **Key Features:**

- 100Mbps Ethernet:
- Composite video output, PAL or NTSC
- Standardized security interface design, using H.264 video compression protocol which is easy for system integration
- 50Hz passive infrared imaging ensure the high frame rate security monitoCircular around the clock in all kinds of
- Image enhancement feature highlights the target details, easy to achieve target surveillance and recognition;
- Precise non-contact wide temperature ranges: 600°C to 2000 °C/1112 °F to 3632 °F; (DB-640)
- High-dynamic 2D-Si-CMOS array with 640× 512 pixels (DB-640) • Spectral range 0.8 μm to 1.1 μm (DB-640)
- Specifications 971S Imaging and optical data Field of view (FOV) / Minimum focus distance 29.8°x 22.6°/0.2m 29.8°x 22.6°/0.2m 22° x 17.6° Special range 8~14 μm 8~14 μm 0.8~1.1 μm 3.33mrad 3.33mrad Spatial resolution (IFOV) 0.6mrad < 0.08°C @ +30°C < 0.08°C @ +30°C Thermal sensitivity/NETD < 1°C @ +600°C (+86°F) / 80 mK (+86°F) / 80 mK Image frequency 50Hz 30Hz Focal length 7.5mm 7.5mm 25mm IR resolution  $160 \times 120$  pixels  $160 \times 120$  pixels  $640 \times 512$  pixels −20 to +150°C −20 to +150°C 600°C to 2000°C  $(-4 \text{ to } +302^{\circ}\text{F})$  $(-4 \text{ to } +302^{\circ}\text{F})$ Object temperature range  $0 \text{ to } +400^{\circ}\text{C}$ 0 to +400°C 1112 °F to 3632 °F (32 to +752°F) (32 to +752°F)  $\pm 2^{\circ}$ C ( $\pm 3.6^{\circ}$ F) or  $\pm 2\%$  of reading 2% of reading Interfaces composite video composite(PAL and NTSC) Video out DC 9V to 12V Input voltage DC 5V Ethernet type, connector type, video streaming 100Mbps, RJ-45, H.264 Alarm output 2 relay output Options Lens 11mm (FOV=20.6°x 15.5°) 8mm (FOV=68.8°x 55°) (FOV=10.4°x 7.8°) 12mm (FOV=45.8°x 36.7°) 22mm (FOV=6.9°x 5.2°) 50mm (FOV=11°x 8.8°) 75mm (FOV=7.3°x 5.9°)

Size(HxWxD): 195 mmx115mmx83mm Accessories: Infrared camera with lens, CVBS cable, Gift box.

CAM80/CAM160/CAM384/CAM640/CAM978/CAM979 have compact structure, small size and light weight which are a solid durable product with high sensitivity, clarity images, precise measurement and flexible operation features. It can meet the demand of non-contact temperature measurement, fast fault detection and thermal field analysis in the field of industrial, electrical,

CAM979 is combined with Visual and Thermal Imaging function, provides more flexible operation

The leading end will complete all the image processing and temperature measurement then the analog video can output to a monitor directly.



CAM160

29 8x22 6°/0 2m

3.33mrad

 $< 0.1^{\circ}C / 100 mK$   $< 0.08^{\circ}C / 80 mK$   $< 0.05^{\circ}C / 50 mK$ 

7.5mm

160x120

CAM384/978

24.6°x 18.6°/

0.5m

1.14 mrad

Manual

Uncooled microbolometer / 8-14 µm

IRON, Rainbow, Grey, Grey Inverted, Sepia, Blue\_Red, Hot\_Cold, Humidity

 $\pm 2$ °C ( $\pm 3.6$ °F) or  $\pm 2$ % of reading

Composite(PAL and NTSC)

2 relay output

14.4°x 10.8°

384x288

IR image only

USB, composite video

Remote control

DC 9V to 12V

20.6° x 15.5° 47.1°x 36.2°

10.4° x 7.8°

6.9° x 5.2°

22mm

CAM640

24.6°x 19.8°/

0.3m

0.45

< 0.05°C /50mK

38mm

640x480

 $-20^{\circ}$ C to  $+150^{\circ}$ C ( $-4^{\circ}$ F to  $+302^{\circ}$ F)

0°C to +400°C (+32°F to +752°F)

CAM979

29.8°x 22.6°/ 0.2m

(+86°F) / 80 mK

< 0.08°C @ +30°C

160x120

composite video

20.6° x 15.5°

10.4° x 7.8°

6.9° x 5.2°

H.264

3 33mrad

CAM80

17x17°/0 5m

80x80

-20°C to +150°C

(-4°F to +302°F) 0°C to +350°C (+32°F to +662°F)

Imaging and optical data

Minimum focus distance

Spatial resolution (IFOV)

Thermal sensitivity/NETD

Focal Plane Array (FPA)

Object temperature range

Data communication interfaces

Ethernet type, connector type,

Size(HxWxD): 90mmx74mmx74mm

130mmx60mmx74mm(978 only)

RS485 cable, Network cable, Gift box.

Accessories: Infrared camera with lens, CVBS cable,

Field of view (FOV) /

Image frequency

Focus mode

Focal length

Spectral range

Image modes

Color palettes

Measurement

Interfaces

Video out

video streaming

Alarm output

Power system

Input voltage

Options Lens

Weight: 1000g

11mm

22mm

USB

Image presentation

IR resolution



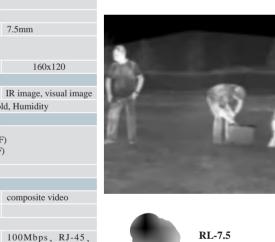
Model: 979

Model: 978



-	\pplications
-	.   -   -   -   -   -   -   -   -   -

- Buildings, factories security monitor circular;
- Border, ports, airports, railway stations and other hig visitors flow rate places monitor circular
- Warehouse fire monitor circular:
- Forest fire monitor circular.





7.5mm Lens



**RL-33** 

**RL-22** 22mm Lens

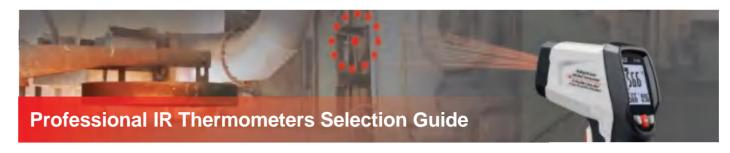




Weight: 632g

## **Non-Contact InfraRed Thermometers**







#### Professional 32\*32 pixels IR Imager Thermometer

**DT-9868S** is a Professional infrared thermal imager with visible light and 32\*32 pixels IR temperature measurement resolution. It combines the convenience of digital camera with thermal heat map at breakthrough affordability. The blended image eliminates guesswork and tells you the exact location of the issue.



## Professional IR Video Thermometers with TFT color LCD display & Camera function

**DT-9860S/9861S/9862S** Professional Infrared Video Thermometers with 2.2" color TFT LCD display & a microSD memory card for capturing Circular images(JPEG) or video(3GP) for viewing on your PC, providing fast, easy and accurate readings for most surface temperature measurements. The measurement of dewpoint will be very visiable for wet and dry proof. These serials products are with international patent and good hand for industrial measurements and data analyzing.



#### **Professional High Temperature InfraRed Thermometers**

**DT-8867H/8868H/8869H** Have widest temperature range up to 2200°C and 75: 1 high distance to target ratio measures smaller surface areas at greater distances. They have 150ms faster sampling time with 1% accuracy, providing much faster, easier and accurate readings for most surface temperature measurements with dual laser pointers.



#### **Professional InfraRed Thermometers with Dual Laser targeting**

**DT-8862** Series dual-laser IR temp gun accurately detects temperatures at far distances, and the 100-millisecond response time enables faster hot spot scanning.



## Heavy Duty Professional InfraRed Thermometers with Circular laser Targeting

**DT-835/836** Have IP54 rated for dust/water proof and 3 m (9.8 ft) drop tested, provide Hi and Lo temperature alarms for rapid display of measurements outside the limits, with Type K probe and Circular Laser Targeting, offer 150ms faster sampling time.





120x90 pixels

NETD 0.06°C Thermal sensitivity



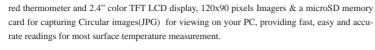


0.06°C (0.10°F)

Model: 9870H





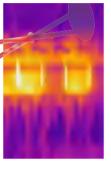


#### **Applications**

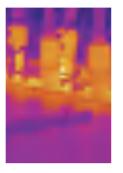
- Plant/General Maintenance
- HVAC/R
- Transportation/Automotive
- Cooling and Reheating
- Serving areas

9870H is a professional InfraRed 120 x 90 pixels imager thermometer with a single point infra-

• Food service Equipment







Features	
	9870H
IR temperature measurement resolution	120x90
2.4" TFT 320x240 Pixels color LCD display	*
Single point infrared temperature	*
Dual laser targeting	*
2 million pixel video camera	*
Image capture frequency	30Hz
Thermal sensitivity (NETD)	≤60 mK
Hot Spot and Cold Spot Tracking	*
Visual camera & images capture(JPEG)	*
Micro SD memory card	*
Date/time setup controls, adjustable emissivity & trigger lock	*
Li-ION rechargeable battery	*
USB interface to smartphone / PC.	*
Language selection: English, Chinese, French, German, Italian	*

Specifications			
Imaging and optical data			
IR resolution	120 x 90 pixels		
Thermal sensitivity (NETD)	60 mK		
Image frequency	30Hz		
Object temperature range	-20°C to 400°C (-4°F to 752°F)		
Basic accuracy	±2°C (±3.6°F) or ±2% of reading		
Field of View	50° x 38°		
Color palettes	GREY/GREY IRON/ IRON/RAINBOW		
Detector data			
Detector type	VOX microbolometer		
Spectral range	8-14µm		
Single point infrared thermometer			
Temperature range	-50°C to 1200°C (-58°F to 2192°F)		
D:S	50:1		
Basic accuracy	±1°C (±1.8°F) or ±1% of reading		
Response Time	Less than 150ms		
Emissivity adjustable	0.10~1.0 Adjustable		
Micro SD memory card	MAX. support 8GB		
Image storage format	Standard JPEG, including measurement data, on memory card > 1000 pictures		

Size(HxWxD): 125mm x 58mm x 205mm Weight: 414g Accessories: 3.7V Li battery, USB cable, Carrying case and Gift box

#### Professional 32 x32 InfraRed Imager Thermometer

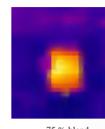
9868S is a Professional InfraRed 32x32 pixels Imager Thermometer with 2.2" color TFT LCD display, 32x32 pixels Imagers & a microSD memory card for capturing Circular images(BMP) for viewing on your PC, providing fast, easy and accurate readings for most surface temperature measurements.

9868H is an InfraRed 32x32 pixels Imager Thermometer with 2.4" color TFT LCD display, which is with Single point infrared temperature and 2 million pixel video camera.



DT-9868S/9868H





75 % blend

9868S combines the convenience of digital camera with thermal heat map at breakthrough affordability. The blended image eliminates guesswork and tells you the exact location of the issue.

Features			
	9868S	9868H	
IR temperature measurement resolution	32x32	32x32	
2 million pixel video camera		*	
640*480 pixel video camera	*		
Single point infrared temperature		*	
2.2" TFT 320x240 Pixels color LCD display	*		
2.4" TFT 320x240 Pixels color LCD display		*	
Image Capture Frequency 9Hz	*	*	
Thermal Sensitivity (NETD)	100 mK	100 mK	
Hot Spot and Cold Spot Tracking	*	*	
Visual Camera & Images Capture(BMP)	*	*	
MicroSD memory card	*	*	
Date/time setup controls, Adjustable emissivity & trigger lock	*	*	
Li-ion rechargeable battery	*	*	
USB interface to smartphone / PC.	*	*	
Language selection: English, Chinese, French, German, Italia	*	*	

Specifications	
Imaging and optical data	
Thermal sensitivity (NETD)	100 mK
Image frequency	9Hz
Detector data	
Detector type	Uncooled hyper-thin pyroelectric ceramic
Spectral range	8-14µm
IR resolution	32 x 32 pixels
Object temperature range	-20°C to 600°C (-4°F to 1112°F)
Accuracy	±2°C (±3.6°F) or ±2% of reading
Spotmeter	Center spot
Emissivity adjustable	0.10~1.0 Adjustable
Single point infrared thermor	meter
Temperature range	-50°C to 1000°C (-58°F to 1832°F) (9868H)
D:S	50:1(9868H)
Basic accuracy	$\pm 1^{\circ}$ C ( $\pm 1.8^{\circ}$ F) or $\pm 1\%$ of reading (9868H)
Response Time	Less than 150ms (9868H)
Micro SD memory card	MAX. support 8GB
Field of View	33° x 33°
Color palettes	GRAY/GRAY IRON/ IRON/RAINBOW
Image storage format	Standard BMP, including measurement data, on memory card $> 1000$ pictures

Size(HxWxD): 125mm x 58mm x 205mm Weight: 404g Accessories: 3.7V Li battery, USB cable, Carrying case and Gift box





0.10°C (0.18°F)





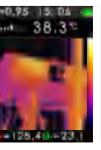
32x32 pixels

**EMC** EN: 61326-1 EN: 61010-1



Model: 9868S

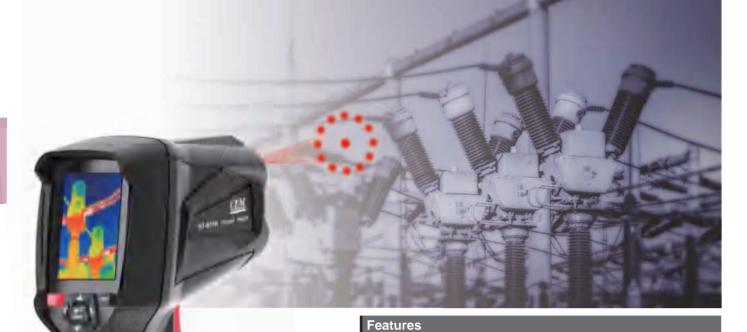






≤100 mK





		877H	876H
	IR temperature measurement resolution	120x90	32x32
	Single point infrare thermometer	*	*
	Circular laser targeting	*	*
	2.4" TFT 320x240 Pixels color LCD display	*	*
	2 million pixel video camera	*	*
	Image capture frequency	30Hz	9Hz
	Thermal sensitivity (NETD)	≤60 mK	≤100 mK
	Hot Spot and Cold Spot Tracking	*	*
	Visual camera & images capture(JPEG)	*	*
	Micro SD memory card	*	*
ity	Date/time setup controls, adjustable emissivity & trigger lock	*	*
rity	Li-ION rechargeable battery	*	*
	Optical Resolution	50:1	30:1
	USB interface	*	*
	Language selection: English, Chinese, French, German,	*	*

877H Series are Professional InfraRed 120x90 pixels Imager Thermometers with 2.4" color TFT LCD display, 120x90 pixels Imagers providing fast, easy and accurate readings for most surface temperature measurements with cloud service.

Model 877H

**EMC** 

120

х 90 IR resolution

120x90 pixels

EN: 61326-1

EN: 61010-1

**NETD** 

Thermal sensitiv 0.06°C (0.10°F)

t=0,75 L5 06 =	t=0.95 15-06 foot 38,3=	t=0//5 15 05 host 28,55
/ IN	-	1
= (20,00 = 23.2	=125,40 =23 L	=(19,10=21)

Size(HxWxD): 210mm x 60mm x 123mm

Weight: 410g

Accessories: 3.7V Li battery, USB cable, Carrying case and Gift box

Specifications			
Imaging and optical data			
Object temperature range (32x32)	-20°C to 600°C (-4°F to 11	12°F) (876H)	
Object temperature range (120x90)	-20°C to 400°C (-4°F to 75	2°F) (877H)	
Basic accuracy	±2°C (±3.6°F) or ±2% of re	eading	
Field of View	50° x 38° (877H) / 33° x 3	3°(876H)	
Color palettes	GREY/GREY IRON/ IRON/RAINBOW		
Detector data			
Datastan trina	VOX microbolometer(877H)		
Detector type	Uncooled hyper-thin pyroelectric ceramic(876H)		
Single point infrared thermometer			
	877H	876H	
Temperature range	-50°C to 800°C	-50°C to 600°C	
Temperature range	-58°F to 1472°F	(-58°F to 1112°F)	
D:S	50:1	30:1	
Basic accuracy	±1°C (±1.8°F) or ±1% of reading		
Response Time	Less than 150ms		
Emissivity adjustable	0.10~1.0 Adjustable		
Micro SD memory card	MAX. support 8GB		
Image storage format	Standard JPEG, including measurement data, on		

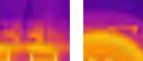
memory card > 1000 pictures

867/867B are the Professional InfraRed 32x32 pixels Imager Thermometers with 2.0" color TFT LCD display, 32x32 pixels Imagers for capturing images(BMP) for viewing on your PC, providing fast, easy and accurate readings for most surface temperature measurements.

eatures
0" TFT 320x240 Pixels color LCD display
R temperature measurement with resolution 32x32 pixels
nage Capture Frequency 7Hz
hermal Sensitivity (NETD) ≤100 mK
ot Spot and Cold Spot Tracking
isual Camera & Images Capture(BMP)
ate/time setup controls, Adjustable emissivity & trigger lock
i-ION rechargeable battery (867 only)
x "AAA" batteries (867B only)
SB interface to PC.
anguage selection: English, Chinese
254 waterproof level

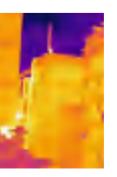
Specifications		
Imaging and optical data		
Thermal sensitivity (NETD)	$0.10^{\circ}\text{C}~(0.18^{\circ}\text{F})$ @ 1Hz and $100^{\circ}\text{C}$	
Image frequency	7Hz	
Detector data		
Detector type	Uncooled hyper-thin pyroelectric ceramic	
Spectral range	8–14μm	
IR resolution	$32 \times 32$ pixels	
Display	2.0" TFT 320x240 pixels color LCD display	
IR temperature Measurement		
Object temperature range	$-20^{\circ}\text{C}$ to $+600^{\circ}\text{C}$ ( $-4^{\circ}\text{F}$ to $+1112^{\circ}\text{F}$ )	
Accuracy	$\pm 3$ °C ( $\pm 5.4$ °F) or $\pm 2\%$ of reading	
Spotmeter	Center spot	
Emissivity adjustable	0.10~1.0 Adjustable	
Field of View	33° x 33°	
Color palettes	GREY/GREY IRON/ IRON/RAINBOW	
Image storage format	Standard BMP, including measurement data, on drivce $>$ 100 pictures	

Size(HxWxD): 175mm x 58mm x 70mm Weight: 350g Accessories: 3.7V Li battery (867), 3x "AAA" batteries (867B) ,USB cable, Carrying case and



Gift box







2.2" TFT Color LCD display

32x32 Pixels IR images



Image storage format

Cloud Server Worldwide Patent:

PCT/CN2010/000230

200910189276.8

200920261924.1

display & Imager Video format

EN: 61326

EN: 60825-1

Professional InfraRed Video Thermometers with TFT color LCD

## DT-9860S/9861S/9862S

#### Professional InfraRed Video Thermometers with TFT color LCD display & Camera function























2.2" TFT Color LCD display

9860S/9861S/9862S Series Professional Infrared Video Thermometers with 2.2" color TFT LCD display & a microSD memory card for capturing Circular images(JPEG) or video(3GP) for viewing on your PC, providing fast, easy and accurate readings for most surface temperature measurements. The measurement of dewpoint will be very visiable for wet and dry proof. These serials products are with international patent and good hand for industrial measurements and data analyzing. The user can be back in office to analyze the measured Infrared temperature readings under the support

- 2.2" Color TFT LCD and Built-in 640 x 480 Camera With a microSD card for capturing
- Dual laser indicates ideal measuring distance where the two laser points converge to a 1"
- Fast 150 millisecond response time
- Type K Thermocouple input
- Air Temperature and Relative Humidity measurement
- · Adjustable emissivity increases measurement accuracy for different surfaces
- programmed set points
- MAX/MIN/AVG/DIF functions
- USB interface
- Double molded housing

Specifications			
	9860S	9861S	9862S
IR Temp. Range	-50°C to 1000°C -58°F to 1832°F	-50°C to 1600°C -58°F to 2912°F	-50°C to 2200°C -58°F to 3992°F
Response Time	Less than 150ms		
Resolution	0.1° up 1000°, 1° ov	er 1000°	
Basic Accuracy (IR)	±1.0% of reading		
Optical Resolution	50:1 Distance to Spot size		
Emissivity Adjustable	0.10~1.0 Adjustable		
Type K Temp. Range	-50°C to 1370°C /-58°F to 2498°F		
Basic Accuracy (TK)	$\pm 0.5\%$ of reading $\pm 1^{\circ}C$		
Micro SD memory card	MAX. support 8GB		
Air Temp Range	0 to 50°C/32 to 122°F		
Air Temp Basic Accuracy	±0.5°C/1°F		
Humidity Range	0 to 100%RH		
Humidity Basic Accuracy	±2.5%RH(20%~80%RH)		
Dew Point Temp. Range	0 to 50°C/32 to 122°F		
Wet Bulb Temp. Range	0 to 50°C/32 to 122°F		

Size(HxWxD): 125mm x 58mm x 205mm

probe, USB cable, Carrying case and Gift box





#### **Features**

- images (JPEG) and video (3GP) for viewing on your PC
- target spot
- Color bargraph for viewing trends

- Adjustable High/Low set points with audible alarm alerts user when temperature exceeds the
- Trigger lock function for continuous readings
- Auto power off

Specifications					
	9860S	9861S	9862S		
IR Temp. Range	-50°C to 1000°C -58°F to 1832°F	-50°C to 1600°C -58°F to 2912°F	-50°C to 2200°C -58°F to 3992°F		
Response Time	Less than 150ms				
Resolution	0.1° up 1000°, 1° ov	er 1000°			
Basic Accuracy (IR)	±1.0% of reading				
Optical Resolution	50:1 Distance to Spot size				
Emissivity Adjustable	0.10~1.0 Adjustable				
Type K Temp. Range	-50°C to 1370°C /-58°F to 2498°F				
Basic Accuracy (TK)	$\pm 0.5\%$ of reading $\pm 1$ °C				
Micro SD memory card	MAX. support 8GB				
Air Temp Range	0 to 50°C/32 to 122°F				
Air Temp Basic Accuracy	±0.5°C/1°F				
Humidity Range	0 to 100%RH				
Humidity Basic Accuracy	±2.5%RH(20%~80%RH)				
Dew Point Temp. Range	0 to 50°C/32 to 122°F				
Wet Bulb Temp. Range	0 to 50°C/32 to 122°	PF			

Weight: 494g

Accessories: 3.7V Li battery, Type K Temp.











Upload images and videos to a PC or

laptop for further analysis or use for report

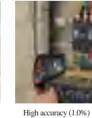


Dual laser targeting & D:S = 50:1









## **Applications**

- Plant/General Maintenance
- HVAC/R

documentation.

- Transportation/Automotive
- Cooling and Reheating
- Serving areas
- Food service Equipment



2.2" TFT color LCD display



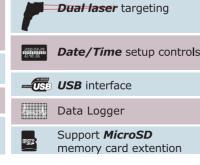
Support **Images**(JPEG) capture capabilities



Support Video (3GP) capture capabilities



Support IR, K-Type, Air, Dewpoint, Wet bulb Temp. & Air Humidity measurement



www.cem-instruments.com E-mail:cemyjm@cem-instruments.com

DT-8867H/8868/8868H/8869/8869H



















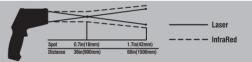
8867H/8868/8868H/8869/8869H Series provide much faster, easier and accurate readings for most surface temperature measurements with Dual laser pointers.

Two laser points converge to a single spot when the unit is at the optimal distance from the object being measured.

- 150ms faster sampling time with 1% accuracy
- High 50 to 1 distance to target ratio measures smaller surface areas at greater distances
- Widest temperature range
- Unique flat surface, modern housing design
- Built-in dual laser pointers for accurate targeting
- Automatic Data Hold & Trigger Lock
- Max, Min, DIF, AVG record
- High and low temp. alarm
- Emissivity Digitally adjustable from 0.10 to 1.0
- USB interface
- Compatible with all standard connector Type K thermocouples

Featur	es		
User select	able °C or °F		
Dual Laser	targeting		
Automatic	Data Hold		
Auto Powe	r Off		
White back	dit LCD display		
Overrange	indication		
High tempe	erature		
Max, Min,	DIF, AVG record		
High / low	alarm, Trigger loc	ck	
Adjustable	emissivity		
Reading m	emory (8868/8869	9/8868H/8869	PH)
Type K inp	ut		
USB interf	ace		





D:S=50:1(8869)

(Unit: mm)

# •150ms faster sampling time •1% accuracy Reading memory • 50 : 1 distance to spot size Dual laser pointers EN: 61326 EN: 60825-1

<b>Specifications</b>					
	8867H	8868	8869	8868H	8869H
IR Temp. Range	-50°C to 1650°C	-50°C to 1200°C	-50°C to 1600°C	-50°C to 1850°C	-50°C to 2200°C
ik remp. Kange	-58°F to 3002°F	-58°F to 2192°F	-58°F to 2912°F	-58°F to 3362°F	-58°F to 3992°F
Response Time	Less than 150ms				
Resolution	0.1° up 1000°, 1° over 1000°				
Basic Accuracy (IR)	±1.0% of reading	±1.0% of reading	±1.0% of reading	$\pm 1.0\%$ of reading	±1.0% of reading
Optical Resolution	30:1 Distance to Spot size	50:1 Distance to Spot size			
Emissivity	Adjustable 0.10~1.0				
Type K Temp, Range	-50°C to 1370°C				
Type K Temp. Kange	-58°F to 2498°F				
Basic Accuracy (TK)	±1.5% of reading				
Readings memories		99	99	99	99

Size(HxWxD): 204mm x 155mm x 52mm Weight: 320g

Accessories: 9V battery, USB Cable, Tripod, Software, Type-K temperature probe, Carrying case and Gift box

	• 75: 1 distance to spot size • Dual laser pointers	Dual Laser	1.0% IR ligh Accuracy	High Amportant    1
		ms faster sampling time accuracy		
		ding memory	-	
			M. Mariners	1332 - 1321 1221 1221 1221 1221
TO DESCRIPTION OF THE PARTY OF			3-2	
A STATE OF THE PARTY OF THE PAR	and the second			
Engler Definalt	0.00 Newcay 0.00 Newcay	Max 092.1		
Or Aluminum	24 0	222 41	100	
Cir. Benord	21.0	332.	1	
the Copper	16:22	Min 232,1		
Point Of	121212010	The Table Section 1 Section	000	
Adjustable Emissivity	Data Record	Fast measuCircular with	50	
Adjustable Elilissivity		high accuracy		100
Features				
Graphic white and black LCD display		Mo	del 8889/8889H	
Max, Min, DIF, AVG record & trigger lock High / low alarm	Distance (D) to Spot siz	e(S)	(	
Auto Power Off	D:S=75:1 (8889H)		`	
Adjustable emissivity				
Type K input  Memory data with Date/Time stamp (30 points)			- Laser	
USB interface	Spot 0.7in(18n Distance 53in(135)		— InfraRed	
Datalog (Only 8879/8889H )	Distance Solii(135)			
Wireless interface (Only 8879/8889H)		(	Unit: mm)  Thermis	stor clamp
Specifications				
8878	8879	8889	8889H	

-50°C to 2200°C/ -50°C to 1200°C/ -50°C to 1600°C/ -50°C to 1850°C/ IR Temp. Range -58°F to 2912°F Less than 150ms Less than 150ms Less than 150ms Less than 150ms Resolution  $\pm 1.0\%$  of reading  $\pm 1.0\%$  of reading ±1.0% of reading Basic Accuracy (IR) ±1.0% of reading Optical Resolution 50:1 Distance to Spot size 50:1 Distance to Spot size 50:1 Distance to Spot size 75:1 Distance to Spot size Adjustable 0.10~1.0 Adjustable 0.10~1.0 Adjustable 0.10~1.0 Adjustable 0.10~1.0 Emissivity Type K Temp. Range -58°F to 2498°F -58°F to 2498°F -58°F to 2498°F -58°F to 2498°F ±0.5% of reading ±0.5% of reading Basic Accuracy (TK) ±0.5% of reading ±0.5% of reading Readings memories 30 30 30 Datalog Wireless interface(433Mhz) Bluetooth interface

www.cem-instruments.com

E-mail:cemyjm@cem-instruments.com

Size(HxWxD): 204mm x 155mm x 52mm Weight: 320g

Accessories: 9V battery, USB Cable, Tripod, Software, Type-K temperature probe, Carrying case and Gift box

TCP-100

Temperature probe

( Optional: NR-31B / TP-500 /

EN: 60825-1

**Applications** 

• HVAC/R

Plant/General Maintenance

• Transportation/Automotive

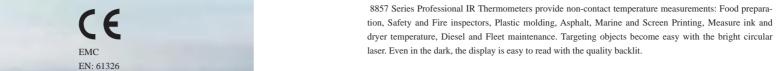
Cooling and Reheating

• Food service Equipment

Serving areas

• Cold storage





- dryer temperature, Diesel and Fleet maintenance. Targeting objects become easy with the bright circular
- 150ms faster sampling time with 1% accuracy
- Rugged: 3 m (9.8 ft) drop tested
- Ergonomically designed: Completely redesigned for a more natural hand fit
- Distance to spot: Precise laser technology makes for more accurate and repeatable measurements
- Alarm: Hi and Lo temp. alarms for rapid display of measurements outside the limits
- Accurate readings for infrared temperature

Features		
	8857	8857H
User selectable °C or °F	*	*
Circular laser targeting	*	*
Automatic Data Hold	*	*
Auto Power Off	*	*
White Backlit LCD Display	*	*
Overrange indication	*	*
Trigger lock for continuous use	*	*
Max, MIN, DIF, AVG display	*	*
High and low alarm	*	*
Adjustable emissivity	*	*
Type-K input	*	*
Bluetooth interface	*	*

Specifications			
	8857	8857H	
IR Temp. Range	-50°C to 1000°C	-50°C to 1200°C	
ik remp. Kange	-58°F to 1832°F	-58°F to 2192°F	
Response Time	Less tha	n 150ms	
Resolution	0.1° up 1000°, 1° over 1000°		
Basic Accuracy (IR)	±1.0% of reading		
Optical Resolution	30:1 Distance to Spot size	40:1 Distance to Spot size	
Emissivity	Adjustable	e 0.10~1.0	
Type K Temp. Range	-50°C to 1370°C/-58°F to 2498°F		
Basic Accuracy (TK)	±1.5% of reading		
Readings memories	99		
Spectral Response	8-1-	4μm	

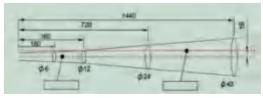
Size(HxWxD): 170mm x 50mm x 95mm Weight: 248g







Distance (D) to Spot size(S) D:S=30:1



DT-8862 Series

Worldwide Patent:

PCT/CN2012/082197

#### **Professional InfraRed Thermometers with Dual Laser Targeting**

## **Professional InfraRed Thermometers with Dual Laser targeting**



Fast response time 0.15 sec.



Built-in Dual Laser Pointers focus target (calibrated distance) High accuracy(1.0%) measurement





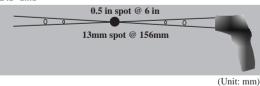
Triple LCD display indicates Reading, Max reading and Emissivity at same time. High contrast LCD with white backlight



Double molded housing design



Distance (D) to Spot size(S) D:S=12:1



Features		
	8862B	8863B
User selectable °C or °F	*	*
Dual laser targeting	*	*
Automatic Data Hold	*	*
Auto Power Off	*	*
White Backlit LCD Display	*	*
Overrange indication	*	*
Trigger lock for continuous use	*	*
Max display	*	*
High and low alarm	*	*
Adjustable emissivity	*	*
Optical Resolution	12:1	20:1
Red backlight & beeper alarm	*	*

Specifications				
	8862B	8863B		
IR Temp. Range	-50°C to 650°C -58°F to 1202°F	-50°C to 800°C -58°F to 1472°F		
IR Temp. Resolution	0.1° up to 1000°, 1° over 1000°			
Emissivity	Adjustable 0.10~1.0			
Basic Accuracy	±1.0% of reading			
Response Time	Less than 150ms			
Spectral response	8-14µm			

Size(HxWxD): 146mm x 104mm x 43mm Weight: 163g Accessories: 9V battery, Carrying case and Gift box.

## **Applications**

- Plant/General Maintenance
- HVAC/R
- Transportation/Automotive
- Cooling and Reheating
- Serving areas
- Food service Equipment
- Cold storage



Red backlight alert



Triple LCD display with white backlit

















8860B/8861B



Features									
	8860L	8860B	8861B	8861	8862	8862C	8862MAX+	8863	8865
User selectable °C or °F	*	*	*	*	*	*	*	*	*
Dual laser targeting	Single laser	Single laser	*	*	*	*	*	*	*
Automatic Data Hold	*	*	*	*	*	*	*	*	*
Auto Power Off	*	*	*	*	*	*	*	*	*
White Backlit LCD Display	*	*	*	*	*	*	*	*	*
Overrange indication	*	*	*	*	*	*	*	*	*
Trigger lock for continuous use	*			*	*	*	*	*	*
Max display	*	*	*	*	*	*	*	*	*
High and low alarm	*			*	*	*	*	*	*
Adjustable emissivity			*	*	*	*	*	*	*
Optical Resolution	12:1	12:1	12:1	12:1	12:1	12:1	12:1	20:1	30:1
Green, Red & Blue blacklight: Normal, Higher & Lower temperature indications							*		
Negativity display						*			

Adjustable 0.10~1.0

20



-50°C to 450°C -50°C to 550°C -50°C to 650°C -50°C to 650°C -50°C to 800°C -50°C to 1000°C -58°F to 932°F -58°F to 842°F -58°F to 1022°F -58°F to 1202°F -58°F to 1202°F -58°F to 1472°F -58°F to 1832°F

laser pointers

Size(HxWxD): 146mm x 104mm x 43mm Weight: 163g Accessories: 9V battery, Carrying case and Gift box.

-50°C to 500°C

Fix 0.95

IR Temp. Resolution 0.1° up to 1000°, 1° over 1000°

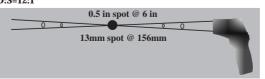
#### Distance (D) to Spot size(S) D:S=12:1

Spectral Response 8-14µm

Specifications

Emissivity

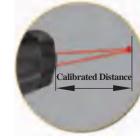
Response Time



(Unit: mm)



Triple LCD display with white backlit



Accurate Measurement

8862/8862C 8862MAX+





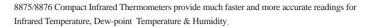












- 150ms faster sampling time with 1% accuracy
- Dust and water-proof: IP54 rated for dust/water proof
- Rugged: 3 m (9.8 ft) drop tested
- Ergonomically designed: Completely redesigned for a more natural hand fit
- Distance to spot: Precise laser technology makes for more accurate and repeatable measurements
- Alarm: Hi and Lo temp. alarms for rapid display of measurements outside the limits
- Accurate readings for infrared temperature, dew-point temperature & humidity.

Features		
	8875	8876
User selectable °C or °F	*	*
Dual laser targeting	*	
Circular laser targeting		*
Automatic Data Hold	*	*
Auto Power Off	*	*
White backlit LCD display	*	*
Overrange indication	*	*
MAX, MIN, DIF, AVG display	*	*
K- Type input		*
Adjustable emissivity	*	*
Optical resolution	16:1	20:1
Red backlight & beeper alarm	*	*

Specifications						
	8875	8876				
IR Temp. Range	-50°C to 850°C -58°F to 1562°F	-50°C to 1000°C -58°F to 1832°F				
IR Temp. Resolution	0.1° up to 1000°, 1° over 1000°					
Emissivity	Adjustable 0.10~1.0					
Basic Accuracy	±1.0% of reading					
Response Time	Less than 150ms					
Spectral response	8-14µm					

Size(HxWxD): 190mm x 55mm x 110mm Weight: 263g Accessories: 9V battery, Carrying case and Gift box.



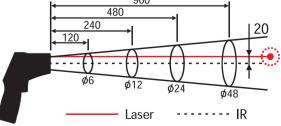
Triple LCD display with white backlit



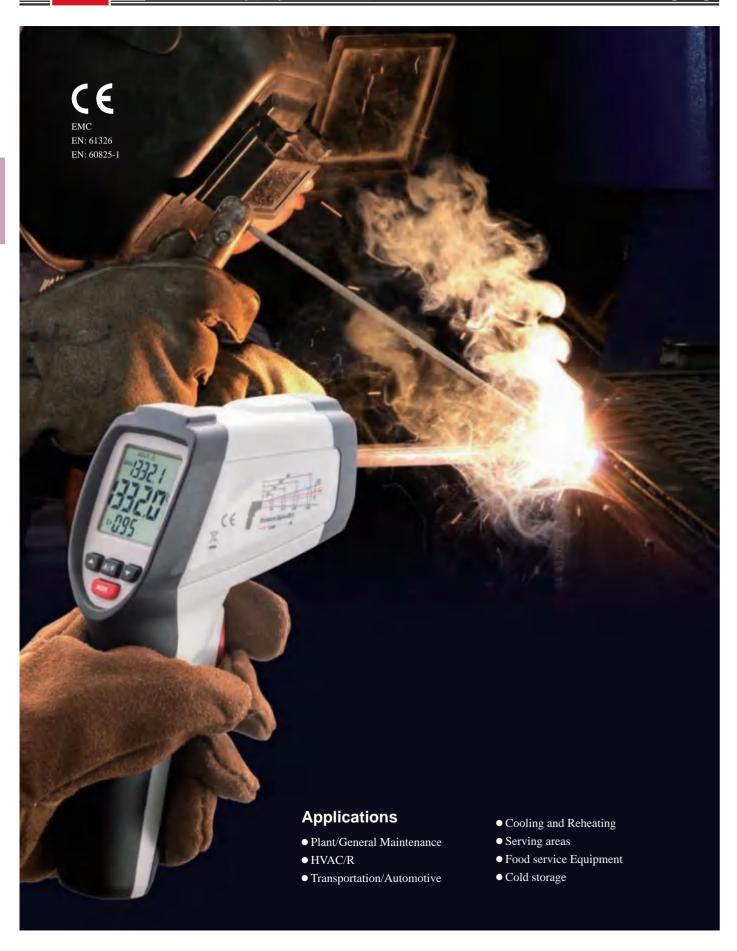
Red backlight alert







Distance:Spot=20:1



#### Heavy Duty Professional InfraRed Thermometers with Circular Laser Targeting

## Professional InfraRed Thermometers with Circular Laser targeting



Fast response time 0.15 sec.



Built-in Circular Laser Pointers focus target (calibrated distance)





Triple LCD display indicates infrared temperature, dew-point temperature & humidity readings.



Double molded housing design



DT-8870 Series

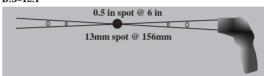
8870/8870B/8870V/8871/8872/8873 Series compact Infrared Thermometers provide much faster and more accurate readings for Infrared Temperature, Dew-point Temperature & Humidity

- Dust and water-proof: IP54 rated for dust/water proof
- Rugged: 3 m (9.8 ft) drop tested
- Ergonomical designe: Perfectly design for more suitable handheld
- Distance to spot: Precise laser technology allows more accurate and
- Alarm: Hi and Lo alarms for rapid display of measurements outside the limits
- Accurate readings for infrared temperature, dew-point temperature & humidity.

EN: 61326 EN: 60825-1

#### Distance (D) to Spot size(S)

D:S=12:1





• 150ms faster sampling time



Model 8870B

Features						
	8870	8870B	8870V	8871	8872	8873
User selectable °C or °F	*	*	*	*	*	*
Circular laser targeting	*	Single laser	Dual laser	*	*	Dual laser
Automatic Data Hold	*	*	*	*	*	*
Auto Power Off	*	*	*	*	*	*
White Backlit LCD Display	*	*	*	*	*	*
Max/Min display			*			
Dew-point temperature alarm	*			*	*	*
Adjustable emissivity	*		*	*	*	*
Optical resolution	12:1	12:1	12:1	16:1	20:1	30:1
Dew-point temperature & humidity readings	*			*	*	*
Bluetooth interface		*				*
Memory data with Date/Time stamp		200 points				200 points

Specifications						
	8870	8870B	8870V	8871	8872	8873
IR Temp. Range					-50°C to 800°C -58°F to 1472°F	-50°C to 1000°C -58°F to 1832°F
IR Temp. Resolution	0.1° up to 1000°, 1° over 1000°					
Basic Accuracy	±2.0% of reading					
Spectral Response	8-14µm					
Response Time	<150ms	<400ms	<500ms	<150ms		
Humidity	0~100%RH			0~100%RH		
Air Temp.	-20~50°C/ -4~122°F	-20~50°C/ -4~122°F				
Dew Point Temp.	-20~50°C/ -4~122°F -20~50°C/ -4~122°F					
Emissivity	Adjustable 0.10~1.0					
Humidity Accuracy	±3%RH(20%~	80%RH)				

Weight: 163g

www.cem-instruments.com

E-mail:cemyjm@cem-instruments.com

Size(HxWxD): 165mm x 45mm x 85mm

Accessories: 9V battery, Carrying case and Gift box.









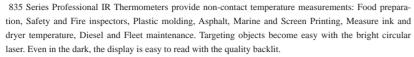




EMC

EN: 61326

EN: 60825-1



- 150ms faster sampling time with 1% accuracy
- Dust and water-proof: IP54 rated for dust/water proof
- Ergonomically designed: Completely redesigned for a more natural hand fit
- Alarm: Hi and Lo temp. alarms for rapid display of measurements outside the limits
- Accurate readings for infrared temperature

Features					
	835	835A/835C	836	836A/836C	
User selectable °C or °F	*	*	*	*	
Circular laser targeting	*	*	*	*	
Automatic Data Hold	*	*	*	*	
Auto Power Off	*	*	*	*	
White Backlit LCD Display	*	*	*	*	
Overrange indication	*	*	*	*	
Trigger lock for continuous use	*	*	*	*	
Max, MIN, DIF, AVG display	*	*	*	*	
High and low alarm	*	*	*	*	
Adjustable emissivity	*	*	*	*	
Type-K input	*	*	*	*	
Negativity display		*/colorful		*/colorful	
Optical resolution	16:1	16:1	20:1	20:1	

Specifications					
	835/835A/835C	836/836A/836C			
ID Town Dones	-50°C to 800°C	-50°C to 1000°C			
IR Temp. Range	-58°F to 1472°F	-58°F to 1832°F			
Response Time	Less than 150ms				
Resolution	0.1° up 1000°, 1° over 1000°				
Basic Accuracy (IR)	±1.0% o	freading			
Optical Resolution	16:1 Distance to Spot size	20:1 Distance to Spot size			
Emissivity	Adjustable 0.10~1.0				
Type K Temp. Range	-50°C to 1370°C/-58°F to 2498°F				
Basic Accuracy (TK)	±1.5% of reading				
Spectral Response	8-1	4μm			

Size(HxWxD): 170mm x 50mm x 95mm Weight: 248g Accessories: 2x1.5V"AAA"batteries, Type K Probe, Carrying case and Gift box.





- Rugged: 3 m (9.8 ft) drop tested
- Distance to spot: Precise laser technology makes for more accurate and repeatable measurements

Features					
	835	835A/835C	836	836A/836C	
User selectable °C or °F	*	*	*	*	
Circular laser targeting	*	*	*	*	
Automatic Data Hold	*	*	*	*	
Auto Power Off	*	*	*	*	
White Backlit LCD Display	*	*	*	*	
Overrange indication	*	*	*	*	
Trigger lock for continuous use	*	*	*	*	
Max, MIN, DIF, AVG display	*	*	*	*	
High and low alarm	*	*	*	*	
Adjustable emissivity	*	*	*	*	
Type-K input	*	*	*	*	
Negativity display		*/colorful		*/colorful	
Optical resolution	16:1	16:1	20:1	20:1	

Specifications					
	835/835A/835C	836/836A/836C			
IR Temp. Range	-50°C to 800°C	-50°C to 1000°C			
ik remp. Kange	-58°F to 1472°F	-58°F to 1832°F			
Response Time	Less than 150ms				
Resolution	0.1° up 1000°, 1° over 1000°				
Basic Accuracy (IR)	±1.0% o	f reading			
Optical Resolution	16:1 Distance to Spot size	20:1 Distance to Spot size			
Emissivity	Adjustable 0.10~1.0				
Type K Temp. Range	-50°C to 1370°C/-58°F to 2498°F				
Basic Accuracy (TK)	±1.5% of reading				
Spectral Response	8-1.	4um			

Size(HxWxD): 170mm x 50mm x 85mm Weight: 238g Accessories: 2x1.5V"AAA"batteries, Carrying case and Gift box.



-50°C to 650°C

-58°F to 1202°F

±1.0% of reading

Less than 150ms

8-14um

Adjustable 0.10~1.0

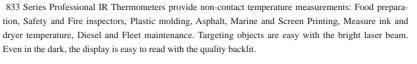
0.1° up to 1000°, 1° over 1000°











- 150ms faster sampling time with 1% accuracy
- Dust and water-proof: IP54 rated for dust/water proof
- Rugged: 3 m (9.8 ft) drop tested

Features

User selectable °C or °F Dual laser targeting Automatic Data Hold Auto Power Off

White Backlit LCD Display

Max, MIN, DIF, AVG display

Overrange indication

High and low alarm Adjustable emissivity Negativity display

Optical resolution

IR Temp. Range

Emissivity

Basic Accuracy

Response Time

Spectral Response

IR Temp. Resolution

Specifications

- Ergonomically designed: Completely redesigned for a more natural hand fit
- Distance to spot: Precise laser technology makes for more accurate and repeatable measurements
- Alarm: Hi and Lo temp. alarms for rapid display of measurements outside the limits
- Accurate readings for Infrared Temperature

833A/833C

\*/colorful







Model 836A

Model 835

Model 835C

## DT-827/827V 12:1 InfraRed Thermometers





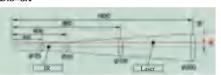


Worldwide Patent: PCT/CN2012/082197



#### Model 811/812

#### Distance (D) to Spot size(S)



(Unit: mi

810/810B/811/812 Series Low cost mini IR Thermometers provides non-contact temperature measurements: Food preparation, Safety and Fire inspectors, Plastic molding, Asphalt, Marine and Screen Printing, Measure ink and dryer temperature, Diesel and Fleet maintenance. Targeting objects become easy with the bright laser beam. Even in the dark, the display is easy to read with the quality backlit.

- Unique flat surface, mini modern housing design
- Temperature measurements from -50.0°C to 500°C/-58.0°F to 932°F (812)
- Backlighting illuminates display for taking measurements at night or in areas with low background light levels
- Max / Min record
- User selectable °C or °F
- Overrange indication
   Auto Data Hold when trigger released

Features	
	810/810B/811/812
User selectable °C or °F	*
Laser targeting	*
Automatic Data Hold	*
Auto Power Off	*
White Backlit LCD Display	*
Overrange indication	*
Max / Min record	*

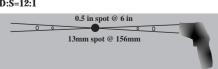
Specifications							
	810	810B	811	812			
Danga	-30°C to 260°C	-50°C to 500°C	-30°C to 380°C	-50°C to 500°C			
Range	-22°F to 500°F	-58°F to 932°F	-22°F to 716°F	-58°F to 932°F			
Basic Accuracy	±2% of reading or	±2% of reading or ±2°C/±4°F					
Resolution	0.1°C/°F	0.1°C/°F					
Response Time	Less than 1 second						
Optical Resolution	8:1 Distance to Spot size						
Emissivity	Fixed at 0.95						

Size(HxWxD): 131mm x 96mm x 35mm Weight: 130g Accessories: 9V battery, Carrying case and Clamshell.

### DT-820/820B/820V/821/822 12:1/20:1 InfraRed Thermometers



Distance (D) to Spot size(S) D:S=12:1



Accessories: 9V battery, Carrying case and Clamshell(Unit: mm)

820/820B/821/822/ Series mini IR Thermometers provide non-contact temperature measurements: Food preparation, Safety and Fire inspectors, Plastic molding, Asphalt, Marine and Screen Printing, Measure ink and dryer temperature, Diesel and Fleet maintenance. Targeting objects become easy with the bright laser beam. Even in the dark, the display is easy to read with the quality backlit.

Features				
	820B	820V	820/821	822
User selectable °C or °F	*	*	*	*
Targeted scanning for higher/lower temperature			*	*
Dual laser targeting	*	Single Laser	*	*
Automatic Data Hold	*	*	*	*
Auto Power Off	*	*	*	*
Negativity display			*	*
Overrange indication	*	*	*	*
Max / Min record	*	*	*	*
Bluetooth				*

Specifications						
	820B	820V	820	821	822	
Range	-50°C to 500°C -58°F to 932°F	-50°C to 500°C -58°F to 932°F	-50°C to 500°C -58°F to 932°F	-50°C to 650°C -58°F to1202°F		
Distance to	10:1	12:1	12:1	12:1	20:1	
Spot size	10.1	12.1	12.1	12.1	20.1	
Response Time	Less than 1s		Less than 150 m	IS		
Basic	±2.0% of readin	α	±1.0% of readin	α		
Accuracy	±2.0% Of Teadin	5	±1.0% of feading	5		
Resolution	0.1°C/°F					
Emissivity	Fixed at 0.95					

Size(HxWxD): 131mm x 96mm x 35mm Weight: 130g

827/827V mini IR Thermometers provide non-contact temperature measurements: Food preparation, Safety and Fire inspectors, Plastic molding, Asphalt, Marine and Screen Printing, Measure ink and dryer temperature, Diesel and Fleet maintenance. Targeting objects become easy with the bright laser beam. It allows you to read the measured data in dim environment with backli

Features		
	827	827V
User selectable °C or °F	*	*
Dual laser targeting	Single Laser	*
Automatic Data Hold	*	*
Auto Power Off	*	*
Negativity display		*
Overrange indication	*	*
MAX/MIN/DIF/AVG display	*	*
High/Low temp. alarm/record	*	*
Backlight	*	*
Color LCD display		*
Adjustable emissivity	*	*

Specifications			
	827	827V	
Temperature Range	-50°C to 500°C/-58°F to 932°F	-50°C to 760°C/-58°F to 1400°F	
Distance to Spot size	12:1		
Response Time	Less than 500ms		
Accuracy	±2% or ±2°C (3.6°F)		
Resolution	0.1°C/°F		
Emissivity	Adjustable 0.10~1.0		

**Size(HxWxD):** 131mm x 96mm x 35mm **Weight:** 130g Accessories: 9V battery, Carrying case and Clamshell.

## DUAL LASER LASER Dual Laser Pointers









#### DT-830/831 InfraRed Thermometers

830 IR Thermometer provides non-contact temperature measurements: Food preparation, Safety and Fire inspectors, Plastic molding, Asphalt, Marine and Screen Printing, Measure ink and dryer temperature, Diesel and Fleet maintenance. Targeting objects become easy with the bright laser beam. It allows you to read the measured data in dim environment with backli

Features			
	830	831	
User selectable °C or °F	*	*	
Automatic Data Hold	*	*	
Auto Power Off	*	*	
White Backlit LCD Display	*	*	
Overrange indication	*	*	
Max, MIN, DIF, AVG display	*	*	
High and low alarm	*	*	
Adjustable emissivity	*	*	
Optical resolution	*	*	

Specifications				
	830	831		
IR Temp. Range	-35°C to 500°C/-31°F to 932°F	-35°C to 650°C/-31°F to 1202°F		
IR Temp. Resolution	0.1°C/°F			
Distance to Spot size	12:1			
Emissivity	Adjustable 0.10~1.0			
Basic Accuracy	±2.0% of reading			
Response Time	Less than 1s			
Spectral Response	8-14µm			

**Size(HxWxD):** 170mm x 50mm x 85mm **Weight:** 238g **Accessories:** 2x1.5V"AAA"batteries, Carrying case and Gift box.









Model 8818V





#### 50 : 1 distance to spot size (8839V/8859V)

High Temperature 1600°C (2912°F)

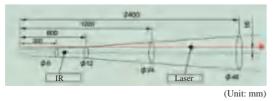
- High 50 to 1 distance to target ratio measures smaller surface areas at greater distances (8839V/8859V)
- Widest temperature range from -50.0 to 1600°C /-58.0 to 2912°F (8859V)
- Unique flat surface, modern housing design
- Built-in laser pointer
- Automatic Data Hold
- Max, Min, DIF, AVG record
- High and low temperature alarm
- Adjustable emissivity
- 8818V/8819V Optical Resolution is 16:1 Distance to Spot size

Features					
	8818V	8819V	8829V	8839V	8859V
User selectable °C or °F	*	*	*	*	*
Laser targeting	*	*	*	*	*
Automatic Data Hold	*	*	*	*	*
Auto Power Off	*	*	*	*	*
Backlit LCD Display	*	*	*	*	*
Overrange indication	*	*	*	*	*
High Temperature		*	*	*	*
Max, Min, DIF, AVG record	*	*	*	*	*
High and low alarm	*	*	*	*	*
Adjustable emissivity	*	*	*	*	*
Trigger lock	*	*	*	*	*

Specifications					
	8818V	8819V	8829V	8839V	8859V
Range	-50°C to 750°C (-58°F to 1382°F)	-50°C to 1000°C (-58°F to 1832°F)	-50°C to 1000°C (-58°F to 1832°F)	-50°C to 1000°C (-58°F to 1832°F)	-50°C to 1600°C (-58°F to 2912°F)
	16:1 Distance to Sp	pot size	30:1 Distance to Spot size	50:1 Distance to Sp	ot size
Emissivity	Adjustable 0.1~1.0				
Response Time	Less than 1 second				
Resolution	0.1° C/°F				
Basic Accuracy	$\pm$ 1.5% of reading or $\pm2^{o}\text{C}/\pm4^{o}\text{F}$				

Size(HxWxD): 220mm x 120mm x 56mm Weight: 290g Accessories: 9V battery, Carrying case and Gift box

#### Distance (D) to Spot size(S) D:S=50:1





#### DT-8856

#### High Temperature IR Thermometer with Wireless USB Interface

8856 compact Infrared Thermometers provide fast, easy and accurate readings for most surface temperature measurements with Wireless USB Interface (RF 433MHz)

Features			
User selectable °C or °F	*		
Built-in dual laser pointers fo	cus target	*	
Automatic Data Hold		*	
Auto Power Off		*	
White backlit LCD display		*	
Fast response time 0.15 sec.		*	
Trigger lock		*	
Max, Min, DIF, AVG record		*	
High and low alarm		*	
Adjustable emissivity		*	
Type K temperature measurer	ment	*	
High temperature		1050°C/1922°F	
Wireless USB interface(RF 433MHz)		*	
Optical resolution (Distance to Spot size)		30:1	
Specifications			
ID T D	-50°C to 1050°C/		
IR Temp. Range	-58°F to 1922°F		
IR Temp. Resolution	0.1° up to 2000	0°, 1° over 2000°	
Optical Resolution 30:1 Distance			
Optical Resolution	30:1 Distance	to Spot size	
•	30:1 Distance -50°C to 1370°	•	
Optical Resolution  Type K Temp. Range		PC/	
•	-50°C to 1370° -58°F to 2498°	PC/	
Type K Temp. Range	-50°C to 1370° -58°F to 2498°	PC/ F 0°, 1° over 2000°	
Type K Temp. Range Type K Temp. Resolution	-50°C to 1370° -58°F to 2498° 0.1° up to 2000	PC/ F O°, 1° over 2000° ms	



Size(HxWxD): 180mm x 106mm x 48mm Weight: 250g Accessories: 9V battery, Carrying case and Gift box, type K temperature probe, RF transmitter, power supply, tripod, CD Software.

#### DT-8830V/8833V/8835V Professional InfraRed Thermometers with Type K Input

8830V	8833V	8835V
*	*	*
*	*	*
*	*	*
*	*	*
*	*	*
*	*	*
*	*	*
*	*	*
*	*	*
*	*	*
*	*	*
500°C/ 932°F	800°C/ 1472°F	1050°C/ 1922°F
13	3:1	30:1
	*  *  *  *  *  *  *  *  *  *  *  500°C/ 932°F	* * * * * * * * * * * * * * * * * * *

Specifications				
	8830V	8833V	8835V	
IR Temp. Range	-50 to 500°C	-50 to 800°C	-50 to 1050°C	
ik teliip. Kalige	-58 to 932°F	-58 to 1472°F	-58 to 1922°F	
Optical Resolution	13	13:1 30:1		
IR Temp. Resolution	0.1°C/°F	0.1°C/°F		
Type K Temp. Range	-50°C to 1370°C/-58°F to 2498°F			
Type K Temp. Resolution	0.1° up to 2000°, 1° over 2000°			
Response Time	Less than 1 second			
Basic Accuracy	±1.5% of reading			
Emissivity	Adjustable 0.10~1.0			

**Size(HxWxD):** 180mm x 106mm x 48mm Weight: 250g

Accessories: 9V battery, Carrying case, clamshell and type K temperature probe

8830V/8833V/8835V compact Infrared Thermometers provide fast, easy, and accurate readings for most surface temperature measurements with Type K Input and 20 Points Memory.



#### **Compact InfraRed Thermometer with Dual Laser Targeting**











8866 compact Infrared Thermometer provides much faster, easy, and accurate readings for most surface temperature measurements

Two laser points converge to a single spot when the unit is at the optimal distance from the object being measured.

Features
User selectable °C or °F
Dual laser targeting
Automatic Data Hold
Auto Power Off
White Backlit LCD Display
Overrange indication
Trigger lock
Max / Min display
High and low alarm
Adjustable emissivity
800°C/1472°F High Temperature
12:1 Optical Resolution (Distance to Spot size)

Specifications	
ID Tomm Donos	-35°C to 800°C
IR Temp. Range	-31°F to 1472°F
IR Temp. Resolution	0.1°C/°F
Optical Resolution	12:1 Distance to Spot size
Emissivity	Adjustable 0.10~1.0
Basic Accuracy	±1.0% of reading
Response Time	Less than 300ms
Spectral Response	8-14µm

Size(HxWxD): 160mm x 82mm x 42mm Weight: 177g Accessories: 9V battery, Carrying case and Gift box

#### DT-880V/882V/883V Compact InfraRed Thermometers







880V/882V/883V Compact IR Thermometer provides non-contact temperature measurements: Food preparation, Safety and Fire inspectors, Plastic molding, Asphalt, Marine and Screen Printing, Measure ink and dryer temperature, Diesel and Fleet maintenance. Targeting objects are easy with the bright laser beam. Even in the dark, the display is easy to read with the quality backlit scroll.

Features				
	880V	882V	883V	
User selectable °C or °F	*	*	*	
Laser targeting	*	*	*	
Automatic Data Hold	*	*	*	
Auto Power Off	*	*	*	
White Backlit LCD Display	*	*	*	
Overrange indication	*	*	*	
Adjustable emissivity	*	*	*	
Max / Min record	*	*	*	
High Temperature		*	*	
High and low alarm	*	*	*	

Specifications			
	880V	882V	883V
Range	-50°C to 380°C	-50°C to 500°C	-50°C to 850°C
	-58°F to 716°F	-58°F to 932°F	-58°F to 1562°F
Optical Resolution (D:S)	12:1 Distance to Spot size		
Response Time	Less than 1 second		
Resolution	0.1°C/°F		
Basic Accuracy	$\pm$ 2% of reading or $\pm$ 2	2°C/± 4°F	

Size(HxWxD): 160mm x 82mm x 42mm Weight: 177g Accessories: 9V battery, Carrying case and Gift box.

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#### DT-8662/8663

#### **Dew Point Temperature Detector with Dual Laser Targeting**

8662/8663 series Infrared Dewpoint Temperature Detectors are very visiable for wet and dry proof. The green LED light will change to yellow and red when reading close to Dewpoint Temperature. It provides faster sampling time and high accuracy, widely applied in steel, oil & chemical, stove, environment testing, calibration lab, gas production industry etc.

Features		
	8662	8663
User selectable °C or °F	*	*
Dual laser targeting	*	*
Automatic Data Hold	*	*
White Backlit LCD Display	*	*
Trigger lock for continuous use	*	*
Max display	*	*
Optical Resolution	12:1	20:1

Specifications	;		
	8662	8663	
IR Temp. Range	-50°C to 260°C / -58°F to 500°F	-50°C to 380°C / -58°F to 716°	
IR Temp. Resolution	0.1°		
Emissivity	0.95		
Temp. Basic Accuracy	±1.0% of reading		
Response Time	Less than 150ms		
Spectral response	8-14µm		
Humidity	0~100%RH		
Humidity Accuracy	±2.5%RH(20%~80%RH)		
Dew Point Temp.	-30~100°C/ -22~199°F; Basic Accuracy: ±2.0% of reading		
Wet Bulb Temp.	-30~100°C/ -22~199°F; Basic Accuracy: ±2.0% of reading		

Size(HxWxD): 82mm x 58mm x 168mm

Weight: 163g

Accessories: 9V battery, Carrying case and Gift box.







Worldwide Patent: PCT/CN2012/082197



Green LED Yellow LED Red LED Close to Dewpoint Normal Dewpoint

## DT-8666/8666H Thermal Leak Detector with Audible Alarm

Features		
	8666	8666H
Optical Resolution	10:1	20:1
Threshold for light color transition( off, 1°F, 5°F, 10°F)	*	
Auto-set base temperature for reference	*	
Single laser targeting	*	*
Fixed Emissivity at 0.95	*	*
°C / °F Switchable	*	*
Beeper alarm, Green, Red & Blue light alarm: Normal, Higher & Lower temperature indications	*	*

Specifications			
		8666	8666H
Temperature Range	-35 to 800°C/-31 to 1472°F		*
Temperature Range	-50 to 380°C/-58 to 716°F	*	
Temperature accuracy	±1.0% of reading ±2 °C/°F	*	*
Response Wavelength range	8-14um	*	*
Resolution	0.1°C/°F	*	*
Emissivity	Adjustable 0.10~1.0	Fixed at 0.95	*
Response Time	< 500ms	*	*

Size(HxWxD): 183mm x 131mm x37mm Accessories: Weight: 220g

Higher temperature Located

with Red LED indicator



Normal Temperature with Green LED indicator

Lower temperature Located

9V battery, Carrying case and Gift box.

with blue LED indicator

8666/8666H Thermal Leak Detector is visible for higher/lower temperature. It permits targeted scanning to find higher/lower temperature with continuous audible alarm.



Worldwide Patent: PCT/CN2012/082197











• 150ms faster sampling time •1% accuracy



Normal Temperature with Green LED indicator



Higher temperature Located with Red LED indicator



Lower temperature Located with blue LED indicator



8665 Infrared Temperature Finder is visiable for higher/lower temperature. It permits targeted scanning to find higher/lower temperature with continuous audible alarm. It provides faster sampling time and higher accuracy, widely applicant in industrial and environment field.

- Targeted scanning for higher/lower temperature
- The position of higher/lower temperature can be precisely found.
- Enables you to work with certainty for Fault diagnosis
- The Audible will alarm when temperature is changed with switchable audible of higher/lower temperature
- LCD display with new target graphics
- Easy keypad operation

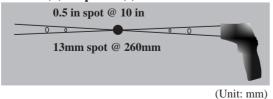
T-Sour	nd: Changeable beeper indication by Temperature
User se	electable °C or °F
Dual la	aser targeting
Autom	atic Data Hold
Auto P	Power Off
White	Backlit LCD Display
Overra	ange indication
Trigger	r lock for continuous use
Max/N	Iin display
20:1 di distanc	istance to target ratio measures smaller surface areas at greater ees
Green, indicati	Red & Blue blacklight: Normal, Higher & Lower temperature ions

Specifications	
IR Temp. Range	-50°C to 380°C -58°F to 716°F
IR Temp. Resolution	0.1°
Emissivity	Fixed at 0.95
Temp. Basic Accuracy	±1.0% of reading
Response Time	Less than 150ms
Spectral Response	8-14µm



Distance (D) to Spot size(S) D:S=20:1

Accessories: 9V battery, Carrying case and Gift box.



Size(HxWxD): 82mm x 58mm x 168mm

Weight: 163g

Size(HxWxD): 195mm x 99mm x 51mm Weight: 252g

2x1.5V"AA"batteries, Type K Temp. probe, USB cable, Carrying case and Gift box

869U 4-in-1 Thermometer features a non-contact IR Thermometer, UV Leak Detector, bright Flashlight, and a unique coaxial Distance-to-Spot laser.

- Non-contact IR Thermometer measures temperature up to 500°C (932°F)
- UV Leak Detector with 5 UV/Blue LEDs (460-470nm)
- Coaxial laser displays a circular set representation of the target area
- Programmable High/Low Temperature set points with audible and visual alarm • Adjustable emissivity for better accuracy on different surfaces
- MAX/MIN/AVG/DIF displays
- Bright flashlight with 5 white LEDs
- Automatic data hold when trigger is released
- Auto Power off
- Complete with two AA batteries

Specifications	
IR Temperature	-50°C to 500°C (-58 to 932°F)
Resolution	0.1°C/°F
Accuracy	±1.5% rdg or ±3°F/±1.5°C whichever is greater
Distance to Target ratio	12:1
Emissivity	0.10 to 1.00 (adjustable)
Repeatabillty	±0.8% rdg or ±2°F/±1°C whichever is greater
Dimensions/Weight	4.1 x 2.1 x 7.3" (104 x 54 x 185mm)/ 10.6oz (300g)



EN: 61326 EN: 60825-1

Model: 869U

#### BX-350/500/BXC-15 Portable IR Calibrators

## **Precision Infrared Calibrator**



#### Accuracy and traceability for infrared measurements

- Easy to increase your IR temperature measurement accuracy
- $\bullet$  Calibrated radiometrically for meaningful, consistent results.
- Accurate, reliable performance from 35 °C to 500 °C
- Large target size of 152 mm (6 in) is required for calibrating most thermometers.
- Intuitive, easy-to-read display that indicates when temperature is stable.
- Ethernet network interface





TFT Color display with capacitive touch screen

Cuacifications	
Specifications	
Temperature Range	35°C ~ 500°C/ (95°F ~ 932°F)
Accuracy	±0.5°C @ 100°C/ (±1.0°F @ 212°F)
Accuracy	±1.8°C @ 500°C/ (±3.6°F @ 932°F)
0. 1 7.	±0.1°C @ 100°C/ (±0.2°F @ 212°F)
Stability	±0.3°C @ 500°C/ (±0.6°F @ 932°F)
Target size	6" (152.4mm)
Target Emissivity	0.95
Resolution	0.01°C/°F up to 300°; 0.1°C/°F over 300°;
Heating Time	30 minutes to max
Cooling Time	40 minutes max to 100°C
Power	230 VAC (±10%), 1.5 A; or 110V AC, 3A

Size(HxWxD): 180mm x 114mm x 233mm Accessories: Carton box, AC power cable.

BX-350/BX-500/BXC-15 portable IR calibrators are used for calibrating long distance Infrared Thermometer, which are designed as handhold and small calibrators.

Specification	S		
	BX-350	BX-500	BXC-15
Temperature Range	50°C ~ 350°C (122°F ~ 662°F)	50°C ~ 500°C (122°F ~ 932°F)	-15°C ~ 120°C (5°F ~ 248°F)
A	±0.5°C @ 100°C (±1.0°F @ 212°F)	±0.5°C @ 100°C (±1.0°F @ 212°F)	±0.40°C at -15 to 0°C ±0.50°C at 0 to 100°C ±0.55°C at 100 to 120°C
Accuracy	±1.2°C @ 350°C (±2.4°F @ 662°F)	±1.8°C @ 500°C (±3.6°F @ 932°F)	
Stability	±0.1°C @ 100°C (±0.2°F @ 212°F)	±0.1°C @ 100°C (±0.2°F @ 212°F)	±0.1°C @ 100°C
Stability	±0.2°C @ 350°C (±0.4°F @ 662°F)	±0.3°C @ 500°C (±0.6°F @ 932°F)	(±0.2°F @ 212°F)
Target size	2.25" (57mm)	2.25" (57mm)	3.26" (83x83mm)
Target Emissivity	0.95	0.95	0.95
Resolution	0.1°C/°F	0.1°C/°F	0.01°C/°F up to 300°; 0.1°C/°F over 300°;
Heating Time	30 minutes to max	40 minutes to max	15 min: 120°C to 23°C 15 min: 23°C to -15°C
Cooling Time	30 minutes max to 100°C	45 minutes max to 100°C	15 min: 120°C to 23°C 20 min: 23°C to -15°C
			TFT Color display with capacitive touch screen
			Ethernet network interface
Power	230 VAC (±10%), 1.5	A; or 110V AC, 3A	

Whether you're using in-line or handheld infrared pyrometers, you need a high performance calibration standard to verify accuracy. Portable IR Calibrator provides a stable blackbody target for calibrating non-contact IR thermometers up to 500°C (BX-500).

The portable IR calibrator features a large temperature controlled blackbody target with a diameter of 2.25" (57 mm), which offers a wide field of view area for optical variations in IR thermometers. With an emissivity of 0.95, the isothermal target can be controlled in set-point increments of 0.1° from 50°C to 500°C (BX-500)

For even higher precision, a contact calibration well is located directly behind the blackbody surface. Using an op tional digital RTD thermometer and calibrated secondary probe,

accuracies of ±0.1°C can be achieved.

Size(HxWxD): 180mm x 114mm x 233mm Weight: 2682g

Accessories: Carton box, AC power cable.

The BXC-15 reaches temperatures from -15 °C to 120 °C



Model BXC-15





Model BX-350/500

#### BX-150 Dry-Well Temperature Calibrator

The new heat source to check your thermometer's accuracy up to  $300^{\circ}\text{C/572}^{\circ}\text{F}$ . Simply set the heat source to the desired test point, insert the test probe into the best fitting well, and get a verification of the performance. It's that easy!

Specifications	
Range	33°C to 300°C (91.4°F to 572°F)
Resolution	0.1°C/F
Accuracy	±0.5°C (33 to 199°C) & ±1°C (200 to 300°C) ±0.9°F (91.4 to 390.2°F) & ±1°F (392 to 572°F)
Stability	±0.5°C
Heating Time	ambient to 300°C (572°F) after 10 minutes
Cooling Time	300°C (572°F) to 100°C (212°F) after 10 minutes
Stabilization	5 minutes
Well Depth	4" (100mm)
Power	230/115 volts

Size(HxWxD): 180mm x 114mm x 233mm Accessories: Box, AC power cable. Weight: 2200g



EN: 61326



Model BX-150



# **Food Safety Check**

A varied selection of products for controlling food safety can help you meet with your HACCP requirements effortlessly - and enables you to be sure you are storing and processing food safely.

Our measuring technology includes data loggers, thermometers, cooking oil testers, pH measuring instruments and lots more.







#### 2 in 1 Food Safety Infrared Thermometer

The IR-95 Food Safety infrared and contact thermometer for surface scans with a probe thermometer and alarm monitoring for internal temperature readings.



#### **Professional BBQ Thermometers**

The 162W/163W professional wireless BBQ thermometer measures the core temperature of grilled food, transmits it wirelessly to a portable display, signals its doneness and gives an acoustic and visual alarm when the cooking time is about to be exceeded.



#### Food Safety type-K Thermometer

The 270KT Food safety type-k thermomrter in the food sector, cooling chain compliance has to be checked and verified. The ambient conditions may also have an influence on product quality. This makes continuous monitoring of temperature and relative humidity in the warehouse essential.



#### **Deep-frying Oil Tester**

The 70 is a handy measuring instrument for fast testing of cooking oils. It can display the temperature of the cooking oil and TPM value. The TPM value (total polar materials) enables a statement on the ageing of cooking oils due to the effects of heat.



#### **Pen type Thermometers**

The 133A contact thermometer offers fast response and laboratory accuracy. The thermometer offers 0.1°C/0.1°F resolution over the entire measurement ranges. A rugged holster protects the model.

#### Waterproof Folding Thermometer



The IR-95 Food Safety infrared and contact thermometer for surface scans with a probe thermometer and alarm monitoring for internal temperature readings.

Features
Built-in fold-out probe for measuring internal food temperatures
Probe temperature range -40 to 230 °C
High and low alarm
Backlit display for clear readings in poorly lit areas
IP65 waterproof
Mini modern housing design
Flashlight

Model	IR-95
HACCP	approved

4		
	<i>IP65</i>	waterproof

Specifications	
IR Temp. Range	-40°C to 280°C/-40°F to 536°F
Response Time	Less than 500ms
Optical Resolution	4:1 Distance to Spot size
Thermistor Temperature Range	-40°C to 230°C/-40°F to 446°F
Emissivity	Fixed at 0.97
Resolution	0.1°C/°F
Basic Accuracy	±1.0% of reading





Size(HxWxD): 50mm x67mm x 185mm Weight: 180g Accessories: 2X1.5V "AAA" batteries, Clamshell.

The 160/161 is a waterproof folding thermometer which offers handy, practical and strong support when carrying out temperature measurements. The thermometer features IP67 class protection and can be used under all conditions. It can also be easily cleaned under running water and has a rubber-coated surface for non-slip handling. The 161 has a large, illuminated display for easy and error-free viewing of measurement data under poor lighting conditions.

• Compact 5.9" size (15 cm)

• Ideally suited to core temperature measurements

• IP67 protection

• Non-slip rubber coated surface

• Large, illuminated readout display

• ABS/TPE/Metal housing

EN: 61326 EN: 13485

EN: 60825-1

Features	
Measuring temperature range	-50 to 300°C / -58 to 572°F (161)
	-50 to 260°C / -58 to 500°F (160)
Accuracy	$\pm 2^{\circ}\text{C}$ / $\pm 3.6^{\circ}\text{F}$ (-50°C to -20°C / -58 to -4°F)
	$\pm 1^{\circ}\text{C}$ / $\pm 1.8^{\circ}\text{F}$ (-20°C to 100°C / -4 to 212°F)
	±1% (100°C to 300°C / 212 to -572°F)
Resolution	0.1°C / 0.1°F
Battery	2 x1.5V "AAA" batteries / 800 hr battery life
Material/Housing	ABS

Size(HxWxD): 150mm x 45mm x 20mm Weight: 50g

Probe is suitable for various



Accessories :



Solid metal surface





Model 161

HACCP approved



IP67 waterproof

#### IR-97 Food Safety Infrared Thermometer

The Food Safety infrared non-contact thermometer for surface scans with a probe thermometer for internal temperature readings. An integrated countdown timer with alarm monitors line checks as well as cooking and cooling intervals.

Features
Built-in fold-out probe for measuring internal food temperatures
Probe temperature range -40 to 200 °C
Countdown timer to monitor cooking, cooling and HACCP
exposure times
Backlit display for clear readings in poorly lit areas
MAX temperature displayed for quick reference
-

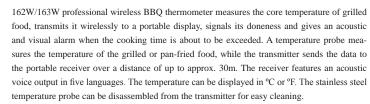
Specifications	
IR Temp. Range	-40°C to 280°C/-40°F to 536°F
Response Time	Less than 500ms
Optical Resolution	20:1 Distance to Spot size
Emissivity	Fixed at 0.97
Thermistor Temperature Range	-40°C to 200°C/-40°F to 392°F
Resolution	0.1°C/°F
Basic Accuracy	±1.0% of reading

Size(HxWxD): 50mm x67mm x 185mm Weight: 180g

Accessories: 9V battery, Clamshell.



## Professional BBQ Thermometers



162 BBQ thermometer is with single measuring probe

162W wireless BBQ thermometer is with single measuring probe.

163W wireless BBQ thermometer is with dual measuring probes.

Features			
	162	162W	163W
Food and cooking temperature of the wireless transmission functions/Transmitter range		433MHz/ 30m	433MHz/ 30m
Probe measurement	Single	Single	Dual
LED for signal indication	*	*	*
Temperature and Time gauge alarm functions	*	*	*
Food type and taste level selection	*	*	*
Food, temperature and time display	*	*	*
°C/°F temperature selection	*	*	*
Backlight function	*	*	*
Power supply	2x1.5AAA	4x1.5AAA	4x1.5AAA

Specification	
Temperature range	-40 to 230°C / -40 to 446°F
Temperature accuracy	±1% ±1°C / ±1% ±1.8°F

Size(HxWxD): 105mm x 58mm x 30mm

Weight: 350g











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IR-92/93 Series The Non-contact Infrared Thermometers can be used to measure the temperature of objects' surface that is improper to be measured by traditional (contact) thermometer (such as moving object, the surface with electricity current or the objects which are uneasy to be touched.)



Features		
	IR-92	IR-93
User selectable °C or °F	*	*
Laser targeting	*	*
Automatic Data Hold	*	*
Auto Power Off	*	*
Overrange indication	*	*
For food	*	

EN: 61326

EN: 60825-1

Model IR-92

Distance (D) to Spot size(S) D:S=8:1

100	1600	-   0
400		- 1
17 P	11 7	11
IR	Laser	¢800

(Unit: mm)

Specifications		
	IR-92	IR-93
Temperature Range	-35 to 300°C/-31to 572°F	-18 to 300°C/0 to 572°F
D:S	4:1	8:1
Temperature accuracy	Blow 39°F (4°C) ±3.6°F (2°C) 39 to 150°F (4 to 65°C) ±2°F (1°C) ±3.6°F(2°C) or ±2% of reading ±3.6°F(2°C) or ±2% of reading	
Response Wavelength range	8-14um	
Resolution	0.1	
Emissivity	Fixed at 0.97 Fixed at 0.95	
Response Time	About 150ms	
Laser wavelength	630-660nm	
Laser class	Class 2	
Low power indication	Yes	

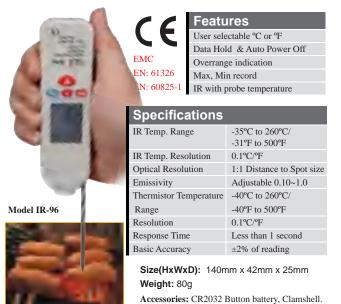
Size(HxWxD): 186mm x45mm x 38mm Weight: 190g

Accessories:

9V battery, Clamshell.

#### IR-96 Food Safety IR Thermometer with thermistor probe

#### DT-880B Food Thermometer with Red/Green LED indication





EN: 60825-1 Size(HxWxD): 160mm x 82mm x 42mm

Model 880B

- High Accuracy for food temperature measurement.
- Set alarm & Sound alarm if temperature is exceeded.
- Digital LCD display with backlit.
- Data displayed in Celsius or Fahrernheit.
- Auto power off (energy saver).
- Small, convenient, easy to use.

Specifications		
Surface Temp.range	-50.0 to 200°C(-58°F to 392°F)	
Basic Accuracy	±0.3°C/±0.6°F at 30°C~40°C/ 86°F~104°F Range	
Optical Resolution	8:1 Distance to Spot size	
Resolution	0.1° C/F	
Response Time	Less than 1 second	
Emissivity	Fixed at 0.95	

Weight: 177g

Accessories: 9V battery, Carrying case and Gift box. The 270KT Food safety type-k thermomrter in the food sector, cooling chain compliance has to be checked and verified. The ambient conditions may also have an influence on product quality. This makes continuous monitoring of temperature and relative humidity in the warehouse essential.

Specifications		
Temp range	-40 to 70°C	
Temp accuracy	±1.0°C	
Humidity range	0 to 100%RH	
Humidity accuracy	±3%RH	
Temp K range	-200 to +1370 °C	
Temp K accuracy	Above -100°C: 0.15% rgd +1.0 °C	
Temp K accuracy	Below -100°C: 0.5% rgd +2.0 °C	
Resolution	0.1 °C (-99.9 to +999 .9 °C) 1 °C (residual range)	
Protection class	IP54	
Measurement rate	5 sec to 24 h (5 seconds default)	
Communication rate	5 sec to 24 h (5 seconds default)	
Memory	4071 readings/channel	
Battery life	12h at +25°C, 5 second communication cycle	
Voltage supply	4 x AA batteries Mains unit optional For temperatures below -10°C please use Energizer batteries	
Radio frequency	2.4 GHz (IEEE 802.11 b/g/n)	
Encryption method	WEP, WPA, WPA2 (TKIP, AES)	





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Size(HxWxD): 68mm x 108mm x 35mm Weight: 172g Accessories: Li-ion battery, charger, adaptor and gift box.

#### IR-100 2 in 1 Food Safety Infrared Thermometer

IR-100 2 in 1 Food safety Infrared Thermometer with a platinum probe is a fully integrated temperature measuring device for managing HACCP and inspection programs for retail and food service organizations. It is with bluetooth for a mobile application, cloud-based enterprise server and easy to read the temerpature shown on the smartphone by APP.

Features	
2 in 1 Food safety Infrared Thermometer with a platinum probe	
Manage Food Quality and HACCP	
Platinum probe for high accurate measurement	
Infrared thermometer for surface temperature scanning	
LED indication for cold and hot food temperature	
Data Hold & Auto Power Off	
Overrange indication	
Max, Min record	
User selectable °C or °F	
Bluetooth Interface and Andriod/iOS APP software	
Rechargeable Li-ion battery with charger	

Specifications	
IR Temp. Range	-40°C to 300°C/ -40°F to 572°F
IR Temp. Resolution	0.1°C/°F
Optical Resolution	2:1 Distance to Spot size
Emissivity	Fixed at 0.95
Platinum Thermistor Temperature Range	-40°C to 250°C, -40°F to 482°F
Resolution	0.1°C/°F
Response Time	Less than 1 second
Basic Accuracy(Platinum Thermistor)	$\pm 0.6$ °C/ $\pm 1.1$ °F

Size(HxWxD): 176mm x 55mm x 41mm Weight: 210g Accessories: Li-ion battery, charger, adaptor and gift box.

-	Backlin
" 858. " 855. " 1255. " 238. 55.1 "	EMC EN: 61326 EN: 60825-1
(  )	WiFi
7	Model 270KT
	Description of the control of the co







**High Quality Sensor** 

Model 70

DT-70 is a handy measuring instrument for fast testing of cooking oils. It can display the temperature of the cooking oil and TPM value. The TPM value (total polar materials) enables a statement on the ageing of cooking oils due to the effects of heat.

# Features Display the temperature of the cooking oil: Indicator for correct setting of the deep fat fryer, checking of integrated temperature displays. Display the TPM value: Indicator for the aging of the cooking oil.

The sensor works on a capacitive basis and determines as the reading the total polar materials as a %.

Specifications	
Measuring range	Temperature: $40.0$ to $200^{\circ}\mathrm{C}$ ; $(104.0$ to $392.0^{\circ}\mathrm{F})$ TPM: $0$ to $40\%$
Accuracy	Temperature:±1.5°C TPM: ±2%
Resolution	Temperature:0.1 °C TPM: 0.5%
Battery life	approx 25h of continuous operation(corresponds to $500$ measurements)
Operating temperature	0 to 50 ℃
Storage/transport temperature	-20 to 70 $^{\circ}\mathrm{C}$
TPM response time	< 30s
Dimensions (LxWxH)	365x48x31
Housing material	ABS+PC 、TPE
Protection class	IP68

Size(HxWxD): 365mm x 48mm x 26mm

Weight: 248g

Accessories: 2x1.5V"AAA"batteries, Carrying case and Gift box.



The 130/131 contact thermometers offer fast response and laboratory accuracy. These thermometers offer  $0.1^{\circ}\text{C}/0.1^{\circ}\text{F}$  resolution over the entire measurement ranges. A rugged holster protects both models.

- Easy to use: Remove the protective sheath, press the ON/OFF button and insert into the testing area.
- LCD screen shows readings in Fahrenheit or Celsius
- Range: -40° to +250° C/ -40° to +482° F
- 132 is pen type humidity & temperature meter

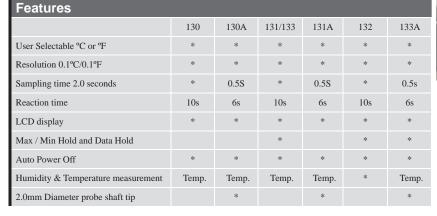








Model 133A



Specifications								
Function	Range	Basic Accuracy	130A	131A	133A	130	131/133	132
Томомоновучно	-40~250°C/482°F	±1.5%				*	*	*
Temperature	-40~200°C/392°F	±1.0%	*	*	*			
Humidity	10%RH~95%RH	±3.5%						*

**Size(HxWxD):** 130:150mm x 40mm x 28mm

131/132/133:211mm x 32mm x 19mm

**Weight:** 130:19g

131/132/133:35g

#### Accessories :

One LR44(1.5V) button battery and clamshell.









1.5% Accuracy (IR-65B)

Model IR-65

EN: 61326

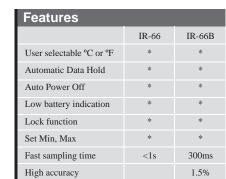
EN: 60825-1

Metal

1.5%

# IR-66/66B





IR-66

1:1

0.1°C/°F

Fixed at 0.95

-35°C~230°C/

-31°F~446°F

Less than 1second

**Specifications** 

Response Time

Basic Accuracy

Resolution

Emissivity

Weight: 33g

Optical Resolution

- 300ms quickest sampling time with 1.5% accuracy (IR-66B)
- Easy to use: hold it within two feet of the area to be measured and push the button
- Large LCD screen shows readings in Fahrenheit or Celsius
- Range: -35 to 250°C/-31 to 482°F
- Compact size design for the ultimate in convenience and portability





(6B)

EN: 61326 EN: 60825-1

Size(HxWxD): 75mm x 40mm x 20mm Accessories :

 $\pm 2\%$  or  $\pm 2$ °C/ $\pm 4$ °F  $\pm 1.5\%$  or  $\pm 2$ °C/ $\pm 4$ °F

IR-66B

-35°C~250°C/

-31°F~482°F Less than 300ms

One CR2032 button battery, Carrying Case & Clamshell



Model IR-66B

Specifications				
	IR-65	IR-65B	IR-67	IR-67B
Range	-35°C~230°C/-	-35°C~250°C/	-35°C~230°C/	-35°C~250°C/
	31°F~446°F	-31°F~482°F	-31°F~446°F	-31°F~482°F
Response Time	Less than 1 second	Less than 1 second	Less than 1 second	Less than 1 second
Basic Accuracy	$\pm 2\%$ or $\pm 2$ °C/ $\pm 4$ °F	$\pm 1.5\%$ or $\pm 2$ °C/ $\pm 4$ °F	$\pm 2\%$ or $\pm 2$ °C/ $\pm 4$ °F	$\pm 1.5\%$ or $\pm 2$ °C/ $\pm 4$ °F
Optical Resolution	1:1			
Emissivity	Fixed at 0.95	0.1 to 1(adjustable)	Fixed at 0.95	
Resolution	0.1°C/°F			

IR-65B

Plastic

1.5%

Size: 80mm x 40mmx25mm (IR-65/65B) 100mm x 25mm(IR-67/67B)

Weight: 36g (IR-65/65B) 33g(IR-67/67B)

Accessories: One CR2032 button battery & Clamshell (IR-65/65B) Two LR44(1.5V) button batteries, Clamshell (IR-67/67B)

• 300ms quickest sampling time with 1.5% accuracy (IR-65B)

• Large LCD screen shows readings in Fahrenheit or Celsius

• Compact size design for the ultimate in convenience and portability

• Range: -35 to 250°C/-31 to 482°F (IR-65B)

• World smallest & IP rating 67 (IR-67/67B)

**Features** 

Auto Power Off

Lock function Set Min, Max

Fast sampling time

Housing material

High accuracy

User selectable °C or °F

Automatic Data Hold

Low battery indication

• Easy to use: hold it within two feet of the area to be measured and push the button





≤100°C Green backlit

>100°C Red backlit





#### IR-77H/88/88H/88G series Pocket InfraRed Thermometers with Laser Pointer

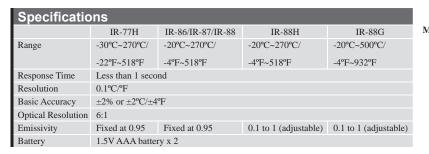
The IR-77H/88/88H series Pocket InfraRed Thermometers are new models designed with lower cost. Check all types of A/C and heating systems. Monitor performance of appliances such as refrigerator, dishwasher, freezer and oven. Ensure proper cooking, grilling and storage temperatures.

- Built-in laser pointer identifies target area
- 6:1 Distance to Spot size ratio
- Data Hold and Max Hold (IR-88/88H)
- Fixed emissivity 0.95 covers 90% of surface applications
- Adjustable Emissivity (88H)
- 0.1° resolution (88H)
- Lock for continuous use (88H)
- Programmable alarm setpoint (88H)

Laser Pointer • Measure up to 270°C/518°F

6:1 Distance to Spot

• Adjustable Emissivity (88H)



Size(HxWxD): IR-77H: 97mm x 57mm x 29mm IR-86/87/88/88H: 97mm x 53mm x 25mm Accessories:

Two "AAA" Batteries, Manual and Clamshell.





Weight: 81g



Features		
	IR-98	IR-99
User selectable °C or °F	*	*
Data Hold & Auto Power Off	*	*
Overrange indication	*	*
Max, Min record	*	*
IR with probe temperature	*	
IR with probe & clamp temperature		*

Specifications				
		IR-98	IR-99	
IR Temp. Range	-35°C to 260°C/ -31°F to 500°F	*	*	
IR Temp. Resolution	0.1°C/°F	*	*	
Optical Resolution	1:1 Distance to Spot size	*	*	
Emissivity	Adjustable 0.10~1.0	*	*	
Thermistor Temperature Range	-40°C to 260°C/ -40°F to 500°F	*	*	
Resolution	0.1°C/°F	*	*	
Clamp Temperature Range	-40°C to 200°C/ -40°F to 392°F		*	
Response Time	Less than 1 second	*	*	
Basic Accuracy	±2% of reading	*	*	

Size(HxWxD): 140mm x 42mm x 25mm (IR-98)

Accessories: CR2032 Button battery, Clamshell.

**Size(HxWxD):** 183mm x 52mm x 25mm(IR-99)

Accessories: CR2032 Button battery, Clamshell.

#### IR-15 2 in 1 InfraRed Thermometer & Pressure Temperature Chart

EN: 61326

2 in 1 Digital Infrared Thermometer with pressure temperature chart offers fast and accurate IR temperature or temperature references on a large easy-to-read LCD display.

- Rugged, double molded case
- Easy to chart the references of freezing devices

Specifications			
IR Temp. Range	-30 to 500°C/-22 to 932°F		
Response Time	Less than 300 ms		
Basic Accuracy	±1.5% or ±2°C/±4°F		
Optical Resolution	13:1		
Resolution	0.1°C/°F		
Emissivity	Fixed at 0.95		

Size(HxWxD): 154mm x 61mm x 46mm Weight: 190g Accessories: 9V battery, gift box with carrying case.

#### AC-8T 2 in 1 InfraRed Thermometer & Non-contact AC Voltage



2 in 1 Infrared Thermometer with Non-contact AC Voltage(NCV) provides easy and safety measurement. Check all types of A/C, electronic and heating systems.

Specifications (IR thermometer)			
IR Temp. Range	-35°C~230°C (-31°F~446°F)		
Response Time	Less than 1second		
Basic Accuracy	±2% or ±2°C/±4°F		
Optical Resolution	1:1		
Resolution	0.1°C/°F		
Emissivity	Fixed at 0.95		
Specifications (NCV)			
Standard	CAT III 1000V		
Operating Range	VoltFinder: 100 ~ 1000V AC;		
	200 ~ 1000V AC (European standard)		

Size(HxWxD): 158mm x 21mm x 25mm Weight: 34g Accessories: Two "AAA" batteries, clamshell

www.cem-instruments.com

E-mail:cemyjm@cem-instruments.com

#### IR-2G

#### 2 in 1 InfraRed Thermometer & **Flash Memory**



Specifications	
IR Temp. Range	-35°C~230°C (-31°F~446°F)
Response Time	Less than 1second
Basic Accuracy	±2% or ±2°C/±4°F
Optical Resolution	1:1
Resolution	0.1°C/°F
Emissivity	Fixed at 0.95
Flash memory	2G bits

Size(HxWxD): 102mm x 35 x 20mm Weight: 48g Accessories: Two "AAA" batteries, Clamshell.

#### Features User selectable °C or °F Automatic Data Hold Low battery indication & Auto Power Off Set Min, Max, Lock

Specifications			
Range	-35°C~900°C/ -31°F~1652°F		
Response Time	Less than 500ms		
Resolution	0.1°C/°F		
Basic Accuracy	$\pm 1.5\%$ or $\pm 2^{\circ}\text{C}/\pm 4^{\circ}\text{F}$		
Optical Resolution	50:1 Distance to Spot size		
Emissivity	0.1 ~ 1.0 (adujstable)		
Power	230 VAC (±10%), 0.1 A, switchable 50/60 Hz or 12 ~24 DCV		

Size(HxWxD): 71mm x 71mm x 87mm Weight: 268g Accessories :Stand, Cable and Gift box

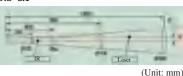


#### IR-82 InfraRed Thermometer Probe

- 8:1 Distance to Spot size ratio
- Built-in laser pointer
- Built-in Analog output of 1 mV/°C or °F & °C/°F switchable
- Compatible with multimeters, clamp meters, oscilloscope and industrial applications etc
- Ideal for applications where object being measured cannot be touched
- Provides instant, highly repeatable readings & Low battery indication

pecificatior	IS	Distance (D) to Spot size(s
	-35°C to 550°C/	D:S=8:1
nge	-31°F to 1022°F	100
sponse Time	Less than 500ms	2000-1
solution	1mV/°C or °F	pt 80
sic Accuracy	±2% or ±2°C/±4°F	IR
tical Resolution	8:1	
nissivity	Fixed at 0.95	Size(HxWxD): 166mm x
	OXY	A CVI 1 C

Fixed at 0.95



53mm x 40mm **Weight:** 189g Accessories: 9V battery, Clamshell

EN: 61326

EN: 60825-1



#### 8810 Series and IR-68 Multifunction InfraRed Thermometers

Features					EMC	
	8811H/8811	8812H/88	12 IR-68		EN: 61326	
16"Gooseneck dete	ector		*		EN: 60825-1	
User selectable °C	or °F *	*	*			
Laser targeting	*	*	*			
Automatic Data Ho	old *	*	*	100		-
Audible and visible Overrange indication	*	*		TE		
Auto Power Off	*	*	*	1 3		-
Backlit LCD Displ	ay *	*	*	1000	ALC: UNKNOWN BOOK OF THE PARTY	
Low battery indica	tion *	*	*	1 3	AND U.S.	
Wide range	*	*	*		The same of the sa	
Automatic range		*	*			The same of
						Towns No.
Features						875
	8811H		8812F	ł	IR-68	10.10
Range	-20°C to 500	)°C/	-50°C to 65	50°C/	-50°C to 600°C	800
	-4°F to 932	°F	-58°F to 12	202°F	-58°F to 1112°F	
Response time	Less than 1 see		Less than 1 s		Less than 1 second.	
Resolution	0.1° up to 200°, 1°		0.1° up to 200°, 1	o over 200°	0.1° up to 200°, 1° over 200°	CERT AND
Basic Accuracy	± 2% of reading or:	±2°C/±4°F ±	± 2% of reading of	or±2°C/±4°F	± 2% of reading or±2°C/±4°F	-
Optical resolution	8:1 Distance to S	pot size	8:1 Distance to	Spot size	8:1 Distance to Spot size	

Size(HxWxD): 159mm x 79mm x 57mm Weight: 180g Accessories: 9V battery, Clamshell or gift box with carrying case

Fixed at 0.95



Model 8811H

Fixed at 0.95

Model IR-68

Non-Contact Clinical Forehead InfraRed Thermometers

## Clinical measuring instruments for healthy care







#### Clinical Forehead Infrared Thermometers with 32 readings memory

**8806H/8806U/8806R/8816H** Clinical Forehead Infrared Thermometers ensure accurate and stable body temperature readings. From a distance of around 5cm, all you have to do is pointing it towards the forehead to read the temperature shown on the LCD screen.



#### Non-Contact Clinical Forehead InfraRed Thermometers

**8807** Non-Contact Forehead IR Thermometer is specially designed to take the body temperature of a person regardless of room temperature. It is with high precise and can be set alarm value and sould alarm.



# Non-Contact Clinical Forehead InfraRed Thermometers with Bluetooth

**8836/8836H** Clinical Forehead Infrared Thermometers ensure accurate and stable body temperature readings. From a distance of around 20cm, all you have to do is pointing it towards the forehead to read the temperature readings on the LCD screen. The temperature readings are transmitted to smart phone via bluetooth which transmits information to the cloud



# 2 in 1 Non-Contact Clinical Forehead InfraRed Thermometer with TDS test

**MT-1** Clinical Forehead Infrared Thermometer ensures accurate and stable body temperature readings and Total dissolved solids (TDS) test. It provides fast response less than 1 second with White / Green / Red LED alarm display.



# Non-Contact Pocket Clinical Forehead InfraRed Thermometer with Bluetooth

**Leyu1/Leyu2/Leyu3** are pocket Clinical Forehead Infrared Thermometers, which ensures accurate and stable body temperature readings and transfer the measuring datas to the smart phone by bluetooth. **Leyu2** shows temperature readings by white LED display. **Leyu3** shows temperature readings by LCD display.

# Leyu1/Leyu2/Leyu3 Non-Contact Clinical Forehead InfraRed Thermometer

## **Non-Contact Clinical Forehead InfraRed Thermometer**





Leyu1/Leyu2/Leyu3 are pocket Clinical Forehead Infrared Thermometers, which ensures accurate and stable body temperature readings and transfer the measuring datas to the smart phone by bluetooth. Levul is easy to use and safety with waterproof, and is particularly efficient for taking the temperature of newborn babies and very young children. From a distance of around Scm, just point it towards to read the temperature shown on the smartphone by App. Leyu2 shows temperature readings by white LED display.

Leyu3 shows temperature readings by LCD display.

	Leyu1	leyu2	leyu2S	leyu3	leyu3
White LED display		*	*		
LCD display				*	*
Fast Sampling time	*	*	*	*	*
Easy to use	*	*	*	*	*
Safety, Anti-swallow&fall	*	*	*	*	*
Waterproof	*	*	*		
Non-contact measurement	*	*	*	*	*
Particular efficient for taking the temperature	*	*	*	*	*
Bluetooth Interface and Android/iOS APP software	*	*		*	

Specifications				
APP software	Yes			
LED indication for temperature	Yes			
Range/Accuracy	Body: $35 \sim 42^{\circ}\text{C}(95^{\circ}\text{F} \sim 107.6^{\circ}\text{F}) / \pm 0.3^{\circ}\text{C}(0.5^{\circ}\text{F})$			
Range/Accuracy	Surface: $0 \sim 60^{\circ}\text{C} (32^{\circ}\text{F} \sim 140^{\circ}\text{F}) / \pm 1^{\circ}\text{C} (1.8^{\circ}\text{F})$			
Repeatability	±0.2°C(0.4°F)			
Response time	1s			
Spectral response	8 to 14um			
Measuring Distance	1 to 4cm			
LED indication	Red/Green/Yellow/Blue			
Operating temp	10 to 40°C(50 to 104°F)			
Storage temp.	-10 to 60°C(14 to 140°F)			
Relative humidity	10% to 90%RH operating, <80%RH storage			
Power supply	CR2032			







Features		
	Leyu-808	Leyu-808S
Forehead temperature	*	*
LCD display	*	*
Easy to use & fast sampling time	*	*
Safety, Anti-swallow & fall	*	*
Non-contact measurement without touching the body	*	*
Particularly efficient for taking the temperature	*	
Bluetooth Interface and Andriod/iOS APP software	*	

Specifications	
Range/Accuracy	Body: $35 \sim 42^{\circ}\text{C}(95^{\circ}\text{F} \sim 107.6^{\circ}\text{F}) / \pm 0.3^{\circ}\text{C}(0.5^{\circ}\text{F})$
Kange/Accuracy	Surface: $0 \sim 60^{\circ}\text{C} (32^{\circ}\text{F} \sim 140^{\circ}\text{F}) / \pm 1^{\circ}\text{C} (1.8^{\circ}\text{F})$
Repeatability	$\pm 0.2^{\circ} C(0.4^{\circ} F)$
Response time	1s
Measuring Distance	1 to 4cm
Power supply	2 x AAA batteriers



#### DT-8806H/8806U/8806R/8816H

Non-Contact Clinical Forehead InfraRed Thermometers

## **Non-Contact Clinical Forehead InfraRed Thermometers**











Body Temperature Datalogger

 $8806H/8806U/8806R/8816H\ Clinical\ For ehead\ Infrared\ Thermometers\ ensure\ accurate\ and$ stable body temperature readings, which is particularly efficient for taking the temperature of newborn babies and very young children. From a distance of around 5cm, all you have to do is pointing it towards the forehead to read the temperature shown on the LCD screen.

- 8806H is portable and easy to take the measurements and store 32 readings.
- 8816H is portable with body temperature datalogger to memory 6000 readings.
- 8806U is portable with USB interface
- 8806R is portable with RS485 interface

#### Safety Conformance

- ASTM E1965-1998
- EN 980: Graphical symbols for use in the labeling of medical devices
- EN 1041:Information supplied by the manufacturer with medical devices
- EN 60601-1: Medical electrical equipment Part 1: General requirements for safety (IEC:60601-1:1998)
- EN 60601-1-2: Medical electrical equipment Part 1-2: General requirements for safety Collateral standard Electromagnetic compatibility Requirements and test (IEC 60601-1-2:2001)

Features				
	8806H	8806U	8806R	8816H
Precise non-contact forehead temperature measurements	*	*	*	*
Selectable °C or °F & forehead heat detection	*	*	*	*
Selectable Body and Surface temperature	*	*	*	*
Set alarm value and sound alarm	*	*	*	*
Memorization of the last 32 measurements	*	*	*	*
Automatic Data Hold & Auto power off	*	*	*	*
Automatic selection range	*	*	*	*
Display Resolution 0.1°C(0.1°F)	*	*	*	*
Backlight LCD display	*	*	*	*
Wireless data transmitting(RF433MHz)				*
6000 Readings memories				*
Records readings with real date and time stamp				*
Read the Max/Min measuring temperature				*
USB interface		*		*
RS485 interface			*	

Specifications	
Range(body mode)	32.0°C to 42.5°C/89.6°F to 108.5°F
Range(Surface mode)	0°C to 60°C/32°F to 140°F
Resolution	0.1°C/0.1°F
Basic accuracy	32 to 35.9°C/93.2 to 96.6°F(±0.3°C/±0.5°F)
ASTM	36 to 39°C/96.8 to 96.6 to 102.2°F(±0.2°C/±0.4°F)
E1965-1998(2003)	39 to 42.5°C/102.2 to 108.5°F(±0.3°C/±0.5°F)
Measuring distance	5-15CM
Response time	0.5 second



Size(HxWxD): 146mm x 88mm x 43mm (8806H/8816U/8816H) Weight: 205g

Accessories: 2x1.5V"AA"batteries, Carrying case and Gift box.

## DT-8806/8806B/8806S

#### Non-Contact Clinical Forehead InfraRed Thermometers



Non-Contact Forehead IR Thermometer is specially designed to take the body temperature of a person regardless of room temperature.

#### Safety Conformance

- ASTM E1965-1998
- EN 980: Graphical symbols for use in the labeling of medical devices
- EN 1041:Information supplied by the manufacturer with medical
- EN 60601-1: Medical electrical equipment Part 1: General requirements for safety (IEC:60601-1:1998)
- EN 60601-1-2: Medical electrical equipment Part 1-2: General requirements for safety Collateral standard Electromagnetic compatibility Requirements and test (IEC 60601-1-2:2001)

Features			
	8806	8806B	88063
Housing colour	Blue	Blue	Purple
Precise non-contact forehead temperature measurements	*	*	*
Selectable °C or °F & forehead heat detection	*	*	*
Selectable Body and Surface temperature		*	*
Set alarm value and sound alarm		*	*
Memorization of the last 32 measurements		*	*
Automatic Data Hold & Auto power off	*	*	*
Automatic selection range	*	*	*
Display Resolution 0.1°C(0.1°F)	*	*	*
Backlight LCD display	*	*	*
Bluetooth & Cloud server		*	

Specifications	
Range(body mode)	32.0°C to 42.5°C/89.6°F to 108.5°F
Range(Surface mode)	0°C to 60°C/32°F to 140°F
Resolution	0.1°C/0.1°F
Basic accuracy	32 to 35.9°C/93.2 to 96.6°F(±0.3°C/±0.5°F)
ASTM E1965-1998(2003)	36 to 39°C/96.8 to 96.6 to 102.2°F(±0.2°C/±0.4°F)
	39 to 42.5°C/102.2 to 108.5°F(±0.3°C/±0.5°F)
Measuring distance	5-15cm
Response time	0.5 second

Size(HxWxD): 131mm x 82mm x 35mm (8806/8806S)

Weight: 130g

Accessories: 2x1.5V"AAA"batteries, Carrying case and Gift box.

#### Model 8806B









#### DT-608/609 Mini Non-Contact Forehead Infrared Thermometers

Non-Contact Forehead IR Thermometer is specially designed to take the body temperature of a person regardless of room temperature.

Features
Precise non-contact body temperature measurements
Selectable °C or °F & forehead heat detection
Selectable Body and Surface temperature
Automatic Data Hold & Auto power off
Automatic selection range and Display Resolution 0.1°C(0.1°F)
0.5~2.5cm Measuring distance

Specifications	
Body temperature range	30.0°C to 42.5°C/86°F to 109°F
Surface temperature range	0°C to 60°C(32°F to 140°F) (Model:608) -35°C to 110°C(-31°F to 230°F) (Model:609)
Resolution	0.1°C/0.1°F
Basic accuracy	±0.3°C at 30°C~40°C/86°F~104°F Range
Response time	0.5 second
Over range indication	LCD will show "Hi"/ "Lo"
Emissivity	fixed at 0.95
Spectral response	6~14um
Power off	Automatic shut off after 7 seconds, approx.

Size(HxWxD): 80mm x 40mm x 23mm

Weight: 33g

Accessories: One CR2032 button battery, Carrying case and Gift box.

















Non-Contact Forehead IR Thermometer is specially designed to take the body temperature of a person regardless of room temperature.

Features
Precise non-contact forehead temperature measurements
Selectable °C or °F & forehead heat detection
Selectable Body and Surface temperature
Set alarm value and sound alarm
Memorization of the last 10 measurements
Automatic Data Hold & Auto power off
Display Resolution 0.1°C(0.1°F)
Backlight LCD display

Accuracy: ±0.3°C/±0.5°F

Memorization of the last 32 measurements

Specifications	
Range(body mode)	32.0°C to 42.5°C/89.6°F to 108.5°F
Range(In Surface mode)	0°C to 60°C/32°F to 140°F
Resolution	0.1°C/0.1°F
Basic accuracy	32 to 35.9°C/93.2 to 96.6°F(±0.3°C/±0.5°F)
ASTM	36 to 39°C/96.8 to 96.6 to 102.2°F( $\pm 0.2$ °C/ $\pm 0.4$ °F)
E1965-1998(2003)	39 to 42.5°C/102.2 to 108.5°F(±0.3°C/±0.5°F)
Measuring distance	1~5cm
Response time	0.5 second

Size(HxWxD): 42mm x 35mm x 150mm Weight: 125g

Accessories: Two 1.5V "AAA" batteries, Carrying case and Gift box.

#### DT-886/886B Ear Thermometer

886/886B Infrared Ear Thermometers measure the kind of temperature from the eardrum has been found to be a clinically reliable indicator of body core temperature. They are high quality products incoperating the latest technology and tested in accordance with international standard. They perform a self-test every time and can be used by consumers in household environment and doctor in clinic as reference.

Features		
	886	886B
Unique Thermoscan Feedback system confirms the thermometer is in the correct position and then confirms an accurate temperature reading has been taken by a constant light and a beep	*	*
Temperature results in degrees °C or degrees °F	*	*
Accurate and safe for newborns and the whole family, new ultra soft and gentle tip is warmed up for accuracy and extra comfort Memory recalls last 8 temperatures	*	*
Bluetooth & Cloud server		*

Specifications	
Temperature unit	°C/°F
Body Temperature range	32.0°C~42.9°C/95°F~109°F
Basic accuracy	35.5°C~42.0°C(±0.1°C/0.2°F)
Resolution	0.1°C/0.1°F
Response time	0.5S
Operating environment	5°C~40°C (41°F~104°F) /15~95%RH

**Size(HxWxD):** 155mm x 50mm x 33mm Accessories:

**Weight:** 68g 2x1.5V batteries, Gift box.



# Features Precise non-contact Forehead temperature measurements Selectable °C or °F Selectable Body and Surface temperature Automatic Data Hold & Auto power off Display Resolution 0.1°C(0.1°F) Backlight LCD display

Non-Contact Clinical Forehead InfraRed Thermometers

Specifications	
Range (body mode)	32.0°C to 42.5°C/89.6°F to 108.5°F
Range (Surface mode)	0°C to 60°C/32°F to 140°F
Resolution	0.1°C/0.1°F
Basic accuracy	32 to 35.9°C/93.2 to 96.6°F(±0.3°C/±0.5°F)
ASTM	36 to 39°C/96.8 to 96.6 to 102.2°F(±0.2°C/±0.4°F)
E1965-1998(2003)	39 to 42.5°C/102.2 to 108.5°F(±0.3°C/±0.5°F)
Measuring distance	1~5cm
Response time	0.5 second



#### **DT-806 Series Non-Contact Body Infrared Thermometers**

Non-Contact Body IR Thermometer is a newly design with European style, specially designed to take the body temperature of a person regardless of room temperature.

Features				
	806//806D/806R	806C	806CV	806B
Precise non-contact body temperature measurements	*	*	*	*
Selectable °C or °F & forehead heat detection	*	*	*	*
Selectable Body and Surface temperature	*	*	*	*
Set alarm value and sound alarm	*	*	*	*
Memorization of the last 32 measurements	*	*	*	*
Automatic Data Hold & Auto power off	*	*	*	*
Automatic selection range and Display Resolution $0.1^{\circ}\text{C}(0.1^{\circ}\text{F})$	*	*	*	*
Backlight LCD display	*	*	*	*
Meterbox iCare & cloud computing service				*
Red, orange, green LED indicator		*	*	
Talking function			*	
Body IR Thermometer analyzer				*
Measuring distance (Distance to Spot size)	1~10cm			
Bluetooth & Cloud server				*



Weight: 157g

Accessories:

# iCare software

for Body Thermometers

Meterbox-iCare Software permits/functions:

Temperature measuring data transferred to Cloud Edit, analysis & Store the temperature data Connecting with iPhone/iPod/ iPad/Android Phone/Android Pad Sharing the data with others by E-mail, facebook & twitter Trend capture

Cloud backup

Body IR Thermometer analyzer





2 x1.5V "AAA" battery, Carrying case and Gift box.

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which transmits information to the cloud

8836/8836H Clinical Forehead Infrared Thermometers ensure accurate

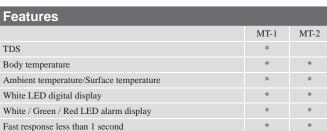
and stable body temperature readings, which is particular efficient for taking the temperature of newborn babies and young children. From a distance of around 20cm, all you have to do is pointing it towards the forehead to read the temperature readings on the LCD screen. The temperature readings are transmitted to smart phone via bluetooth



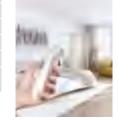








	MT-1	MT-2
Body temperature Measuring range	35-42°C (95 -107.6 °F)	)
Ambient temperature measuring range	0-60°C (32 -140 °F)	
TDS	TDS: 0-9990PPM	
Basic accuracy	Body temperature: +0.2°C / +0.4°F TDS: +2%F.S	Body temperature +0.2°C / +0.4°F TVOC: +5%F.S
Resolution	Body temperature: 0.1°C/°F TDS: 1PPM	Body temperature 0.1°C/°F TVOC:0.001
Measuring distance	1-5CM	
Operating temperature	10-40°C	
Operating Humidity	<85%RH	
Battery type	2*AAA	







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	Auto off	
	(1)	
_	$\stackrel{\smile}{=}$	

Features		
	MT-1	MT-2
TDS	*	
Body temperature	*	*
Ambient temperature/Surface temperature	*	*
White LED digital display	*	*
White / Green / Red LED alarm display	*	*
Fast response less than 1 second	*	*

Size(HxWxD): 35mm x 142mm x 50mm Accessories: 2x1.5V batteries, Gift box.



Features		
	8836	8836H
Precise non-contact forehead temperature measurements	*	*
Selectable °C or °F & forehead heat detection	*	*
Selectable Body and Surface temperature	*	*
Set alarm value and sound alarm	*	*
Face recognition	*	*
Image storage	*	*
Automatic Data Hold & Auto power off	*	*
Automatic selection range	*	*
Display Resolution 0.1°C(0.1°F) *		*
Backlight LCD display *		*
Readings memories *		*
Records readings with real date and time stamp *		*
Read the Max/Min measuring temperature *		*
Automatic generation of data tables		*
Automatic Data Hold & Auto power off	*	*

Specifications	
Range(body mode)	32.0°C to 42.5°C/89.6°F to 108.5°F
Range(Surface mode)	0°C to 60°C/32°F to 140°F
Resolution	0.1°C/0.1°F
Basic accuracy	32 to 35.9°C/93.2 to 96.6°F(±0.3°C/±0.5°F)
ASTM	36 to 39°C/96.8 to 96.6 to 102.2°F(±0.2°C/±0.4°F)
E1965-1998(2003)	39 to 42.5°C/102.2 to 108.5°F(±0.3°C/±0.5°F)
Measuring distance	15-25CM
Response time	0.5 second

Size(HxWxD): 155mm x 50mm x 33mm Accessories: Weight: 68g 2x1.5V batteries, Gift box.

#### DT-8809/8809H Non-Contact Infrared Thermometers for animals

Accessories:

9V batteries, Gift box.

	8809	8809H
Measuring distance	0.5-1m	0.5-1m
Precise non-contact forehead temperature measurements	*	*
Selectable °C or °F & forehead heat detection	*	*
Selectable Body and Surface temperature	*	*
Set alarm value and sound alarm	*	*
Memorization of the last 32 measurements	*	*
Automatic Data Hold & Auto power off	*	*
Display Resolution 0.1°C(0.1°F)	*	*
Backlight LCD display	*	*
Read the Max/Min measuring temperature	*	*
Red backlight & beeper alarm	*	*
Interface	Bluetooth (Optional)	NB-IO

Specifications	
Range(body mode)	32.0°C to 42.5°C/89.6°F to 108.5°F
Range(Surface mode)	0°C to 60°C/32°F to 140°F
Range (animal mode)	30°C to 45°C/86°F to 113°F
Resolution	0.1°C/0.1°F
Basic accuracy	±0.3°C/±0.5°F
Measuring distance	50-100CM
Response time	0.5 second

Size(HxWxD): 204mm x 155mm x 52mm Weight: 320g



Triple LCD display with white backlit



Red backlight alert







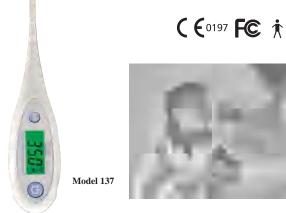
specially designed to take the body temperature of a person regardless of room temperature.

#### **Features** Precise non-contact forehead temperature measurements Selectable °C or °F & forehead heat detection Selectable Body and Surface temperature Set alarm value and sound alarm Memorization of the last 10 measurements Automatic Data Hold & Auto power off Display Resolution 0.1°C(0.1°F) Backlight LCD display

Specifications	
Range(In body mode)	32.0°C to 42.5°C/89.6°F to 108.5°F
Range(In Surface mode)	0°C to 60°C/32°F to 140°F
Resolution	0.1°C/0.1°F
Basic accuracy ASTM E1965-1998(2003)	32 to 35.9°C/93.2 to 96.6°F(±0.3°C/±0.5°F)
	36 to 39°C/96.8 to 96.6 to 102.2°F(±0.2°C/±0.4°F)
	39 to 42.5°C/102.2 to 108.5°F(±0.3°C/±0.5°F)
Measuring distance	1~75cm
Response time	0.5 second

Size(HxWxD): 146mm x 104mm x 43mm Weight: 163g Accessories: 9V battery, Carrying case and Gift box.

#### **DT-137 Electron Clinical Thermometer**



The special-purpose of electron clinical thermometer is body temperature Measuring, offering safe, accurate and quick temperature readings. Select oral, rectal or axillary as your measurement site. No need to worry about broken glass or mercury

Specifications	
Measurement rang	32.0°C -42.9°C(89.6°F-109.2°F
Measurement accuracy	$\pm 0.1 ^{\rm o}{\rm C}(0.2 ^{\rm o}{\rm F}) between 35 ^{\rm o}{\rm C}$ to 42 $^{\rm o}{\rm C}$ (95 $^{\rm o}{\rm F}$ to 107.6 $^{\rm o}{\rm F}$ )
Operating Temperature	10°C to 40°C(50°Fto 104°F)
Storage temperature	-10°C to +60°C
Memory	For signaling the last measured value
Battery:	3V, CR2032

Size(HxWxD): 156mm x 34mm x 22mm Accessories: Weight: 32g CR2032 3V battery, Clamshell

#### BP-96/96B/96H Electronic Blood Pressure Monitor





Model 96



Specifications			
Systolic/mmHg		Meaning	Action
<105	<60	Hypotonic	Consult your doctor
105-140	60-90	Normal	Self-monitoring is sufficient
140-160	90-95	Borderline hypertonic	Consult your doctor
>160	95-105	Mildly hypertonic	Consult your doctor
>160	105-115	Hypertonic,medium severity	Get medical attention
>180	>115	Severely hypertonic	Get medical attention immediately

Size(HxWxD): 66mm x 65mm x 30mm(96) 73mm x 68mm x 28mm(96B)

85mm x 85mm x 28mm(96H) Weight: 99g(96), 107g(96B),133g (96H)

#### BP-102/106

#### **Electronic Blood Pressure Monitor**

BP-102/106 Arm cuff is suitable for arm from 220 to 320mm circumference, the blood pressure monitor readjust itself to identify the necessary pumping pressure, if the pumping pressure set in the factory is not sufficient, the device identifies this and continues

Features
Talking function (BP-102)
99 x2 memory locations
The date and time are displayed and stored together with every blood pressure value
If the battery icon is displayed, the batteries are discharged and the device cannot be used until new batteries are installed

Specifications	
Display	Digital LCD display
Measurement	Oscillometric method
Pressure Display Range	0-299mmHg
Measurement Range	Pressure: 30 to 280 mmHg
Pulse rate	40 to 199 beats/min
Accuracy	Pressure: Within ±5 mmHg
	Pulse rate: Within ±5% of reading
Power Supply	4×1.5V "AA" Size Batteries
Operating Environment	10~40°C /15%~85%RH
Storage Environment	-10~50°C/10%~93%RH
Measurable Arm Circumference	220mm~320mm
Safety Classification	Internal power: Type B
Inflation	Automatic inflation with pumping
Air Release	Automatic rapid air release
Pressure Detection	Electrostatic capacity pressure sensor
Pulse Detection	Electrostatic capacity pressure sensor

**Size(HxWxD):** 136mm x 131.5mm x 68.5mm(106),145mm x 113mm x 115mm(102) Weight: 451g(106),596g(102)

Accessories:

4x1.5V "AA" batteries, Carrying case and Gift box.

## **BS-860 High Definition Personal Video Borescope**

Features
3.5" Color TFT LCD
Camera and Video function
Support real-time live view
TV peripherals to support operations in other
Highlighted with LED to support the operation in the dark
Built-in 1800mAh lithium battery, support USB charging
Standby function to support the charge
Support rotating the image 180° from top to bottom
Flexible gooseneck camera head with waterproof

LCD screen type	3.5"TFT
LCD Pixels	320x240
The max number of frames(FPS)	30FPS/S
Picture format from the camera	JPG(640x480)
Camera video format	AVI
Gooseneck length	1m(39")
Camera diameter	6mm(0.23")
Viewing distance	15cm to ∞
Viewing direction	Viewing angle 64°
Zoom and Rotation	2xZoom, 90° rotation
SD card	2GB/Max 32GB
Dust and water proof	IP 67
Working voltage	Li Battery 3.7V/1800mA
Language	Support English,French,German, Spanish

Size(HxWxD): 120mm x 87mm x 185mm Accessories:

Weight: 584g 3.7V Li battery, gift box with carrying case.















Model 860



BS-860 personal video borescope using 3.5" TFT LCD with high resolution: 320(W) × 240(H) application of H. 264 video codec technology makes images clearer. The flexible

> Allows user to view image and video on LCD monitor

High visibility and 10 degree adjustable LED lighting

Rechargeable battery with USB cable Support SD memory card expansion

Menu with multinational language

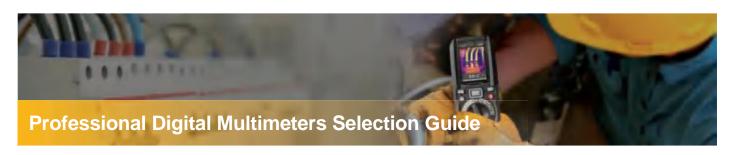
**EMC** EN: 61326





## **Professional Digital Multimeters**







# **Professional True RMS Industrial Multimeter with InfraRed Thermal Imager**

9889 is a professional True RMS digital multimeter and built-in 80  $\times$  80 thermal imager ideal for commercial electricians, automation, electronics, field service, and HVAC work etc. It can visually find the precise location of an electrical problem without direct contact and pinpoint hot spots faster, safer, and more efficiently.

Thermview+ software & cloud sever support the Bluetooth function, the measured data can easily transferred to customers' smartphone for edit and storage.



#### Professional True RMS Multimeter Built-in Oscilloscope

9989 is True RMS multimeter + Oscilloscope + Data logger + Low pass filter + Trend Capture feature, all in one! CEM DT-9989 professional multi-purpose instrument is outgoing right-hand product for engineers. It can quickly solve complex problems in electronics, factory automation, power distribution and electronic engineering equipment etc.

TFT color LCD display + IP67 dustproof and waterproof + Bluetooth interface to smartphone/ PC bring you a better experience.



#### **Heavy Duty True RMS Industrial Multimeter with Backlight**

965BT with automatic backlight for LCD, buttons and knob switch, it is the perfect multimeter for weak light or night use. Protection against water rating IP67 and plus the strong flashlight, it is more safe and reliable.



#### 50.000 counts True RMS Industrial Multimeter with Bluetooth

DT-989 HEAVY DUTY True RMS industrial digital multimeter with 50,000 counts TFT color LCD display, providing fast A/D converting sampling time, high accuracy, built-in datalogging and trend capture features. Offering low pass filter to help user accurately analyze non-traditional sine waves and noisy signals. It is easy to find and solve the electrical challenges.

It features Bluetooth technology to connect a compatible smartphone for remote viewing and sharing, software Meterbox Pro can store and analyze the data.



#### **Heavy Duty True RMS Industrial Multimeters with VFD Measurement**

DT-9560/9561/9562/9663H heavy duty industrial digital multimeter with VFD measurement, the advanced variable frequency drive filtering to help user accurately analyze non-traditional sine waves and noisy signals. It also offers comprehensive features like  $\mu A$  current measurement capability and durable design for quick and safe troubleshooting of electrical, electronic, and HVAC/R systems. It can assess temperatures up to 1000°C (1832°F) with the Type-K thermocouple.

Protection against water rating IP67 is more safe and reliable.

EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033

















IP65 dust and water proof • True RMS





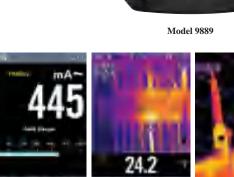


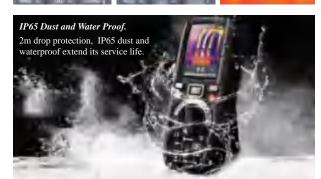






















9889 Professional True RMS Industrial Digital Multimeter built-in Thermal Imager design, providing fast A/D converting sampling time, high accuracy, with datalogging and Trend Capture features. Advanced system platform permits smart multifunctions such as updating software on line, PC calibration etc.

Thermview+ software & cloud server support to transfer the measured data to the customer's smartphone for edit and storage.

#### Safety Conformance

• EN61010-1 CAT IV 600V, CAT III 1000V

Non-Contact Voltage detection (VAC:100V~1000V)

- 1000V input protection on all ranges
- 10A/1000V & 0.8A/1000V fuses protection on current ranges

Features
Built-in Thermal Imager design quickly identifies hot spots without contact
240 x 320 2.8" TFT color LCD display
Large LCD display 6000 counts
Logging function with Trend Capture for easy review of logged data
Low pass filter for accurate measurement of variable frequency drive (VFD) signals
Long work time with li-ion battery
AC, AC+DC true-RMS measurements & 1kHz ACV, ACA bandwidth
3000A Flexible Coil Current Measurements
A/D convert fast sampling time: 10 Times/sec.
Peak capture (records transients as fast as 500µs)
Min/Max/Average with Time stamp (records signal fluctuations)
MicroSD memory card
Support capture screen capabilities
80x80 Infrared resolution
Bluetooth BLE instant share function
Easy to view and analyze images quickly

Thermal Imager				
IR resolution	80x80 pixels	80x80 pixels		
Field of View (FOV)	21° x 21°			
Thermal sensitivity/NETD	< 0.1°C@ +30°C	C(+86°F)/100mK		
Image frequency	50Hz			
Object temperature range	range: -20 to 26	0°C (-4 to 500°F)		
Focus mode	Focus free	Focus free		
Focal length	7.5mm	7.5mm		
Spectral range	8–14 μm	8–14 μm		
Color palettes	IRON/Rainbow/	IRON/Rainbow/Grey/Grey Inverted		
Accuracy		±3°C (±5.4°F) or ±3% of reading (Environment temperature 10°C-35°C, object temperature >0°C.)		
True RMS Multimeter Funct	ions			
Function	Max. Range	Max. resolution	Best Accuracy	
Voltage DC	1000V	100mV	$\pm (0.09\% + 5)$	
Voltage AC	1000V	100mV	$\pm (0.8\% + 5)$	
Current DC	10A	0.1μΑ	$\pm (0.9\% + 5)$	
Current AC	10A	0.1μΑ	$\pm (1.2\% + 5)$	
Resistance	$60 \mathrm{M}\Omega$	0.1Ω	$\pm (0.5\% + 5)$	
Capacitance	6000uF	0.01nF	$\pm (1.2\% + 8)$	
Frequency	10MHz	0.01Hz	$\pm (0.09\% + 5)$	
Diode and Continuity	Yes	Yes		
PC Interface	Bluetooth	Bluetooth		
Power Supply	8 hours Li-ion re	echargeable battery;AC	C Adaptor/charg	

Size(HxWxD): 195mm x 80mm x 58mm

Test leads, Li-ion batteries, Type K temperature probe, Software, gift box with carrying case.





**Professional True RMS Industrial Multimeter** 

Built-in InfraRed Thermal Imager design quickly identifies hot spots without contact



Data Logger



Date/Time setup contro







Features



0.47" (12mm) Fork clamp sensor for AC/DC 100A current measurement

Large LCD display 4000 counts with True RMS measurements & flashlight Built-in Thermal Imager design quickly identifies hot spots without contact Logging function with Trend Capture for easy review of logged data (100,000

AC, AC+DC True RMS measurement & 1kHz ACV/ACA bandwidth

Peak capture (records transients as fast as 500µs) & Data Hold Min/Max with Time stamp (records signal fluctuations)

240 x 320 2.4" TFT color LCD display

CAT III-600V Category safety rating

**True RMS Multimeter Functions** 

Thermal sensitivity/NETD < 0.08°C /80mK

Object temperature range -20 to 260°C (-4 to 500°F)

8-14 µm

Max Range

600V

10A

100A

 $40M\Omega$ 

4000μF 10MHz

IRON/Rainbow/Grey/Grey Inverted

Basic Accuracy

±1.0%

 $\pm 2^{\circ}$ C ( $\pm 3.6^{\circ}$ F) or  $\pm 2\%$  of reading

**Specifications** Thermal Imager IR resolution

Field of View (FOV)

Image frequency

Spectral range

Color palettes Accuracy

Mode Function

Voltage DC Voltage AC

Current DC

Capacitance

Frequency

Duty Cycle

Fork clamp DC curent Current AC Fork clamp AC current

Diode Check & Continuity Test

Built-in 0.3Megapixels visible light digital camera A/D convert fast sampling time: 3 Times/sec.









Model 898A

CAT III-300V

898A 898FC 889FC

32x32 pixels

40°x40°

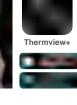
-20 to 300°C













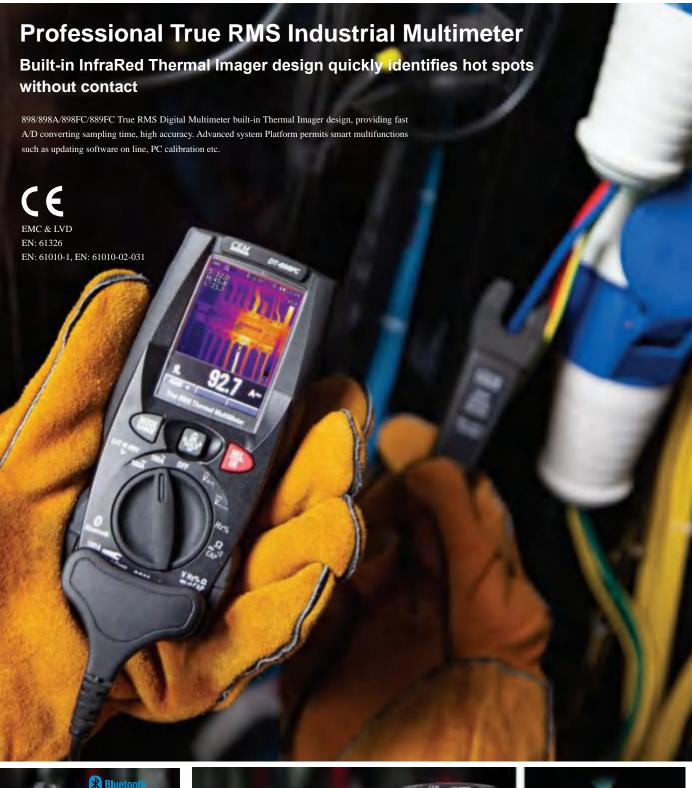


(889FC)

Size(HxWxD): 148mm x 68mm x 48mm Weight: 348g

#### Accessories:

Test leads, Li-ion batteries, Software, gift box with carrying case.







www.cem-instruments.com E-mail:cemyjm@cem-instruments.com

www.cem-instruments.com E-mail:cemyjm@cem-instruments.com



















#### **Safety Conformance**

- EN61010-1 CAT IV 600V, CAT III 1000V
- 1000V input protection on all ranges
- 10A/1000V & 0.8A/1000V fuses protection on current ranges

## Features

50,000 counts 320 x 240 TFT color LCD display

20MHz bandwidth and 50ms/s realtime sample rate

Logging function with trend capture and over 10,000 data logging

Free software to calibrate accuracy

100kHz bandwidth (voltage/current)

AC, AC+DC True RMS measurements

0.025% DCV accuracy with fully PC calibration

Saves measurements, records events and trends 20 times/sec. A/D convert fast sampling time

Peak capture (records transients as fast as 250µs)

Max/Min/Avg with time stamp (records signal fluctuation)

50MS/s

AC/DC

 $1M\Omega/15pF$ 

1000Vp-p

1000V

10A

50ΜΩ

10mF

Size(HxWxD): 220mm x 96mm x 60mm Weight: 631g

10MHz

Smartphone/PC

Accessories: Test leads, Li-ion batteries, Type K temperature probe, Bluetooth and Software,

3.5" color LCD; 320 x 240 pixels

Free Run, falling edge, rising edge

Voltage and time/ Frequency

 $0.01 \mu A$ 

 $0.01 \mu A$ 

0.001nF

0.01Hz

6 hours Li-ion rechargeable battery; AC Adaptor

0.1°C

50mV/div to 200V/div

Moto winding and low ohm  $(50\Omega)$  measurement range

Low pass filter

Display Size

Bandwidth

Risetime Channels

**Specifications Oscilloscope Functions** 

Real time sample rate

Vertical Sensitivity Vertical Resolution Trigger Mode

Trigger Source Trigger Coupling

Input impedance

Function

Voltage DC

Voltage AC

Current DC

Current AC

Temperature

Resistance

Capacitance

Frequency Diode & Continuity Bluetooth Interface

Power Supply

gift box with carrying case.

Max Input Volatage

Cursor Measurement

**True RMS Multimeter Functions** 

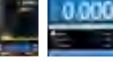
Bluetooth interface to smartphone / PC













High Resolution & Accuracy

 $\pm (0.025\% + 5)$ 

 $\pm (0.3\% + 25)$ 

 $\pm (0.15\% + 2)$ 

 $\pm (0.6\% + 5)$ 

 $\pm (0.05\% + 2)$ 

 $\pm (2.0\% + 40)$ 

 $\pm (0.01\% + 10)$ 

±(1.0%+2.5°C)

Fast response time

#### Bluetooth interface to smartphone /PC

- · Remote measurement of voltage, current, resistance, capacitance and other electrical parameter
- Measurement data can be transmitted to smart phones via Bluetooth and visually analyzed and stored
- · Users can annotate and save each measurement
- Data can be shared to e-mail and other platforms













Type K thermocouple temperature





Built-in digital Oscilloscope and FFT functions

IP67 dust and water proof







50000 counts

PC Calibration

TFT color LCD display





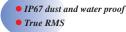
















EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032

EN: 61010-02-033









**Model 9987** 



Fast response time

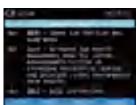
105



High Resolution & Accuracy



Trend Capture function



Help Menu

The 9987 Professional True RMS Industrial Digital Multimeter with TFT color LCD display, providing fast A/D converting sampling time, high accuracy, built-in datalogging and Trend Capture feactures. It can trace any interrupted problems of the equipments and watch on without person. It is easy to find and solve the problems of the production equipments, providing Bluetooth technology and memory the datasheets. It is much safer measurements with double molded plastic housing design and IP67 waterproof.

#### **Safety Conformance**

- EN61010-1 CAT IV 600V, CAT III 1000V
- 1000V input protection on all ranges
- 10A/1000V & 0.8A/1000V fuses protection on current ranges

Features	
Large 50,000 count 320 x 240 TFT color LCD display	
Logging function with Trend Capture for easy review of logged data	
Bluetooth interface for easy data transfer & accuracy calibration	
100kHz bandwidth (voltage/current)	
AC, AC+DC True-RMS measurements	
Records events and trends	
Saves measurements	
A/D convert fast sampling time	
Peak capture (records transients as fast as 250µs)	
Min/Max/Average with Time stamp (records signal fluctuations)	
Moto winding and low ohm $50\Omega$ measurement range	
4-20mA process loop measurements with % reading	
Low pass filter	
IP Rating 67	
Meterbox pro & cloud service	

Specifications			
Function	Maximum	Max, resolution	Accuracy
Voltage DC	1000V	1μV	$\pm (0.025\% + 5)$
Voltage AC	1000V	1μV	$\pm (0.4\% + 40)$
Current DC	10A	$0.01 \mu A$	$\pm (0.15\% + 2)$
Current AC	10A	$0.01 \mu A$	$\pm (0.6\% + 5)$
Temperature	-50°C to 1000°C	0.1°C	±(1.0% + 2.5°C)
Resistance	50ΜΩ	$0.01\Omega$	$\pm (0.05\% + 2)$
Capacitance	10mF	0.001nF	$\pm (1.0\% + 5)$
Frequency	10MHz	0.01Hz	$\pm (0.005\% + 1)$
Diode and Continuity	Yes		
PC Interface	Bluetooth		
Power Supply	18 hours Li-ion rechargeable battery; AC Adaptor/charger		

Size(HxWxD): 220mm x 96mm x 60mm Weight: 631g

Test leads, Li-ion batteries, Type K temperature probe,





Safety Conformance

Features

to 10,000 recorded events

Auto zeroing function

Bluetooth interface

Meterbox pro & cloud service

• EN61010-1 CAT IV 600V, CAT III 1000V

• 1000V input protection on all ranges • 10A/1000V & 0.8A/1000V fuses protection on current ranges





9979 Professional True RMS Industrial Digital Multimeter with

50,000 counts and full Graphics Type LCD display with white backlight.

providing fast A/D converting sampling time, high accuracy, built-in

datalogging and Trend Capture features. It can monitor any problems

of the equipments and watch on without person. It is easy to find and solve the problems of the production equipments, providing Bluetooth

technology and memory the datasheets. It is much safer measurements

with double molded plastic housing design and IP67 waterproof function.

information can simultaneously be displayed at the same time.

Log multiple sessions or log data continuously for over 200 hours. Real Time Clock – for automatic time stamping of saved readings Expandable meter lets you keep current as new capabilities are added

Measure up to 10A (20 A for 30 seconds; 10A continuous)

10MHz Frequency counter and 1MHz duty cycle measurement

Peak hold function with calibration mode

IP67 Waterproof and Auto Power Off

Allow to save and name the measurements, and also recall them at any time Min/Max/Average with Time Stamp to record signal fluctuations

Soft keys, scroll buttons much more secondary functions to access in easily













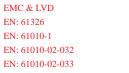
















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**Model 9979** 

Specifications						
Function	Maximum	Max, resolution	Accuracy			
Voltage DC	1000V	1μV	$\pm (0.025\% + 5)$			
Voltage AC	1000V	1μV	$\pm (0.3\% + 20)$			
Current DC	10A	0.01μΑ	$\pm (0.10\% + 5)$			
Current AC	10A	0.01μΑ	$\pm (0.6\% + 5)$			
Temperature	-50°C to 1000°C	0.1°C	±(1.0% + 2.5°C)			
Resistance	50ΜΩ	$0.01\Omega$	$\pm (0.05\% + 5)$			
Capacitance	10mF	0.001nF	$\pm (2.0\% + 5)$			
Frequency	10MHz	0.01Hz	$\pm (0.005\% + 5)$			
Diode and Continuity	Yes					
PC Interface	Bluetooth	Bluetooth				
Power Supply	18 hours Li-ion recha	18 hours Li-ion rechargeable battery; AC Adaptor/charger				

Large 50,000 counts, Full Graphics Type LCD display with white backlight. Multiple sets of measurement

Voltage (DC/AC), current(DC/AC), resistor, diode, capacitance, frequency and duty cycle measurement Ability to record data of signals and review Trend Capture curve, monitoring while you work on other project, it plots measurements as a single line to help detect signal anomalies over time; store up

TRMS AC voltage and current for accurate measurements on complex signals or non-linear loads.

Size(HxWxD): 220mm x 96mm x 60mm Weight: 631g

#### Accessories:

Test leads, Li-ion batteries, Type K temperature probe, Software, gift box with carrying case.



**Trend Capture function** 



Real-time data Recording

www.cem-instruments.com

Fast Response time

Multifunction selectable

# DT-9972/9973/9974



















EMC & LVD EN: 61326 EN: 61010-1

EN: 61010-02-032 EN: 61010-02-033



Meterbox Pro

Model 9978



**Model 9970** 





Model 9971

9978 is the new Professional Digital Multimeter which provides safer measurements with double molded plastic housing design and IP67 waterproof function. 9978 performance like datalogger & True RMS AC voltage and current measurements, 50,000 counts resolution and 0.025% basic DC accuracy within the reach of more customers. The large LCD display with analog bargraph and backlit ensure that datas are easy to read under all circumstances.

Meterbox pro software & cloud server support to transfer the measured data to customer's smartphone for edit and storage.

All inputs are protected by EN 610101-1 CATIV 600V/CATIII 1000V.

#### Safety Conformance

- EN61010-1 CAT IV 600V, CAT III 1000V
- 1000V input protection on all ranges
- 10A/1000V & 0.5A/1000V fuses protection on current ranges



Specifications				
Model		9970	9971	9978
	Max. Range		Best Accuracy	
DC Voltage (v)	1000V	±(0.1%+8)	±(0.05%+5)	$\pm(0.025\% + 5)$
AC Voltage (v)	1000V	±(0.8%+40)	±(0.6%+40)	$\pm (0.4\% + 40)$
DC Current (A)	10A	±(0.2%+20)	±(0.15%+20)	$\pm (0.15\% + 2)$
AC Current (A)	10A	±(1%+15)	$\pm (0.8\% + 15)$	$\pm (0.6\% + 5)$
Resistance (Ω)	50ΜΩ	$\pm (0.5\% + 20)$	$\pm (0.4\% + 20)$	$\pm (0.05\% + 2)$
Capacitance (F)	10mF	±(1.5%+20)	±(0.2%+20)	$\pm (1.0\% + 5)$
Frequency (HZ)	10MHZ	$\pm (0.1\% + 15)$	$\pm (0.1\% + 15)$	$\pm(0.005\% + 1)$
Temperature(°C)	-40°C~1000°C		±(1.0%+30)	±(1.0% + 2.5°)
Temperature (°F)	-40°F~1832°F		±(1.5%+50)	±(1.0% + 2.5°)
Features				
3.5" LCD Display Count		30,000	30,000	50,000
True RMS and Auto Range		*	*	*
Bandwidth (Hz)	100KHz	*	*	*
Duty Cycle	10%~90%	±(1%+30)	±(1%+30)	±(1%+30)
Diode		*	*	*
Auto Power Off		*	*	*
Continuity Buzzer		*	*	*
Low battery indication		*	*	*
Data Hold		*	*	*
Relative Mode		*	*	*
MAX/MIN		*	*	*
Data logging			100	*
Bluetooth Interface		*	*	*
Double Backlight		*	*	*
Analogue Bar Graph		*	*	*
Full Icon Display		*	*	*
Setup		*	*	*
Input Impedance for DCV/ACV	$10M\Omega$	*	*	*
4-20mA Loop	0~100%		±(1%+50)	±(1%+50)
10A/1000V & 0.5A/1000V fuses		*	*	*
protection on current ranges				
Current Measurement Alam		*	*	*
Voltage & Current AC+DC Measurement		*	*	*

Size(HxWxD): 220mm x 96mm x 60mm

Weight: 631g

Accessories: Test leads, 6x1.5V "AAA" batteries, Type K temperature probe(9971), gift box with carrying case and Software













9972

Best Accuracy

 $\pm (0.025\% + 5)$ 

 $\pm (0.4\% + 30)$ 

 $\pm (0.1\% + 15)$ 

 $\pm (0.7\% + 15)$ 

 $\pm (0.3\% + 8)$ 

 $\pm (0.01\% + 8)$ 

 $\pm (1.5\% + 50)$ 

50,000

 $\pm(1\%+30)$ 





9972/9973/9974 are the new Professional Digital Multimeters which provide much safer measurements with double molded plastic housing design and IP67 waterproof function. 9972/9973/9974 performance like datalogger & True RMS AC voltage and current measurements, 50,000 counts resolution and 0.025% basic DC accuracy within the reach of more

All inputs are protected by EN 610101-1 CATIV 600V/CATIII 1000V.

Range

10Hz-10MHz

-40°C~1000°C

-40°F~1832°F

2500W

10%~90%



EN: 61010-02-032 EN: 61010-02-033

Specifications

Model

DC Voltage (v)

AC Voltage (v)

DC Current (A)

AC Current (A)

Resistance  $(\Omega)$ 

Capacitance (F)

Frequency (Hz)

Temperature(°C)

Temperature (°F)

**Features** 3.5" LCD Display Count

Auto Range True RMS Bandwidth (Hz) Duty Cycle

Continuity Buzzer Low battery indication

Input Impedance for DCV/ACV  $10M\Omega$ 

Size(HxWxD): 220mm x 96mm x 60mm

10A/1000V & 0.5A/1000V fuses protection on current ranges Current Measurement Alarm Voltage & Current AC+DC

Diode Auto Power Off

Data Hold Relative Mode MAX/MIN Data logging Bluetooth Interface Double Backlight Analogue Bar Graph Full Icon Display Setup

4-20mA Loop

Weight: 631g

Power (W)



500mV/5V/50V/500V/1000V

500mV/5V/50V/500V/1000V

500μA/5000μA/50mA/500mA/10A

500uA/5000uA/50mA/500mA/10A

 $500\Omega/5K\Omega/50K\Omega/500K\Omega/5M\Omega/50M\Omega$ 

 $50 nF/500 nF/5 \mu F/50 \mu F/500 \mu F/5 mF/50 mF \quad \pm (1\% + 20)$ 







9973

 $\pm (0.025\% + 5)$ 

 $\pm (0.4\% + 30)$ 

 $\pm (0.15\% + 15)$ 

 $\pm (0.7\% + 15)$ 

 $\pm (0.3\% + 8)$ 

 $\pm (1\%+20)$ 

 $\pm (0.01\% + 8)$ 

 $\pm (1\% + 30)$ 

 $\pm (1.5\% + 50)$ 

50,000



9974

 $\pm (0.025\% + 5)$ 

 $\pm (0.4\% + 30)$ 

 $\pm (0.1\% + 15)$ 

 $\pm (0.7\% + 15)$ 

 $\pm (0.3\% + 8)$ 

 $\pm (1\% + 20)$ 

 $\pm (0.01\% + 8)$ 

 $\pm(1\%+30)$ 

±(1.5%+50)

 $\pm (2\% + 5)$ 

50,000

Model 9972



Model 9973



**Model 9974** 

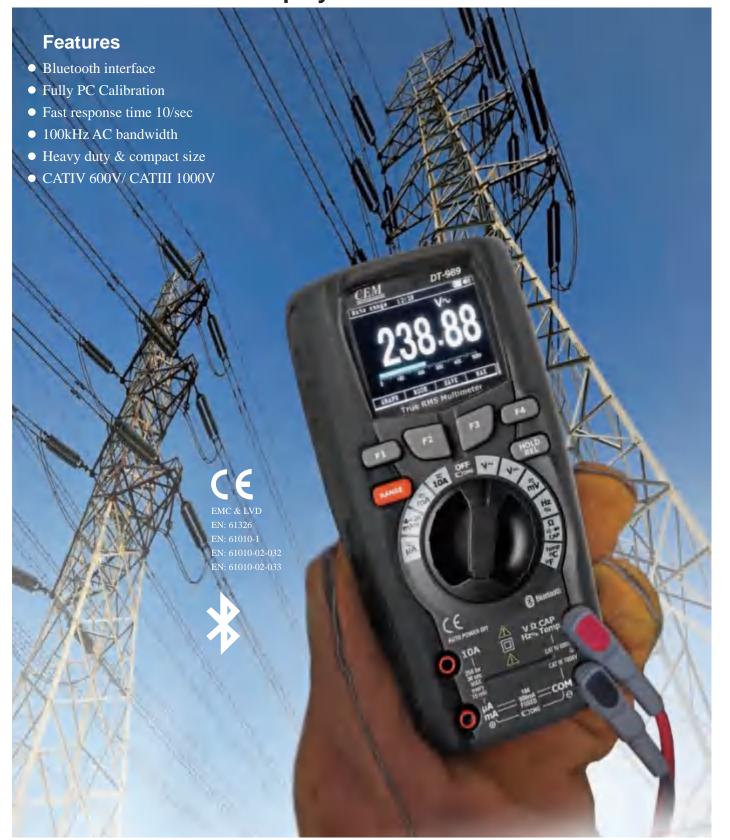
Test leads, 6x1.5V "AAA" batteries, Type K temperature probe, power adaptor(9974) gift box with carrying case and Software

## DT-989/989H

#### Heavy Duty True RMS Industrial Multimeter with TFT color LCD display



# Heavy Duty True RMS Industrial Multimeter with TFT color LCD display







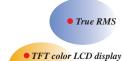












• 50000 counts

PC Calibration



EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033





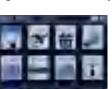












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Trend Capture function



Fast response time







- Remote measurement of voltage, current, resistance, capacitance and other electrical parameter
- Measurement data can be transmitted to smart phones via Bluetooth and visually analyzed and stored
- User can annotate and save each measurement
- Data can be shared to e-mail and other platforms



#### **Safety Conformance**

- EN61010-1 CAT IV 600V, CAT III 1000V
- 1000V input protection on all ranges

with double molded plastic housing design.

• 10A/1000V & 0.8A/1000V fuses protection on current ranges

Features		
	989	989H
Large 50,000 count 320 x 240 TFT color LCD display	*	*
Logging function with Trend Capture for easy review of logged data	*	*
Graph 100 Data review	*	*
Bluetooth interface for easy data transfer & accuracy calibration	*	*
10kHz bandwidth (voltage/current)	*	100kHz
AC, ACV+DCV True-RMS measurements	*	*
Records events and trends	*	*
Saves measurements	*	*
10times/sec A/D convert fast sampling time	*	*
Peak capture (records transients as fast as 250μs)	*	*
Min/Max/Average with Time stamp (records signal fluctuations)	*	*
4-20mA process loop measurements with % reading	*	*
Battery capacity indication	*	*
Date indication	*	*
Meterbox Pro & cloud service	*	*
2m drop proof	*	*

Specifications					
Function	Maximum	Max, resolution	Accuracy		
Voltage DC	1000V	10mV	$\pm (0.05\% + 5)$		
Voltage AC	1000V	10mV	$\pm (0.5\% + 5)$		
Current DC	10A	10μΑ	$\pm (0.2\% + 5)$		
Current AC	10A	10μΑ	$\pm (0.8\% + 5)$		
Temperature	-200°C to 1350°C	0.1°C	±(1.0% + 3°C)		
Resistance	50ΜΩ	$10 \text{m}\Omega$	$\pm (0.2\% + 10)$		
Capacitance	10mF	0.001nF	$\pm (1.0\% + 8)$		
Frequency	10MHz	0.0001Hz	$\pm (0.01\% + 5)$		
Diode and Continuity	Yes				
PC Interface	Bluetooth				
Power Supply	7.4V Li-ion rechargeable battery; AC Adaptor				

Size(HxWxD): 170mm x 79mm x 50mm

 $\begin{tabular}{lll} \textbf{Accessories:} & Test leads, Li-ion batteries, Type K temperature probe, Software, Power Adaptor, gift box with carrying case. \end{tabular}$ 

Weight: 360g



#### Heavy Duty True RMS Industrial Multimeter with TFT color LCD display







Meterbox Pro



Fast response time

EN: 61010-02-033









High Resolution & Accuracy

The 988H Heavy duty True RMS Industrial Digital Multimeters with TFT color LCD display, providing fast A/D converting sampling time, high accuracy, built-in datalogging and Trend Capture feactures. It can trace any interrupted problems of the equipments and watch on without person. It is easy to find and solve the problems of the production equipments, providing Bluetooth technology and memory the datasheets. It is much safer measurements with double molded plastic housing

#### Features

Large 6000 counts 320 x 240 TFT color LCD display

Logging function with Trend Capture for easy review of logged data

Graph 100 Data review

Bluetooth interface for easy data transfer & accuracy calibration (Optional)

1kHz bandwidth (voltage/current)

AC ACV+DCV True RMS measurement

Setup function & save measurement

Fast sampling time

Peak capture (records transients as fast as 500µs)

Max/Min/Avg with time stamp (records signal fluctuation)

4-20mA process loop measurements with % reading

Meterbox Pro & cloud service

Specifications						
Function	Maximum	Max Resolution	Basic accuracy			
Voltage DC	1000V	100mV	±(0.1% + 5)			
Voltage AC	1000V	100mV	±(0.9% + 5)			
Voltage AC+DC	1000V	100mV	±(3.0% + 20)			
Current DC	10A	0.1μΑ	±(0.9% + 5)			
Current AC	10A	0.1μΑ	±(1.2% + 5)			
Temperature	1350°C/2462°F	0.1°C/°F	±(1.2% + 3°)			
Resistance	$60 \mathrm{M}\Omega$	0.1Ω	$\pm (0.8\% + 5)$			
Capacitance	10mF	0.01nF	±(1.2% + 8)			
Frequency	10MHz	0.01Hz	±(0.09% + 5)			
Diode and Continuity	Yes					
Power Supply	7.4V Li-ion rechar	7.4V Li-ion rechargeable battery; AC Adaptor				

#### Size(HxWxD): 170mm x 79mm x 50mm Weight: 360g

Accessories:

Test leads, Li-ion batteries, Type K temperature probe, Software, gift box with carrying case.



#### DT-985/987A/987BT/987H

#### **Heavy Duty True RMS Industrial Multimeter**









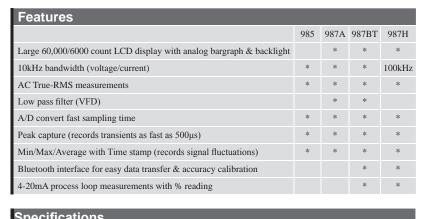


The 985/987A Heavy duty True RMS Industrial Digital Multimeters with providing fast A/D converting sampling time, high accuracy. It can trace any interrupted problems of the equipments and watch on without person. It is easy to find and solve the problems of the production equipments. It is much more safe measurements with double molded plastic housing design.

#### **Safety Conformance**

- EN61010-1 CAT IV 600V, CAT III 1000V
- 1000V input protection on all ranges
- 10A/1000V & 0.8A/1000V fuses protection on current ranges





Function	Maximum	Max, resolution	Basic Accuracy	985	987A	987BT	987H
W.L. DC	100017	10mV	. (0.00/ . 5)		*	*	*
Voltage DC	1000V	100mV	$\pm (0.9\% + 5)$	*	*	*	*
W.L. A.C.	100017	10mV	. (1.00(5)		*	*	*
Voltage AC	1000V	100mV	$\pm (1.0\% + 5)$	*	*	*	*
Comment DC	104	$0.01 \mu A$	. (1.50/5)		*	*	*
Current DC	10A	0.1μΑ	$\pm (1.5\% + 5)$	*	*	*	*
aa	10A	0.01μΑ	±(2.5% + 5)		*	*	*
Current AC		$0.1 \mu A$		*	*	*	*
Resistance	(0) (0)	$10~\text{m}\Omega$	. (1.20/5)		*	*	*
Resistance	60ΜΩ	$100~\text{m}\Omega$	$\pm (1.2\% + 5)$	*	*	*	*
Temperature	760°C/1400°F	0.1°C/°F	±(2.0% + 3°)	*	*	*	*
Capacitance	10mF	0.01nF	$\pm (2.5\% + 5)$	*	*	*	*
Frequency	10MHz	0.01Hz	±(1.0% + 2)	*	*	*	*
Diode and Continuity	Yes						
Power Supply	1.5Vx4 "AAA"	batteries.					

Size(HxWxD): 170mm x 79mm x 50mm

Weight: 360g

Accessories: Test leads, Batteries, Type K temperature probe, Software, gift box with carrying case.









Model 985

EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033







Model 987A



Model 987BT

E-mail:cemyjm@cem-instruments.com



## DT-965/965T/965BT

Heavy Duty Industrial Digital Multimeters















EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033

965 Series are new compact meters with double molded plastic housing and over sized high contrast 6000 counts LCD display. They are all CAT IV 600V/CATIII 1000V.







Specifications  Model	Range	965	965T	965BT
DC Voltage (V)	600mV/6V/60V/600V/1000V	±(0.5%+1)	±(0.5%+1)	±(0.1%+2)
AC Voltage (V)	600mV/6V/60V/600V/1000V	±(1.0%+3)	±(1.0%+3)	±(0.8%+10)
DC Current (A)	600μA/6000μA/60mA/600mA/6A/10A	±(1.0%+3)	±(1.0%+3)	±(0.5%+10)
AC Current (A)	600µA/6000µA/60mA/600mA/6A/10A	±(1.2%+3)	±(1.2%+3)	±(0.8%+3)
Resistance (Ω)	$600\Omega/6K\Omega/60K\Omega/600K\Omega/6M\Omega/60M\Omega$	±(1.2%+5)	±(1.2%+5)	$\pm (0.8\% + 10)$
C : (F)	$40nF/400nF/4\mu F/40\mu F/400\mu F/4000\mu F$	±(3.0%+5)		
Capacitance (F)	$60nF/600nF/6\mu F/600\mu F/600\mu F/6000\mu F$		±(3.0%+5)	±(3.0%+10)
Frequency(Hz)	10Hz-10KHz	$\pm (0.1\% + 5)$	±(0.1%+5)	$\pm (0.01\% + 5)$
Temperature(°C)	-20°C~760°C	±(1.2%+3°C)	±(1.2%+3°C)	±(1.0%+3°C)
Temperature(°F)	-4°F~1400°F	±(2.0%+4°F)	±(2.0%+4°F)	±(1.8%+4°F)
Features				
Display Count		6000	6000	6000
Auto Range		*	*	*
True RMS			*	*
Bandwidth(Hz)		45Hz-1kHZ	45Hz-1kHZ	45Hz-1kHZ
Duty Cycle	0.1~99.9%	*	*	*
Diode		*	*	*
Auto Power Off	Around 15 Minutes	*	*	*
Continuity Buzzer		*	*	*
	≤4.5V	*	*	*
Low Battery Indication				
Low Battery Indication  Data Hold/Relative Mode		*	*	*
•		* MAX/MIN	* MAX/MIN	* MAX/MIN/AV
Data Hold/Relative Mode				



Model 965BT

Model 965

Meterbox Pro

& Flashlight Analogue Bar Graph

IP67 Waterproof

Bluetooth interface with Meterbox pro software Automatic backlight for LCD, Button, knob Switch

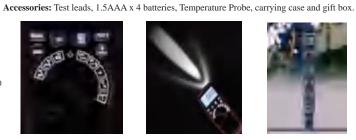
DCV/ACV measurements



Low input Impedance for  $>3k\Omega$  @ 600V MAX.

Size(HxWxD): 170mm x 74mm x 45mm Weight: 218g

Input Impedance for DCV Around 10MΩ





## DT-950/950B/951H/951BT/952BT

#### **Compact Digital Multimeters**



Weight: 188g















950 Series are new compact meters with double molded plastic housing and over sized high contrast 4000 counts LCD display. They are all CAT III 600V.







EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033



Specifications						
Model	Range	950	950B	951H	951BT	952BT
DC Voltage (V)	400mV/4V/40V/400V/600V	$\pm (0.8\% + 2)$	$\pm (0.8\% + 2)$	$\pm (0.8\% + 8)$	$\pm (0.8\% + 1)$	$\pm (0.8\%+1)$
AC Voltage (V)	4V/40V/400V/600V	$\pm (1.0\% + 3)$	$\pm (1.0\% + 3)$	$\pm (1.5\%+10)$	$\pm (0.8\% + 10)$	$\pm (0.8\% + 10)$
	4A/10A	$\pm (1.0\% + 3)$		$\pm (1.0\% + 8)$	$\pm (0.5\% + 10)$	$\pm (0.5\% + 10)$
DC Current (A)	400μA/4000μA/40mA/ 400mA		±(1.0%+3)			±(1.0%+3)
	4A/10A	±(1.2%+3)	±(2%+3)	±(2%+3)	$\pm (1.2\% + 3)$	±(12%+3)
AC Current (A)	400μA/4000μA/40mA/ 400mA		±(1.2%+3)	±(1.5%+3)		±(1.2%+3)
Resistance (Ω)	$400\Omega/4K\Omega/40K\Omega/400K\Omega/$ $4M\Omega/40M\Omega$	±(1.2%+5)	±(1.2%+5)	±(1.2%+5)	±(0.8%+10)	±(0.8%+10)
Capacitance (F)	$40nF/400nF/4\mu F/40\mu F/400\mu F/ \\ 4000\mu F$	±(3.0%+5)	±(3.0%+5)	$\pm (3.0\% + 5)$	±(3.0%+10)	±(3.0%+10)
Frequency(Hz)	10Hz-10MHz	±(1.2%+5)	$\pm (1.2\%+5)$	$\pm (1.2\% + 3)$	$\pm (1.2\%+5)$	±(1.2%+5)
Temperature(°C)	-20°C~760°C	±(1.2%+3°C)	±(1.2%+3°C)	±(1.5%+5°C)	±(1.0%+3°C)	±(1.0%+3°C)
Temperature(°F)	-4°F~1400°F	$\pm (2.0\% + 4^{\circ}F)$	$\pm (2.0\% + 4^{\circ}F)$	±(1.5%+9°F)	$\pm (1.8\% + 4^{\circ}F)$	±(1.8%+4°F)

Features					
		950	950B	951H	951BT/952BT
Display Count		4000	4000	4000	4000
Auto Range		*	*	*	*
True RMS				*	*
Bandwidth(Hz)		45Hz-1kHZ	45Hz-1kHZ	45Hz-400HZ	45Hz-1kHZ
Outy Cycle	0.1~99.9%	*	*	*	*
Diode		*	*	*	*
Auto Power Off	Around 15 Minutes	*	*	*	*
Continuity Buzzer		*	*	*	*
Low Battery Indication	≤3.5V	*	*	*	*
Data Hold		*	*	*	*
MAX/MIN		*	*	*	*
Bluetooth interface with Meterbox pro software					*
CD Backlight		*	*	*	*
Flashlight		*	*	*	*
Analogue Bar Graph		41	41	41	41
Low input Impedance for OCV/ACV measurements	>3kΩ @ 600V MAX.			*	*
nput Protection		*	*	*	*
nput Impedance for DCV	Around 10MΩ	*	*	*	*
D67 Watamana of		sk	*	*	sk

Test leads, 1.5V AAA x 3 batteries, Temperature Probe,



carrying case and gift box.



Model 951H



www.cem-instruments.com















#### Features

- Low pass filter for accurate measurement of variable frequency drive (VFD) signals
- 6000 counts display with LCD Backlight
- True RMS measurement
- 45Hz~1kHz AC Bandwidth
- Diode & Continuity Buzzer
- Auto Power Off
- Low Battery Indication
- Data Hold function

- Auto Ranging
- Max/Min
- Relative Mode
- Input Protection
- IP67 Waterproof







**Model 9560** 



IP67 dust and water proof

2m Drop-proof

Specification	Specifications		
Model	Range	9560	9561
DC Voltage (V)	60 mV/600 mV/6V/60V/600V/1000V	±(0.5%+5)	±(0.5%+5)
AC Voltage (V)	60 mV/600 mV/6V/60V/600V/1000V	±(0.8%+3)	±(0.8%+3)
VFD	50.0V to 700V	±(4.0%+3)	±(4.0%+3)
DC Current (A)	$600 \mu A/6000 \mu A/60 m A/600 m A/6A/10A$	±(1.0%+3)	±(1.0%+3)
AC Current (A)	$600 \mu A/6000 \mu A/60 m A/600 m A/6 A/10 A$	±(1.5%+3)	±(1.5%+3)
Resistance (Ω)	$600\Omega/6K\Omega/60K\Omega/600K\Omega/6M\Omega/60M\Omega$	$\pm (0.8\% + 2)$	$\pm (0.8\% + 2)$
Capacitance (F)	99.99nF/999.9nF/9.999μF/99.99μF/ 999.9μF/9.999mF/99.99mF	±(4.0%+5)	±(4.0%+5)
Frequency(Hz)	9.999Hz-9.999MHz	±(0.1%+4)	$\pm (0.1\% + 4)$
Temperature(°C)	-40°C~1000°C		±(3.0%+3)
Temperature(°F)	-40°F~1832°F		±(3.0%+5)

Size(HxWxD): 180mm x 82mm x 55mm Weight: 255g

Accessories: Test leads, 9V battery, temperature probe (9561) and gift box with carrying case.

























Model 9664H



**Model 9562** 



234.48

Model 9665H

- Low pass filter for accurate measurement of variable frequency drive (VFD) signals (9562/9664H/9665H)
- Low input impedance prevents false readings due to "ghost voltage" (LoZ) (9664H/9665H)
- 3000A ACA flexible clamp (9664H/9665H)
- Peak Value (9664H/9665H)
- 6000 counts display with LCD backlight
- True RMS Measurement

Features

- 45Hz-1kHZ Bandwidth (9562/9663H/9664H)
- 45Hz-10kHZ Bandwidth (9665H)
- Duty Cycle 0.1~99.9%

- Diode & Continuity Buzzer
- Auto Ranging & Auto Power Off
- Low Battery Indication ≤7.5V
- Data Hold
- Relative Mode
- Max/Min (9562/9663H)
- 61 Analogue Bar Graph
- Input Protection
- Input Impedance for DCV & ACV (around 10MΩ)
- IP67 Waterproof

Specifications							
Model	Range	9562	9663H	9664H	9665H		
DC Voltage (V)	60mV/600mV/6V/60V/600V/1000V	±(0.5%+5)	±(0.5%+5)	±(0.5%+5)	$\pm (0.5\% + 5)$		
AC Voltage (V)	60mV/600mV/6V/60V/600V/1000V	±(0.8%+3)	±(0.8%+3)	±(0.8%+3)	±(0.8%+3)		
VFD	50.0V to 700V	±(4.0%+3)		±(4.0%+3)	±(4.0%+3)		
Loz (V)	600V DC/AC			±(3.0%+30)	±(3.0%+30)		
DC Current (A)	600μA/6000μA/60mA/600mA/6A/10A	±(1.0%+3)	±(1.0%+3)	±(1.0%+3)	±(1.0%+3)		
AC Current (A)	600μA/6000μA/60mA/600mA/6A/10A	±(1.5%+3)	±(1.5%+3)	±(1.5%+3)	±(1.5%+3)		
Flexible Coil Current 3000A	3000A			$\pm (3.0\% + 5)$	$\pm (3.0\% + 5)$		
Resistance $(\Omega)$	$600\Omega/6K\Omega/60K\Omega/600K\Omega/6M\Omega/60M\Omega$	$\pm (0.8\% + 2)$	±(0.8%+5)	$\pm (0.8\% + 2)$	$\pm (0.8\% + 2)$		
Capacitance (F)	99.99nF/999.9nF/9.999μF/99.99μF/ 999.9μF/9.999mF/99.99mF	±(4.0%+5)	±(4.0%+5)	±(4.0%+5)	±(4.0%+5)		
Frequency (Hz)	9.999Hz-9.999MHz	±(0.1%+4)	±(0.1%+4)	±(0.1%+4)	±(0.1%+4)		
Temperature(°C)	-40°C~1000°C	±(3.0%+3)	±(3.0%+3)	±(3.0%+3)	±(3.0%+3)		
Temperature(°F)	+40°F~1832°F	±(3.0%+5)	±(3.0%+5)	±(3.0%+5)	±(3.0%+5)		

Size(HxWxD): 180mm x 82mm x 57mm

Accessories: Test leads, 9V battery, temperature probe, carrying case and gift box.

Weight: 255g

**Professional True RMS Industrial Digital Multimeters** 

**Meterbox pro Software** 

• Remote measurement of voltage, current, resistance, capacitance and other electrical parameter

• Measurement data can be transmitted to smart phones via Bluetooth and visually analyzed and

**Bluetooth** Meterbox Pro

• User can annotate and save each measurement

• Data can be shared to e-mail and other platforms

for DT-9959 DMM

## DT-9919/9929/9939/9949/9959

#### **Professional True RMS Industrial Digital Multimeters**















Bluetooth interface (9959)

50000 counts

PC Calibration

9919/9929/9939/9949/9959 are the new Professional Digital Multimeters which provide much safer measurements with double molded plastic housing design and IP67 waterproof function. 9949/9959 performance like datalogger & True RMS AC voltage and current measurements, 50,000 counts resolution and a 0.03% basic DC accuracy within the reach of more customers. The large LCD display with analog bargraph and backlit ensure that datas are easy to read under all circumstances.

All inputs are protected to EN 610101-1 CATIV 600V/CATIII 1000V.

#### **Safety Conformance**

- EN61010-1 CAT IV 600V, CAT III 1000V
- 1000V input protection on all ranges
- 10A/1000V & 0.5A/1000V fuses



















Model 9919







- protection on current ranges

EN: 61010-1







Features					
	9919	9929	9939	9949	9959
$20,\!000$ counts high resolution (0.01mV, 0.01 $\mu A,0.01\Omega)$					
$40,\!000$ counts high resolution (0.01mV, 0.01 $\mu A,0.01\Omega)$	*	*	*		
50,000 counts high resolution (0.01mV, 0.01 $\mu A,0.01\Omega)$				*	*
Triple LCD display with bargraph & Backlit		*	*		*
AC+DC Measurement		*	*		*
9999 Readings memories		*	*		*
True RMS measurement & Peak capture mode	*	*	*	*	*
1000V input protection on all ranges	*	*	*	*	*
4-20mA process loop measurements with % reading	*	*	*	*	*
Data Hold/MAX/MIN recording mode	*	*	*	*	*
IP67 Waterproof and Auto Power Off	*	*	*	*	*
Wide capacitance range	*	*	*	*	*
Wireless USB interface			*		
Bluetooth interface with Meterbox pro software					*

Specification	ns		
Function	Max. Range	Max.Resolution	Basic Accuracy
Voltage DC	1000 V	10μV	±0.03% (9949/9959 ±0.06% (9929/9939 ±0.06% (9919/9919E
Voltage AC	1000V	10μV	±1.0%
Current DC	10A	0.01μΑ	±1.0%
Current AC	10A	0.01μΑ	±1.5%
Resistance	$40 \mathrm{M}\Omega$	$10 \mathrm{m}\Omega$	±0.3%
Duty Cycle	99.9%	0.1%	±1.2%
Frequency	10MHz	0.001Hz	±0.1%
Capacitance	40mF	10PF	±3.5%
Temperature	1200°C/2192°F/ 760°C/1400°F(9919)	0.1°C/°F	±1.0%
Diode Check			
Continuity Test			

Weight: 447g Size(HxWxD): 183mm x 82mm x 55mm

Accessories: Test leads, 9V battery, Type K temperature probe, gift box with carrying case and Software (9959)

USB cable and Software (9939)



Model 9959



## DT-9915H/9917H/9918T















They set the standard with a combination of precision, features, easy-to-use,

Have True RMS AC Voltage, Current readings, as well as Frequency and Capacitance ranges.

#### Safety Conformance

- EN61010-1 CAT IV 600V, CAT III 1000V
- 1000V input protection on all ranges
- 10A/1000V & 0.5A/1000V fuses protection on current ranges



IP67 dust and water proof

True RMS

CE EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033

Analog bargraph/segment







Model 9918



Model 9915H

119







#### **Features** 9915H 9917H 9918T Digital LCD display counts 6000 6000 4000 True RMS measurement Temperature measurement IP67 & Safety design Relative zero Wide capacitance range Max/Min recording mode & Data Hold Auto Power Off & Blacklight AC/DC current clamp-on adaptor input Peak capture mode

Specifications									
Function	Max. Range	Basic Accuracy	9915H	9917H	9918T				
Voltage DC	1000 V	$\pm 0.5\% + 5 digits$	*	*	*				
Voltage AC	1000V	±0.8%+3digits	*	*	*				
Current DC	10A	$\pm 1.0\% + 3 digits$	*	*	*				
Current AC	10A	$\pm 1.5\% + 3 digits$	*	*	*				
Resistance	60ΜΩ	±0.8%+2digits	*	*	*				
Duty Cycle	99.9%	$\pm 1.2\% + 2 digits$	*	*	*				
Frequency	9.999MHz	$\pm 1.0\% + 5 digits$	*	*	*				
Capacitance	99.99mF	$\pm 4.0\% + 5 digits$	*	*	40mF				
Temperature	1300°C/2372°F	±3.0%+5°C/9°F		*	*				
AC/DC current cl	40A/	400A							
Diode Check	*	*	*						
Continuity Test	*	*	*						

Size(HxWxD): 182mm x 82mm x 55mm Weight: 360g

Accessories: Test leads and 9V battery, Type K temperature probe (9918T), gift box with carrying case.

## DT-9926/9927/9927T/9928/9928T/9938

#### Professional Digital Multimeters



9926, 9927 & 9927T series are the new 6000 counts multimeters. They are a combination of precision, features, easy-to-use, safety and reliability.

9928/9928T are the new 11,000 counts and 9938 is the new 22,000 counts multimeter. They are a combination of precision, features, easy-to -use, safety and reliability.

9927T/9928T has True RMS AC Voltage and Current readings, MAX-MIN recording.

## Safety Conformance

- EN61010-1 CAT IV 600V, CAT III 1000V
- 1000V input protection on all ranges
- 10A/1000V & 0.5A/1000V fuses protection on current ranges



EMC & LVD EN: 61326 EN: 61010-1

EN: 61010-02-032 EN: 61010-02-033







Features										
	9926	9927	9927T	9928	9928T	9938				
Digital display counts	6000	6000	6000	11,000	11,000	22,000				
Max.Resolution	0.1n	nV/0.1μA	$/0.1\Omega$	0.01m	V/0.01µA	$/0.01\Omega$				
True RMS measurement			*		*					
Analog bargraph/segment	*/61	*/61	*/61			*				
Safety design	*	*	*	*	*	*				
Relative mode	*	*	*	*	*	*				
Data Hold	*	*	*	*	*	*				
MAX/MIN recording mode	*	*	*	*	*	*				
Auto Ranging	*	*	*	*	*	*				
Auto Power Off	*	*	*	*	*	*				
Wide capacitance range	$1000 \mu F$	$1000 \mu F$	$1000 \mu F$	110mF	110mF	*				
Temperature function		*	*	*	*	*				

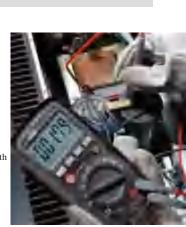
Specifications										
Function	Max. Range	Basic Accuracy								
Voltage DC	1000 V	±0.09%								
Voltage AC	1000V	±0.8%								
Current DC	10A	±1.0%								
Current AC	10A	±1.5%								
Resistance	$40 \mathrm{M}\Omega$	±0.3%								
Duty Cycle	99.9%	±1.2%								
Frequency	10MHz	±0.1%								
Capacitance	40mF	±3.5%								
Temperature	760°C/1400°F(9919)	±3.0%								
Diode Check										
Continuity Test										



Accessories:

Test leads, 9V battery.

Type K temperature probe and gift box with carrying case.



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Model 9927/9927T



Model 9926



Model 9928/9928T



**Model 9938** 

# DT-9967/9967T/9969

#### Professional Digital Multimeters















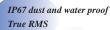




9968/9968BT are Professional digital multimeters which provide safer measurements with double molded plastic housing design and IP67 waterproof function. 9968/9968BT performance as True RMS AC/DC voltage and current measurement, 6000 counts resolution. The large OLED display with analog bargraph and backlit ensures that readings are easy to read under all circumstances.

All inputs are protected by EN 610101-1 CATIV 600V/CATIII 1000V.







Meterbox Pro

Model 9968BT



• EN61010-1 CAT IV 600V, CAT III 1000V

• 1000V input protection on all ranges

Safety Conformance

• 10A/1000V & 0.8A/1000V fast fuses protection on current ranges

EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033





Features							
	9968	9968BT					
Large 6,000 count OLED display	*	*					
Logging function with Trend Capture for easy review of logged data	*	*					
Bluetooth interface for easy data transfer		*					
2kHz bandwidth (voltage/current)	*	*					
AC, ACV+DCV True-RMS measurements	*	*					
Record events and trends	*	*					
Save measurements	*	*					
Peak Hold	*	*					
Min/Max/Average with Time stamp (records signal fluctuations)	*	*					
4-20mA process loop measurements with % reading	*	*					
Battery capacity indication	*	*					
Flexible Current test (320B optional)	*	*					
Date indication	*	*					
Bluetooth interface		*					
Meterbox pro & cloud service		*					

Maximum	Max, resolution	Accuracy			
1000V	100mV	$\pm (0.9\% + 4)$			
1000V	100mV	$\pm (1.0\% + 40)$			
10A	$0.1 \mu A$	±(1.8% + 5)			
10A	$0.1 \mu A$	±(2.0% + 5)			
3000A	0.01A	$\pm (3.0\% + 5d)$			
-20°C to 1000°C	0.1°C	±(2.0% + 3°C)			
60ΜΩ	0.1Ω	±(1% + 5)			
60mF	0.01nF	±(2.0% + 10)			
10MHz	0.01Hz	±(0.5% + 4)			
Max 3V Test current	t <0.5mA				
Buzzer sounds at $50\Omega$					
	1000V 1000V 10A 10A 3000A -20°C to 1000°C 60MΩ 60mF 10MHz Max 3V Test current	1000V     100mV       1000V     100mV       10A     0.1μA       10A     0.01A       -20°C to 1000°C     0.1°C       60MΩ     0.1Ω       60mF     0.01nF       10MHz     0.01Hz       Max 3V Test current <0.5mA			

Size(HxWxD): 170mm x 79mm x 50mm Weight: 342g Accessories: Test leads, 9V battery. Type K temperature probe and gift box.



**Model 9968** 



within the reach of more customers













9967/9967T series are the new 6600 counts multimeters. They are a combination of precision, easy-to -use, safety and reliability.

9967T has True RMS AC Voltage, Current readings, MAX-MIN recording, as well as Frequency and Capacitance readings.

All inputs are protected by EN 610101-1 CATIV 600V/CATIII 1000V.





Bluetooth Remote measurement of voltage, current, resistance, capacitance and other electrical parameter Meterbox Pro Measurement data can be transmitted to smart phones via Bluetooth and visually analyzed and stored User can annotate and save each measurement Data can be shared to e-mail and other platforms

Features			
	9967	9967T	9969
Digital display counts	6600	6600	50,000
50,000 counts high resolution (0.001mV, 0.01 $\mu$ A, 0.01 $\Omega$ )			*
True RMS measurement		*	*
1000V input protection on all ranges	*	*	*
Data Hold/ MAX/MIN /Relative function	*	*	*
Auto Power Off	*	*	*
Analog bargraph & segment	*	*	*
NCV Function	*	*	

Specifications										
Function	Max. Range	Basic Accuracy	9967	9967T	9969					
Voltage DC	1000 V	±0.5%	*	*	±0.06%					
Voltage AC	1000V	±0.8%	*	*	±1.0%					
Current DC	10A	±1.2%	*	*	±1.0%					
Current AC	10A	±1.8%	*	*	±1.5%					
Resistance	$60 \mathrm{M}\Omega$	±0.8%	*	*	±0.3%					
Duty Cycle	99.9%	±1.2%	*	*	±1.2%					
Frequency	10MHz	±1.5%	*	*	±0.1%					
Capacitance	$100\mu F/60mF$	±3.0%	*	*	±3.5%					
Temperature	760°C/1400°F	±3.0%	*	*	±1.0%					
Diode Check			*	*	*					
Continuity Test			*	*	*					

Size(HxWxD): 170mm x 79mm x 50mm Weight: 366g Accessories: Test leads, 9V battery. Type K temperature probe and gift box.









EMC & LVD EN: 61326 EN: 61010-1

EN: 61010-02-032

EN: 61010-02-033



**Model 9969** 

**Model 9967** 



# DT-9960H/9961H/9964H/9965H Series Professional Digital Multimeters

# DT-9515/9516/9517/9518B/9519BT Professional True RMS Digital Multimeters





















Model 9961H



Model 9964H



Model 9965H





61010-1 CAT III 1000V





Features									
	9960	9960H	9961/9961W	9961H	9962/9962T	9963/9963T	9964H	9965H	
Digital display counts	4000	6000	4000	6000	4000	6000	6000	6000	
True RMS measurement		*	9961W	*	9962T	9963T	*	*	
Safety design	*	*	*	*	*	*	*	*	
Relative zero	*	*	*	*		*	*	*	
Data Hold	*	*	*	*	*	*	*	*	
MAX/MIN recording mode		*		*	*	*	*	*	
VFD function							*	*	
Current Clamp AC/DC 60A							*		
Auto Power Off	*	*	*	*	*	*	*	*	
Peak capture mode					*				
Wide capacitance range		99.99mF		99.99mF	40mF	1000uF	99.99mF	99.99mF	
Analog bargraph/segment					*/42	*/61	61	61	
NCV Function	*	*	*	*	*	*	*	*	
Live test		*		*					
Low input Inpedance				*			*		

Specifications										
Function	Max. Range	Basic Accuracy	9960	9660H	9961/9961W	9661H	9962/9962T	9963/9963T	9964H	9965H
Voltage DC	1000 V	±0.5%	*	*	*	*	*	*	*	*
Voltage AC	1000V	±0.8%	*	*	*	*	*	*	*	*
Current DC	10A	±1.2%	*	±1.0%	*	±1.0%	*	*	±1.0%	±1.0%
Current AC	10A	±1.8%	*	±1.5%	*	±1.5%	*	*	±1.5%	±1.5%
Current Clamp DC	60A	±1.0%							*	
Current Clamp AC	60A	±1.2%							*	
VFD function	700V AC	±4.0%							*	*
Resistance	$40 \mathrm{M}\Omega$	±0.8%	*	$60 \mathrm{M}\Omega$	*	$60 \mathrm{M}\Omega$	*	*	$60 \mathrm{M}\Omega$	$60 \mathrm{M}\Omega$
Duty Cycle	99.9%	±1.2%	*	*	*	*	*	*	*	*
Frequency	10MHz	±1.5%	*	*	*	*	*	*	*	*
Capacitance	$100\mu F/40mF$	±3.0%	100μF	99.99mF	100μF	99.99mF	40mF	1000μF	99.99mF	99.99mF
Temperature	760°C/1400°F	±3.0%		1000°C/1382°F	*	1000°C/1382°F	*	*	1000°C/1382°F	1000°C/1382°F
Diode Check			*	*	*	*	*	*	*	*
Continuity Test			*	*	*	*	*	*	*	*

Size(HxWxD): 170mm x 79mm x 50mm

Weight: 366g

Accessories: Test leads, 9V battery. Type K temperature probe without 9960 and gift box.











9515 series Digital Multimeters are compact and simple use for safe and reliable measurements. They are high accuracy and good choose to find and solve problems of the production equipments.

#### Safety Conformance

- EN61010-1 CAT IV 600V, CAT III 1000V
- 1000V input protection on all ranges
- 10A/1000V & 0.8A/1000V fuses protection on current ranges

#### Features

- CAT IV 600 V safety catagory
- Large OLED display (9519BT)
- Frequency and temperature measurement
- Voltage, Resistance, Continuity, Capacity measurement
- AC/DC current measurement, Max 10A current Diode test, data hold
- Peak Hold

Low pass filter for accurate measurement of variable frequency drive (VFD) signals (9516/9517/9518B/9519BT)

Features					
	9515	9516	9517	9518B	9519BT
LCD display	LCD	LCD	LCD	LCD	OLED
Backlit Controls	*	*	*	*	
Range mode	Manual	Auto	Auto	Auto	Auto
ACV+DCV measurements					*
Digital display counts	6000	6000	6000	6000/60000	6000
Analog Bargraph/segments				*	*
AC bandwidth (voltage/current)	1kHz	1kHz	1kHz	10kHz	1kHz
Auto Power Off	*	*	*	*	*
True-RMS measurements	*	*	*	*	*
Flexible A 3000A					*
VFD function		*	*	*	*
Bluetooth interface					*
Flexible Current test					*
Date indication					*
Data storage					*

<b>Specifica</b>	ations						
Function	Max. Range	Basic Accuracy	9515	9516	9517	9518B	9519B
AC Voltage	1000V	1.0 % ± 5 counts	*	*	*	*	*
DC Voltage	1000V	$0.5\% \pm 3$ counts	*	*	*	*	*
AC Current	10A	$2.5\% \pm 5$ counts	*	*	*	*	*
DC Current	10A	2.0% ± 3 counts	*	*	*	*	*
Flex A AC	3000A	3.0% ± 3 counts					*
Resistance	60Meg	$2.5\% \pm 5$ counts	*	*	*	*	*
Temperature	-20 to 1000°C -4 to 1832°F	2.5% ± 3°C			*	*	*
Capacitance	6000uF	$2.5\% \pm 5$ counts	*	*	*	*	60mF
Duty Cycle	1~99%			*	*	*	*
Frequency	10MHz	1.0% ± 2 counts	*	*	*	*	*
Continuity	50Ω		*	*	*	*	*
LoZ	600V						*
Diode Check	MAX 3V		*	*	*	*	*
4-20mA%						*	*

Size(HxWxD): 188mm x 90mm x 45mm Weight: 373g

Accessories: Test leads, 1.5Vx3 "AAA" batteries,

Type K temperature probe, 320B option (9518/9519BT), software and gift box with carrying case.

www.cem-instruments.com



**Model 9515** 









**Model 9517** 



Model 320B

Model 9519BT

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## **Compact Digital Multimeters**







#### **True RMS Compact Digital Multimeter**

DT-960/960C compact True RMS digital multimeter is the true tester for construction sites. The sturdy structure design is capable of resisting every shock and keep working with the very same precision and reliability(3m drop tested). It provides with all of the typical functions of everyday use, but also features an in-built flashlight to illuminate poorly lit environments.

DT-960C features Bluetooth technology to connect a compatible smartphone for remote viewing and sharing, software Meterbox Pro can store and analyze the data.



#### **Compact Digital Multimeters**

DT-916H auto range multimeter measures AC and DC voltage and current, resistance, capacitance, frequency, duty cycle and temperature. It also tests continuity, diodes and has a built-in non-contact AC voltage detector. DT-912D manual range multimeter measures AC and DC voltage, DC current, resistance, continuity, diodes and batteries. Readings are displayed on a backlit LCD. They are suitable for commercial electrician, electronics technician, and DIY users.



#### **Smart True RMS Multimeter with Automatic Selection**

DT-946 is a high performance smart digital multimerer with auto selection DC/AC voltage. It provides True RMS readings for more accurate measurements, also check resistance and continuity. It offers a built-in non-contact voltage detection function 50V~600V and a built-in LED flashlight offers convenience in poorly lit environments. The Autohold feature automatically holds the reading on the display when the leads are connected to the circuit being tested.



#### **CATIV 600V Pocket Multimeter with NCV Tester**

DT-218 CAT IV 600V pocket multimeter with double molded plastic housing and designed with non-contact voltage detection function (VAC: 100V~600V). It measures AC and DC voltage and current, resistance, continuity, capacitance, frequency, duty cycle and diode test. A built-in LED flashlight offers convenience in poorly lit environments.



#### **Pocket Digital Multimeters**

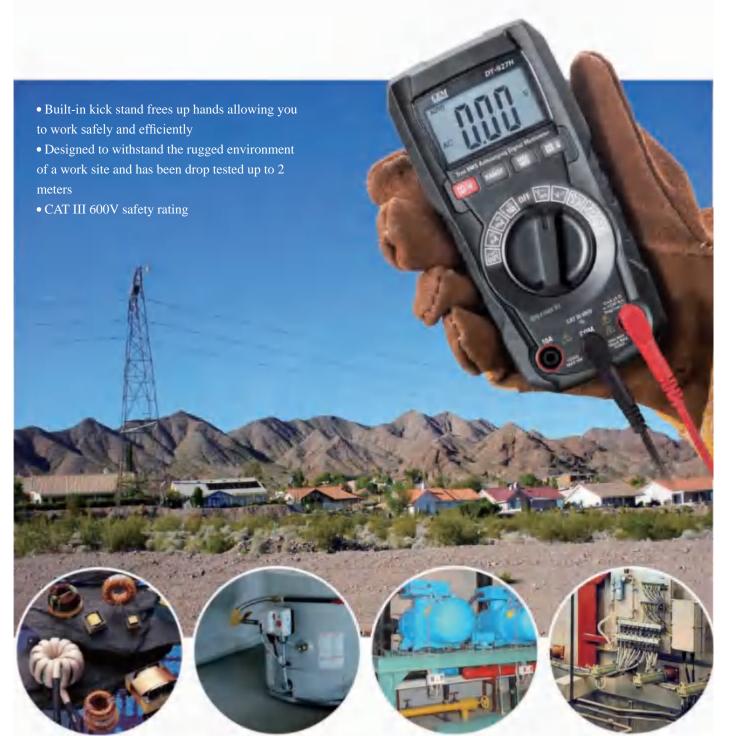
DT-913B/913T/915T compact digital multimerer with tuber holster housing. It measures AC and DC voltage and current, resistance, continuity and diode test etc. They are all CAT III 600V rated. DT-915T has high contrast 6000 counts LCD display. It offers advanced variable frequency drive filtering to help you accurately analyze non-traditional sine waves and noisy signals.

# DT-926A/926/927A/927/927H/928BT

#### Compact True RMS Multimeter with Battery test



# **Compact 6000 Counts True RMS Multimeter with Blacklight**









EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033







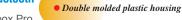












• True RMS

926 is durable and attractive 600V multimeter for the beginning electrician. 7 Measurement functions including AC and DC voltage, DC current, resistance, diode test, battery test, and continuity provide the capability to tackle any basic electrical task.

927 compat 600V True RMS 13-function auto-ranging multimeter with built-in NCV and Live detector.

	GOOD	LOW	BAD
1.5V	>1.3V	0.95 to 1.3V	< 0.95V
9V	>7.7V	5.7 to 7.7V	< 5.7V

Features						
	926A	926	927A	927	927H	928BT
Digital display counts with backlit	2000	2000	4000	4000	6000	6000
True RMS measurement	*	*	*	*	*	*
Range selection	Manual	Manual	Auto	Auto	Auto	Auto
MAX/MIN hold			*	*	*	*
0.1~99.9% Duty Cycle measurement				*	*	*
Diode & Continuity buzze check	*	*	*	*	*	*
Auto Power Off	*	*	*	*	*	*
Display backlight			*	*	*	*
Data Hold/REL measurement	*	*	*	*	*	*
Fast and accurate capacitance measurement				*		
Non-Contact ACV & ACV Live detection			*	*	*	
Backlight for LCD, Knob Switch, Flashlight					*	*
1.5V and 9V battery test	*	*		*		
Full ranges protection	*	*	*	*	*	*
Drop tested up to 2 meters	*	*	*	*	*	*
Square wave signal output					*	*
Low input Inpedance (around $3k\Omega$ )					*	*
Bluetooth interface with Meterbox Pro software						*

CE
EMC & LVD
EN: 61326
EN: 61010-1
EN: 61010-02-032
EN: 61010-02-033

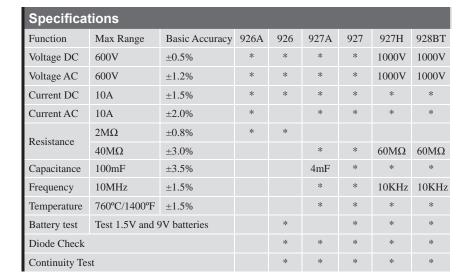






Model 927

Model 926A



Size(HxWxD): 151mm x 75mm x 45mm

Accessories: Test leads, 2x1.5V battery and type K temperature probe (927/927A/927H/928BT), clamshell. Meterbox Pro





Model 928BT

927H/928BT

## DT-912B/912/912N/914/916/916N/916H/912D

**Compact Digital Multimeters** 

# DT-920/920N/920L/921/921N/922/920H/922H/931H/932H

Compact True RMS Digital Multimeters







 Built-in Non-Contact AC Voltage Detector (912N/916N/916H)







Features							
	912B	912D	912/912N	914	916	916N	916H
Digital display counts	2000	2000	2000	2000	4000	4000	4000
True RMS measurement		*					*
Range selection	Manual	Manual	Manual	Auto	Auto	Auto	Auto
MAX/MIN hold				MAX			*
Auto Power Off		*		*			*
Display backlight		*	*	*	*	*	*
Data Hold		*	*	*	*	*	*
REL measurement		*					*
Fast and accurate capacitance measurement							*
Non-Contact ACV detection			*			*	*
1.5V and 9V battery test		*	912N				
Full ranges protection		*					*

912/912N/

912B

912D

916

916N 916H

Basic

±1.2%

±1.5%

±2.0%  $\pm 0.8\%$ 

±3.0%

±3.5%

±1.5%

±1.2%

Accuracy ±0.5%



**Specifications** 

Voltage DC 600V Voltage AC 600V

Current DC 10A

Current AC 10A

Capacitance 4mF

Function

Resistance

Frequency

Duty Cycle

Diode Check Continuity Test

Max Range

 $2M\Omega$ 

 $40M\Omega$ 

10MHz

Temperature 760°C/1400°F ±1.5%

Battery test Test 1.5V and 9V batteries

• Double molded plastic housing

Model 916N



129

Model 912D













Double molded plastic housing Built-in Non-Contact AC Voltage Detector (920N/921N/920H/931H/932H)

Features							
	920/920N/920L	921/921N	920H	922	922H	931H	932H
Digital display counts	2000	2000	2000	4000	4000	6000	6000
True RMS measurements					*	*	*
Backlight	920L					*	*
Data Hold/REL measurements	Hold	Hold		Hold	*	Hold	Hold
LoZ low impedance measurement							*
Auto Power Off				*	*	*	*
Fast and accurate capacitance measurement					*	*	*
Auto Ranging		*		*	*	*	*
MAX/MIN Hold		MAX				*	*
Duty Cycle					*		*
Non-Contact ACV detection (NCV)	920N	921N	*			*	*
Motor shaking & LED indicatore for NCV detection						*	
61-segments analog bargraph						*	*
Test 1.5V and 9V batteries			*				
Full ranges protection			*		*	*	*

Specifications										
Function	Max Range	Basic Accuracy	920/920N/920L	921/N	920H	922	922H	931H	932H	
Voltage DC	600V	±0.5%	*	*	*	*	*	1000V	1000V	
Voltage AC	600V	±1.2%	*	*	*	*	*	1000V	1000V	
Current DC	10A	±2.5%	*	*	*	*	*	*	*	
Current AC	10A	±3.0%		*		*	*	*	*	
	$2M\Omega$	±0.8%	*	$20 M\Omega$	*					
Resistance	$40 \mathrm{M}\Omega$	±0.8%				*	*			
	$60 \mathrm{M}\Omega$	±2.0%						*	*	
Capacitance	99.99mF	±3.0%				100μF	4mF	*	*	
Frequency	10MHz	±1.5%				*	9.999MHz	*	*	
Temperature	760°C/1400°F	±1.5%		921N		*	*	*	*	
Duty Cycle	99.9%	±1.2%				*	*		*	
Diode Check			*	*	*	*	*	*	*	
Continuity Test			*	*	*	*	*	*	*	



Model 920H



Model 922H

Size(HxWxD): 150mm x 70mm x 48mm Weight: 255g

Accessories: Test leads, 9V battery, type K temperature probe (921/921N/922/922H/931H/932H) and gift box with carrying case.









Motor shaking & LED indicator for NCV detection

www.cem-instruments.com

E-mail:cemyjm@cem-instruments.com



Model 931H



Model 932H

#### True RMS Compact Digital Multimeters



Model 961



Model 960BL



Model 960C



• True RMS

• Double molded plastic housing











DT-960/960B/960C/960BL/960BT/960BT6/961/962/964/966 Series are True RMS compact digital multimeters with double molded plastic housing and over sized high contrast 4000 counts LCD display. They're all CAT III rated for 600V.

#### **Safety Conformance**

- EN61010-1 CATIII 600V
- Double molded plastic housing
- Full ranges protection



EMC & LVD	38.00000
EN: 61326	11/1
EN: 61010-1	61
EN: 61010-02-032	6
EN: 61010-02-033	******

Features										
	960	960B	960BL	960BT	960BT6	961	962	964	966	960C
Digital display counts	4000	4000	2000	4000	6000	4000	4000	6000	6000	6000
Display type(Negativity display)	*	Positive	Positive	Positive	Positive	*	*	*	Positive	Positive
True RMS measurements	*	*	*	*	*	*	*	*	*	*
Safety design	*	*	*	*	*	*	*	*	*	*
Data Hold/ MAX/MIN recording mode	*	*	*	*	*	*	*	*	*	*
Flash light/ Backlight	*	*	*	*	*	*	*	*	*	*
Auto Ranging & Auto Power Off	*	*	*	*	*	*	*	*	*	*
Type K temperature input						*		*	*	
Bluetooth interface with Meterbox pro software				*	*				*	*
LoZ: low input impedance to prevent ghost voltage							*	*		

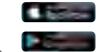
Specific	ations											
Function	Max Range	Basic Accuracy	960	960B	960BL	960BT	960BT6	961	962	964	966	960C
Voltage DC	600V	±0.5%	*	*	*	*	*	*	*	*	*	*
Voltage AC	600V	±1.0%	*	*	*	*	*	*	*	*	*	*
Current DC	10A	±1.0%	*	*	*	*	*	*	*	*	*	*
Current AC	10A	±2.0%	*	*	*	*	*	*	*	*	*	*
Resistance	$40M\Omega$	±1.5%	*	*	$20 \text{M}\Omega$	*	$6M\Omega$	*	*	$60M\Omega$	$6M\Omega$	$60M\Omega$
Capacitance	4000μF	±3.0%	*	*		*	$6000 \mu F$	*	*	$4000 \mu F$	$6000 \mu F$	$6000 \mu F$
Frequency	10kHz	±1.0%	*	*		*	*	*	*	*	*	*
Temperature	760°C/1400°F	±3.0%						*		*	*	
Duty Cycle	99.9%	±1.2%	*	*		*	*	*	*	*	*	*
Diode Check			*	*	*	*	*	*	*	*	*	*
Continuity Te	st		*	*	*	*	*	*	*	*	*	*

Size(HxWxD): 120mm x 67mm x 46mm Weight: 200g Accessories: Test leads, 1.5V AAA x 2 batteries, type K temperature probe





(961/962) and clamshell.



DT-896/897/897FC

#### **True RMS Compact Multimeter**



Safety Conformance

Features



● EN61010-1 CAT IV 300V, CAT III 600V

Large LCD display 6000 counts with flashlight

A/D convert fast sampling time: 3 Times/sec.

0.47" (12mm) Fork clamp sensor for AC/DC 100A current measurement

Peak capture (records transients as fast as 500µs) & Data Hold Min/Max with Time stamp (records signal fluctuations)

10A

100A

10A

100A 60ΜΩ

10mF

10MHz

99.9%

±1.2%

Accessories:

carrying case.

Test leads, Li-ion batteries, Software, gift box with

760°C/1400°F ±2.5%

240 x 320 2.4" TFT color LCD display

Temperature measurements

Record events and trends True RMS measurements

Saves measurements

Specifications

Fork clamp DC curent

Fork clamp AC current

Diode Check & Continuity Test

Size(HxWxD): 148mm x 68mm x 48mm

Function Voltage DC Voltage AC Current DC

Current AC

Resistance Capacitance

Frequency

Duty Cycle

Temperature

Weight: 348g

Low pass filter

• 600V input protection on all ranges





EMC & LVD

EN: 61326

EN: 61010-1

EN: 61010-02-032

EN: 61010-02-033





\*



897 897FC

\* \*



Model 896

**Bluetooth** 



Model 897

**Bluetooth** 











Flexible clamp

Model DT-320BS

#### DT-216/218/218T/219

#### **CATIV 600V Pocket Multimeter with NCV Tester**

#### Safety Conformance

- EN61010-1 CATIV 600V
- 200mA fused protection





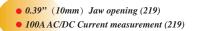
EMC & LVD EN: 61326 EN: 61010-1

EN: 61010-02-032 EN: 61010-02-033

133





















The four pocket models 216, 218, 218T and 219 are double molded plastic housing and large high contrast 2000/4000 counts LCD display. They are all CAT IV 600V safety designed plus non-contact voltage detection & flashlight. 219 can measure 100A AC/DC current with 0.39" opening jaw.

216/218/219 Series CATIV Pockert Multimeter has the features needed to find most electrical and HVAC problems.

- CAT IV 600V safety rating for industrial applications
- Wide 600V measurement range
- True-RMS for precise measurement of non-linear signals(219)
- Capacitance, resistance, continuity and frequency (218/219)
- Built-in thermometer (219 only)
- Large, easy-to-read display
- Backlight for work in dimly lit areas
- Max to record signal fluctuations
- Display hold function (216/219)
- Manual and automatic ranging

Features									
	216	218	218T	219					
Digital display counts	2000	4000	4000	4000					
Safety design	*	*	*	*					
True RMS			*	*					
Auto Ranging	*	*	*	*					
Data Hold	*		*	*					
Auto Power Off	*	*	*	*					
Flashlight		*	*	*					
Backlight	*	*	*	*					
Non-Contact Voltage detection	*	*	*	*					
Pocket size	*	*	*	*					

Specifications									
Function	Max Range	Basic Accuracy	216	218	218T	219			
Voltage DC	600V	±0.5%	*	*	*	*			
Voltage AC	600V	±1.0%	*	*	*	*			
Current DC	100A	±2.5%	200mA	200mA	200mA	*			
Current AC	100A	±3.0%	200mA	200mA	200mA	*			
Resistance	$20M\Omega$	±0.8%	*						
Resistance	$40 \mathrm{M}\Omega$	±0.8%		*	*	*			
Capacitance	4000uF	±3.0%		100uF	*	*			
Frequency	10kHz	$\pm (0.8\% \pm 5d)$		*	*	*			
NCV (VAC: 100	V~600V)		*	*	*	*			
Diode Check			*	*	*	*			
Continuity Test			*	*	*	*			

Size(HxWxD): 105mm x 60mm x 38mm Weight: 145g

Accessories: Test leads, two "AAA" batteries and clamshell with canvas bag (219).





#### DT-116/118/118B/119

#### 3 in 1 e - Testers



The four pocket models 116, 118, 118B and 119 are double molded plastic housing and large high contrast 2000/4000 counts LCD display. They are all CAT IV 600V safety designed plus non-contact voltage detection & flashlight.

#### **Safety Conformance**

- EN61010-1 CATIII 1000V
- 200mA fused protection (118/118B)

Features				
	116	118	118B	119
Digital display counts	2000	2000	4000	2000
Safety design & Pocket size	*	*	*	*
Auto Ranging & Auto Power Off	*	*	*	*
Data Hold	*	*		*
Flashlight	*	*	*	*
Non-Contact Voltage detection	*	*	*	*

Specifications								
Function	Max Range	Basic Accuracy	116	118	118B	119		
Voltage DC	600V	±0.5%	*	*	*	*		
Voltage AC	600V	±1.2%	*	*	*	*		
Current DC	200mA	±2.0%		*	*			
Current AC	200mA	±2.5%		*	*			
Resistance	$2M\Omega$	±0.8%	*					
	20ΜΩ	±0.8%		*	$40 \mathrm{M}\Omega$	*		
Capacitance	100uF	±(3.0%±5d)			*			
Frequency	100kHz	±(0.8%±5d)			*			
NCV (VAC: 100V~600V)			*	*	*	*		
Diode Check		*	*	*	*			
Continuity Test			*	*	*	*		

 Non-Contact Voltage Detection • Flashlight







 Double Molded housing • CAT IV 600V

Full range protection











Model 118

Size(HxWxD): 120mm x 55mm x 40mm Weight: 145g Accessories: Test leads, two "AAA" batteries and clamshell.

#### DT-946/946F Smart Digital Multimeter with Automatic Selection

946 is a high performance smart digital multimeter with automatic selection DC/ACV, providing wide application in HAVC, factories, schools and at home, etc. All inputs are protected to EN 610101-1 CATIV 600V.

#### Safety Conformance

- EN61010-1 CATIV 600V
- Double molded plastic housing
- Full ranges protection

Features		
	946	946F
0.47" (12mm) Fork clamp sensor for AC 100A current measurement		*
Automatic DCV or ACV selection, Resistance, Continuity	*	*
4000 counts LCD display with blacklight & flashlight		*
Automatic selection ranging		*
True RMS measurements		*
IP67 dust and water proof		*
Non-Contact ACV detection: 50V~600V		*
Auto Hold & Auto Power Off	*	*

Specifications								
Function	Max Range	Basic Accuracy	946	946F				
Voltage DC	600V	±1.0%	*	*				
Voltage AC	600V	±1.0%	*	*				
Current DC	10.00A	±3.5%		*				
Current DC	100.0A	±3.0%		*				
Current AC	10.00A	±3.0%		*				
Current AC	100.0A	±3.0%		*				
Resistance	$400 \mathrm{k}\Omega$	±2.0%	*	*				
=								

Size(HxWxD): 150mm x 70mm x 48mm Weight: 200g Accessories: Test leads, 1.5V x 2 batteries, carrying case and gift box.













Double Molded housing

Automatic Selection

• CAT IV 600V







**Features** 

EMC & LVD

• Fast respond time & PC calibration

• IP67 dust and water proof

• CATIII 1000V/CATIV 600V

• Bluetooth interface

Professional True RMS Industrial Digital Multimeters













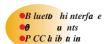






970/971/972/973 are the new Professional Digital Multimeters which provide much safer measurements with double molded plastic housing design and IP67 waterproof function. 972/973 performance like datalogger & True RMS AC voltage and current measurements,  $50,\!000$  counts resolution and a 0.03% basic DC accuracy within the reach of more customers. The large LCD display with analog bargraph and backlit ensure that readings are easy to read under all circumstances.

All inputs are protected to EN 610101-1 CATIV 600V/CATIII 1000V.





## Safety Conformance

- EN61010-1 CAT IV 600V, CAT III 1000V
- 1000V input protection on all ranges
- 10A/1000V & 0.5A/1000V fuses protection on current ranges







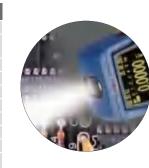




Model 971



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Model 972





Model 973

Features				
	970	971	972	973
$50,\!000$ counts high resolution (0.01mV, $0.01\mu A,0.01\Omega)$			*	*
Larger 50000 counts display with bargraph	6000 counts LCD dispay	6000 counts LCD dispay	Negativity LCD Display	OLED Display
AC+DC Measurement	*	*	*	*
9999 Readings memories		*	*	*
AC bandwidth (voltage/current)	3kHz	3kHz	10kHz	10kHz
Analog bargraph/segment	*/60	*/60	*/60	*/60
True RMS measurement	*	*	*	*
1000V input protection on all ranges	*	*	*	*
4-20mA process loop measurements with % reading		*	*	*
Data Hold/MAX/MIN recording mode	*	*	*	*
IP67 Waterproof and Auto Power Off	*	*	*	*
Wide capacitance range	*	*	*	*
Bluetooth interface with Meterbox pro software		*	*	*
Powerful Working light	*	*	*	*

Specifications	S			
Function	Max. Range	Max.Resolution	Basic Accuracy	
Voltage DC	1000 V	10μV	±0.03% (972/973) ±0.5% (970/971)	
Voltage AC	1000V	10μV	±1.0%	
Current DC	10A	0.01μΑ	±1.0%	
Current AC	10A	0.01μΑ	±1.5%	
Resistance	60ΜΩ	$10 \mathrm{m}\Omega$	±0.3%	
Duty Cycle	99.9%	0.1%	±1.2%	
Frequency	10MHz	0.001Hz	±0.1%	
Capacitance	60mF	10PF	±3.5%	
Temperature	-50°C to 1300°C -58°F to 2372°F	0.1°C/°F	±1.0%	
Diode Check	Test current < 0.5mA MAX 3V			
Continuity Test				

Weight: 447g

Low pass fiter (VFD)

Size(HxWxD): 183mm x 82mm x 55mm Accessories: Test leads, 9V battery, Type K temperature probe, gift box with carrying case and Software

VFD LPF

• Users can annotate and save each measurement • Data can be shared to e-mail and other platforms

Bluetooth and visually analyzed and stored

• Remote measurement of voltage, current, resistance, capacitance and other electrical parameter

• Measurement data can be transmitted to smart phones via

Meterbox Pro

## DT-180A/181B

## **Pocket Size Digital Multimeters**









EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033

Model 180A

## **Safety Conformance**

- EN61010-1 CATIII 600V
- Double molded plastic housing
- Full ranges protection

	180A	181B
Digital display counts	6000	6000
CATIII 600V Safety design	*	*
Data Hold	*	*
Auto Ranging & Auto Power Off	*	*
MAX /MIN Hold & REL	*	*
Non-Contact 90-600VAC detection	*	*
LCD display with backlight	*	*
True RMS measurements	*	*
Temperature measurement		*
Specifications		

Features

Specifications						
Function	Max Range	Basic Accuracy	180A	181B		
Voltage DC	600V	±0.5%	*	*		
Voltage AC	600V	±1.2%	*	*		
Current DC	600mA	±2.0%	*	*		
Current AC	600mA	±2.5%	*	*		
Resistance	60ΜΩ	±0.8%	*	*		
Capacitance	60mF	±3.0%	*	*		
Temperature	760°C/1400°F	±3.0%		*		
Frequency	100kHz	±1.2%	*	*		
Duty Cycle	9.99%	±1.2%	*	*		
Diode Check			*	*		
Continuity Test			*	*		

Size(HxWxD): 128mm x 63mm x 37mm Weight: 205g

Accessories: Test leads, 2x1.5V "AAA" battery, type K temperature probe (928) and gift box with carrying case.

## **DT-923B/928 Compact Digital Multimeters**

923B/928 Series are compact multimeters with double molded plastic housing and over sized high contrast 2000/4000 counts LCD display. They're all CAT III rated for 600V and have auto-ranging function and provide 0.5% basic DCV accuracy.



Model 923B



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EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033



www.cem-instruments.com

E-mail:cemyjm@cem-instruments.com

Model 928

Features		
	923B	928
Digital display counts	2000	4000
CATIII 600V Safety design	*	*
Data Hold	*	*
Auto Ranging		*
Auto Power Off		*
MAX /MIN Hold & REL		*
Non-Contact ACV detection		*
LCD display with backlight & flashlight		*
True RMS measurements		*
Low pass filter for accurate measurement of Variable frequency drive (VFD) signals		*

Specifications						
Function	Max Range	Basic Accuracy	923B	928		
Voltage DC	600V	±0.5%	*	*		
Voltage AC	600V	±1.2%	*	*		
Current DC	10A	±2.0%	*	*		
Current AC	10A	±2.5%		*		
Resistance	$2M\Omega$	±0.8%	*			
Resistance	$40 \mathrm{M}\Omega$	±2.5%		*		
Capacitance	40mF	±3.0%		*		
Frequency	10MHz	±1.2%		*		
Temperature	760°C/1400°F	±2.5%		*		
Duty Cycle	9.99%	±1.2%		*		
Diode Check			*	*		
Continuity Test			*	*		
•						

Size(HxWxD): 146mm x 73mm x 45mm Weight: 237g Accessories: Test leads, 2x1.5V "AAA" battery, type K temperature probe (928) and gift box with carrying case.

## DT-660/661/662/662VA/663/663T

## Compact Digital Multimeters



 $660/661/662/663/663T \ Series \ are \ compact \ multimeters \ with \ high \ contrast \ 2000/4000 \ counts$ LCD display. They're all CAT III rated for 600V and provide 0.5% basic DCV accuracy.

## **Safety Conformance**

- EN61010-1 CATIII 600V
- Full ranges protection









					515
	Model 660	Model 661	Mo Color EBTN LCD Display	del 662VA	Model 663T
-	99				

Features					
	660	661	662/662VA	663	663T
Digital display counts with Backlight	2000	2000	2000	4000	4000
Auto/manual ranging	manual	manual	Auto	Auto	Auto
True RMS measurements				*	*
Safety design & Holster for option	*	*	*	*	*
Data Hold	*	*	*	*	*
Auto Power Off			*	*	*
Type K temperature input					*

Specifications							
Function	Max Range	Basic Accuracy	660	661	662/662VA	663	663T
Voltage DC	600V	±0.5%	*	*	*	*	*
Voltage AC	600V	±1.0%	*	*	*	*	*
Current DC	10A	±1.5%	*	*	*	*	*
Current AC	10A	±2.0%	*	*	*	*	*
	$2M\Omega$		*	*			
	20ΜΩ	±1.0%			*		
	$40 \mathrm{M}\Omega$					*	*
Capacitance	4000μF	±3.0%				*	*
Frequency	10kHz	±1.0%				*	*
Duty Cycle	99.9%	±1.2%				*	*
Temperature	760°C/1400°F	±3.0%					*
Diode Check		*	*	*	*	*	
Continuity Test			*	*	*	*	*
9V, 1.5V Battery Test			*				

Size(HxWxD): 120mm x 67mm x 46mm Accessories: Test leads, 1.5V AAA x 2 batteries, type K temperature probe (663T) and Clamshell. Weight: 200g



Model 211









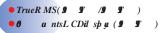
DT-913/913B/913T/915/915T series are compact meters with rubber holster housing and over sized high contrast 6000 counts LCD display (915/915T). They're all CAT III rated for 600V.

Low pass filter for accurate measurement of variable frequency drive (VFD) signals (915/915T)



Safety Conformance

EN61010-1 CATIII 600V Single molded plastic housing with holster Full ranges protection





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EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033

Model 913T

Model 913B



Model 915T

Features					
	913B	913	913T	915	915T
Range Model	Manual	Auto	Auto	Auto	Auto
LCD display	*	*	*	*	*
Backlit Controls		*	*	*	*
Digital display counts	2000	4000	4000	6000	6000
Ture RMS		*	*	*	*
Data Hold	*	*	*	*	*
Auto Power Off		*	*	*	*
Low battery indication	*	*	*	*	*
VFD				*	*

Function	Max. Range	Basic Accuracy	913B	913	913T	915	915T
AC Voltage	600V	$1.0~\% \pm 5~counts$	*	*	*	*	*
DC Voltage	600V	$0.5\% \pm 3$ counts	*	*	*	*	*
AC Current	10A	$2.5\% \pm 5$ counts		*	*	*	*
DC Current	10A	$2.0\% \pm 3$ counts	*	*	*	*	*
Resistance	60ΜΩ	$2.5\% \pm 5$ counts	$2M\Omega$	$40 \mathrm{M}\Omega$	$40 \text{M}\Omega$	*	*
Temperature	-20 to 800°C -4 to 1472°F	2.5% ± 3°C			*		*
Capacitance	40mF	$2.5\% \pm 5$ counts		*	*	60mF	60mF
Duty Cycle	1~99%			*	*	*	*
Frequency	10MHz	$1.0\% \pm 2 \text{ counts}$		*	*	*	*
Continuity	50Ω		30Ω	*	*	*	*
Diode Check	MAX 3V		1.5V	*	*	*	*

Size(HxWxD): 144mm x 72mm x 38mm

Specifications

Weight: 214g Accessories:

Test leads, 2 x 1.5V "AAA" battery, type K temperature probe (913T/915T) and gift box with carrying case.



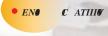






EN: 61010-02-032 EN: 61010-02-033





• TrueR MS(2 T /2 3 a ntsL CDd sp g ( 2 3

Low pass filter for accurate measurement of variable frequency drive (VFD) signals (213/215)

211	211B	212	212T	213	215
Auto	Manual	Auto	Auto	Auto	Auto
*	*	*	*	*	*
*	*	*	*	*	*
2000	2000	4000	4000	6000	6000
		*	*	*	*
*		*	*	*	*
*	*	*	*	*	*
				*	*
	Auto  *  2000  *	Auto Manual  * *  * *  2000 2000	Auto Manual Auto  * * *  * *  2000 2000 4000  *  *	Auto Manual Auto Auto  * * * *  * * *  2000 2000 4000 4000  * *  * *	Auto Manual Auto Auto Auto  * * * * * *  * * * *  2000 2000 4000 4000 6000  * * * *  * * *  * * *

Specific	ations							
Function	Max. Range	Basic Accuracy	211	211B	212	212T	213	215
AC Voltage	600V	$1.0\% \pm 5$ counts	*	*	*	*	*	*
DC Voltage	600V	$0.5\% \pm 3$ counts	*	*	*	*	*	*
AC Current	600mA	$2.5\% \pm 5$ counts	200mA		400mA	400mA	*	*
DC Current	600mA	$2.0\% \pm 3 \ counts$	200mA	200mA	400mA	400mA	*	*
Resistance	$60 \mathrm{M}\Omega$	$2.5\% \pm 5 counts$	$20M\Omega$	$2M\Omega$	$40 \mathrm{M}\Omega$	$40 \text{M}\Omega$	*	*
Temperature	-20 to 800°C -4 to 1472°F	2.5% ± 3°C				*		*
Capacitance	60mF	$2.5\% \pm 5 counts$			4000uF	4000uF	*	*
Duty Cycle	1~99%				*	*	*	*
Frequency	10kHz	$1.0\% \pm 2 counts$			*	*	*	*
Continuity	50Ω		$30\Omega$	$30\Omega$	*	*	*	*
Diode Check	MAX 3V		1.5V	1.5V	*	*	*	*



Model 213









Model 215

Size(HxWxD): 132mm x 65mm x 35mm

Weight: 205g

Accessories:

Test leads, 2 x 1.5V "AAA" battery, type K temperature probe (212T/215) and gift box with carrying case.









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EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033



Model 8908D





Model 8908C





LED check

8908C/8908D is an innovative and reliable portable 35/6 digital multimeter with powerful measuring functions, including AC voltage and AC current True RMS sine wave measurement functions. It can measure up to 1000V AC/DC voltage, up to 20A AC/DC current, resistance, capacitance, frequency, diode, hFE, continuity and NCV, quickly and accurately distinguish neutral wire from strip wire. Temperature can also be measured and neutral and live wires and test leads detected. Equipped with sound and light alarm, torch, automatic backlight and other functions, can be used in a dark environment. It attracts users with its two-color durable case, modern appearance and versatility

## **Safety Conformance**

- EN61010-1 CAT III 600V, CAT II 1000V
- 1000V input protection on all ranges
- $\bullet$  10A/1000V & 0.8A/1000V fuses protection on current ranges

Features		
	8908C	8908D
6000 counts display with LCD backlight	*	*
True-RMS measurements	*	*
100mF very large capacitance range, fast measurement	*	*
Accurate measurement of 1000V voltage, 20A current measurement	*	*
Dual range NCV test which quickly identifies neutral and live wires	*	*
Auto Power Off	*	**
Flashlight and Auto backlight	*	*
hFE triode measurement function, can be on the transistor current amplification times detection;	*	*
Low battery indication	*	*
AC voltage frequency response	45~1000Hz	45~1000Hz
Sampling rate	3 times/s	3 times/s
Double injection molding	*	*
2m drop proof	*	*
LED check	*	

Specifica	tions			
Function	Max. Range	Basic Accuracy	8908C	8908D
AC Voltage	6V/60V/600V/1000V	$\pm (1.0 \% \pm 5)$	*	*
DC Voltage	600mV/6V/60V/600V/1000V	$\pm (0.5\% \pm 3)$	*	*
AC Current	60mA/600mA/20A	$\pm (2.5\% \pm 5)$	*	*
DC Current	60µA/6mA/60mA/600mA/20A	$\pm (2.0\% \pm 3)$	*	*
Resistance	$600\Omega/6k\Omega/60k\Omega/600k\Omega/6M\Omega/60M\Omega$	$\pm (2.5\% \pm 5)$	*	*
Temperature	-20 to 1000°C/-4 to 1832°F	±(2.5% ± 3°C)		*
Capacitance	$\frac{6nF/60nF/600nF/6\mu F/60\mu F/600\mu F/6mF/6}{0mF/100mF}$	$\pm (2.5\% \pm 5)$	*	*
Duty Cycle	1~99%			*
Frequency	9.999Hz/9.999MHz	$\pm (1.0\% \pm 2)$	*	*

Size(HxWxD): 188mm x 88mm x 56mm Weight: 420g

Accessories: Test leads, 1.5Vx3 "AAA" batteries, Type K temperature probe, gift box with carrying case.

## DT-9905H/9908H

## High Performance, High Accuracy Digital Multimeters



- 4000 counts display with LCD backlight
- Data Hold
- Diode check & continuity test
- True RMS

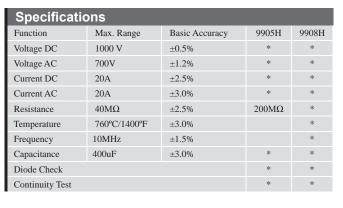
EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033

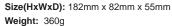












Accessories: Test leads, 9V battery, Type K temperature probe (9908H) and gift box with carrying case.





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Model 9908H

Model 9905H

EMC & LVD

EN: 61326

EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033

## DT-2005B/DT-2008 3 1/2 Digital Multimeters

2005B/2008/2009/2006 have double molded plastic housing and oversized high contrast 2000/4000/6000 counts LCD display with backlight.

## **Safety Conformance**

- EN61010-1 CAT III 600V, CAT II 1000V
- Full ranges protection

Features						
Function	Max Range	Basic Accuracy	2005B	2008	2009	2006
Voltage DC	1000V	±(0.5%+2d)	*	*	*	*
Voltage AC	700V	±(1.0%+3d)	*	*	*	*
Current DC	20A	±(1.5%+3d)	*	*	*	*
Current AC	20A	±(2.0%+3d)	*	*	*	*
Resistance	$20M\Omega$	±(1.2%+2d)	*	*	$40 \mathrm{M}\Omega$	$60 \mathrm{M}\Omega$
Capacitance	200uF	±(4.0%+3d)	*	*	100uF	6000uF
Frequency	20kHz	±(1.5%+5d)		*	9,999MHz	9,999MHz
Temperature	760°C/1400°F	±(3.0%+3d)		*	*	*
Diode Check	Open Voltage 2.8V dc		*	*	*	*
Continuity Test	Threshold $30\Omega$		*	*	*	*

Size(HxWxD): 195mm x 92mm x 38mm Weight: 380g

Accessories: Test Leads, Type K temperature probe (2008, 2009 & 2006), 9V battery, gift box and carrying case.









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Model 2005B

La g L CDd sp g

Model 2008

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# DT-101/102/103/103B/105/107/108/111/112/113

Pocket Digital Multimeters



# Ar eseth ef usep b ectin (2 3







EMC & LVD EN: 61326

EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033

Size(HxWxD): 115mm x 60mm x 16mm Weight: 82g Accessories:

Test leads, Wallet style case and one CR 2032 button battery.

## DMP-30/31/32/33 Pocket DMMs

33: 6000 counts, 10 functions including DCV, ACV, DCA, ACA Resistance, Capacitance, Frequency, Duty Cycle, Continuity, diode test with Data Hold, Relative and MAX/MIN functions.

30/32: 4000 counts, 10 functions including DCV, ACV, DCA, ACA Resistance, Capacitance, Frequency, Duty Cycle, Continuity, diode test with Data Hold and

31: 2000 counts, 5 functions with Data Hold , Max Hold and Auto Power Off.

Specifica	tions					
Function	Max Range	Basic Accuracy	30	31	32	33
Voltage DC	600V	±(1.0%±2d)	*	*	*	*
Voltage AC	600V	±(1.5%±5d)	*	*	*	*
	$20M\Omega$	±(1.0%±2d)		*		
Resistance	$40 \mathrm{M}\Omega$	±(1.0%±2d)	*		*	
	60ΜΩ	±(1.0%±2d)				*
Git	100μF	±(3.0%±5d)	*		*	
Capacitance	1000μF	±(3.0%±5d)				*
Frequency	9.999MHz	±(0.8%±5d)	*		*	*
Current DC	200mA	±(1.5%±2d)			*	*
Current AC	200mA	±(2.5%±5d)			*	*
Continuity	Audible thres	Audible threshold $< 50\Omega$		*	*	*
Diode test	Test Current 0.6mA		*	*	*	*

## DT-10/12/16/16A Pocket Digital Multimeters



CEM pro







Model 12

10: 4000 counts, 8 functions including DCV, ACV, DCA, ACA, Resistance, Continuity, Diode test with Data Hold, Low impedance and non-contact ACV detec-

16/16A: 6000 counts with Min/Max, Data hold and non-contact ACV detection.

- Non-Contact Voltage detection identifies live circuits (16/16A)
- Large high contrast 4000 counts LCD display with Analog bargraph (10)
- Large high contrast 6000 counts LCD display with Analog bargraph (16/16A)
- Auto Power off

**Specifications** 

Voltage DC 600V

- Relative, and Data Hold
- Built-in storage compartment for integrated test leads
- Over-range and low battery indication

EN: 61326 EN: 61010-1 EN: 61010-02-032

EN: 61010-02-033

Max Range



Basic Accuracy 10  $\pm (1.3\% \pm 2d)$ 

Model 16 Ar eseth ef usep b ectin ( ) §



4000/6000 counts LCD



**Built-in Non-Contact Voltage** Detector automatically detects

a live wire when the red LED is

Voltage AC 600V ±(2.3%±5d)  $40M\Omega$  $\pm (2.0\% \pm 2d)$ Resistance  $60M\Omega$  $\pm (1.0\% \pm 2d)$ Audible threshold  $< 50\Omega$ Continuity Diode test Test Current 0.6mA Frequency 9.999MHz  $\pm (0.8\% \pm 5d)$  $\pm (1.5\% \pm 2d)$  $4000\mu A/6000\mu A$   $\pm (2.5\%\pm 5d)$ 200mA ±(2.5%±5d) \* 100.0A \* Current AC  $4000\mu A/6000\mu A$   $\pm (2.5\%\pm 5d)$ 

Size(HxWxD): 126mm x 59mm x 32mm Accessories: Weight: 124g

Test leads, Wallet style case and one 1.5V L44 button battery.

## DT-101/102/103/103B/105/107/108 Pocket DMMs

101/102 Series Pocket Digital Multimeters provide multifunction.

Features					
	103B	101/103	102/105	107	108
2000 Counts digital display	*	*	*	*	*
Safety design CAT II 600V/ CATIII 300V	*	-/*	-/*	*	*
Double molded housing	*	-/*	-/*	*	*
Non-contact ACV detection		-/*	-/*	*	*
Data Hold		-/*	-/*	*	*
Auto Ranging				*	*
Auto Power Off				*	*
Type K temperature input					*

Specificatio	ns					
Function	Max Range	Basic Accuracy	101/103/103B	102/105	107	108
Voltage DC	600V	±0.5%	*	*	*	*
Voltage AC	600V	±1.8%	*	*	*	*
Current DC	200mA	±1.0%	*	*	*	*
Resistance	2ΜΩ	±0.8%	*	*	20ΜΩ	$20 M\Omega$
Temperature	760°C/1400°F	±3.0%				*
Diode Check			*	*	*	*
Continuity Test				*	*	*

Size(HxWxD): 101/102: 100mm x 48mm x 26mm 103/105/107/108: 108mm x 53mm x 32mm

Weight: 102g Accessories:

Clamshell, Test leads and 12V battery.

• Da	b em old li	a sing







Model 103

EN: 61010-02-033







Model 107

## DT-111/112/113 Pocket DMMs

111/113: 4000 counts, 10 functions including DCV, ACV, DCA, ACA Resistance, Capacitance, Frequency, Duty Cycle, Continuity and Diode test with Data Hold and Relative functions.

112: 2000 counts, 5 functions with Data Hold , Max Hold and Auto Power

Specific	ations				
Function	Max Range	Basic Accuracy	111	112	113
Voltage DC	500V	±(1.3%±2d)	*	*	*
Voltage AC	500V	±(2.3%±5d)	*	*	*
Resistance	$20 \mathrm{M}\Omega$	±(2.0%±2d)		*	
	$40 \mathrm{M}\Omega$	±(1.0%±2d)	*		*
Continuity	Audible threshold $< 50\Omega$		*	*	*
Diode test	Test Current 0.	6mA	*	*	*
Capacitance	200μF	±(3.0%±5d)	*		*
Frequency	9.999MHz	±(0.8%±5d)	*		*
Current DC	400mA	±(1.5%±2d)			*
Current AC	400mA	±(2.5%±5d)			*

Size(HxWxD): 113mm x 61mm x 13mm Weight: 90g





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EN: 61010-02-032 EN: 61010-02-033 111/112/113: Test leads, Wallet style case



and one CR 2032 button battery.

**Rubber Protection** 

EMC & LVD

EN: 61326

EN: 61010-1

# **DT-203B**

Battery Tester





Model R-100





Wide range Decade boxes for product design or calibration checks Heavy duty durable construction EMC EN: 61326 Seperate grounding terminal Three binding posts permit isolated substitutions 1% Resistance substitution from 1 to 11,111,1101/2 Seven Decade Ranges of Resistance Values can be changed in 11/2 increments 0.3W resistors 0.31/2 internal zero resistance Size(HxWxD): 140mm x 130mm x 48mm

Features

Weight: 190g

Accessories: Clamshell

## DT-155 Intelligent Semiconductor Analyzer



EMC EN: 61326

Size(HxWxD): 102mm x 56mm x 24mm

Accessories: Two "AAA" batteries and clamshell

The intelligent semiconductor Component analyzer offers great features together with refreshing simplicity.

Features
Automatic component type identification
Automatic pinout identification, just connect any way round.
Special feature identification such as diode protection and resistor shunts.
Gain measurement for bipolar transistors.
Leakage current measurement for bipolar transistors.
Silicon and Germanium detection for bipolar transistors.
Gate threshold measurement for Enhancement Mode MOSFETs.
Semiconductor forward voltage measurement for diodes,
LEDs and transistor Base-Emitter junctions.
Automatic and manual power-off.

## DT-3216/3218/3219/3260/3280/3280B/3290 Pen-type Digital Multimeters

- 7 functions Pen-type Digital Multimeters
- Large 3-3/4 digital LCD display with Bargraph
- Full function indication
- Diode and audible continuity

	Function	Max rang
97	Voltage DC	600V
м.	Voltage AC	600V
	Current DC	
	Current AC	
	Resistance	$40 \mathrm{M}\Omega$
	Capacitance	40mF
	Non-contact vo	oltage: 50-60
	Continuity: <3	5Ω
-	Diode test: Tes	t voltage ma

Specifica	itions								
Function	Max range	Basic accuracy	3216	3218	3219	3260	3280	3280B	3290
Voltage DC	600V	±0.8%	*	*	*	*	*	*	*
Voltage AC	600V	±1.2%	*	*	*	*	*	*	*
Current DC		±1.5%		340mA	400 mA	400 mA	200 mA		400mA
Current AC		±2.0%		340mA	400mA	400mA	200mA		400mA
Resistance	$40 \mathrm{M}\Omega$	±3.0%	$20 \mathrm{M}\Omega$	$30M\Omega$	*	$\pm 1.0\%$	$20 \mathrm{M}\Omega$	$20 \mathrm{M}\Omega$	*
Capacitance	40mF	±3.5%				*			
Non-contact voltage: 50-600V				*		*	*		
Continuity: <35Ω									
Diode test: Test voltage max, 3.4V									

Size(HxWxD): 220mm x 40mm x 33mm Accessories: Clamshell and button battery

Weight: 215g





31/2 LCD display, pocket size and easy to use, wide measuring range for 9 kinds of battery such as button cell, AA, AAA, 9V etc, distinguishing the battery in good quality or not by setting different load resistance, the unit has no battery but powered by tested bat-

Specification	าร	
Battery Type	Load Current	Minimum Voltage for Good Indication
Button cell 1.5V	1mA	1.125V+/-0.09V
AAA-N-1.5V	50mA	1.125V+/-0.09V
AA-C-D-1.5V	150mA	1.125V+/-0.09V
Lithium 3V	100mA	2.25V+/-0.18V
6V	10mA	4.50V+/-0.36V
9V	10mA	6.75V+/-0.54V
12V	10mA	9.00V+/-0.72V
15V	10mA	11.25V+/-0.90V
22.5V	10mA	16.875V+/-1.35V



EMC & LVD

EN: 61010-1

EN: 61010-02-032

EN: 61326



Size(HxWxD): 60mm x 116mm x 29mm

Weight: 115g Accessories: Clamshell

## **SMD-100 Smart Electronic Components Tester**

SMD-100 has a changeable head for automatic scan check DC/AC Voltage, components (resistance, capacitance, diode and continuity) and circuit fault. All inputs are protected according to EN 610101-1 CATIII 600V.

Features
Automatic DCV or ACV selection, Capacitance, Resistance, Continuity and
diode selection
6000 counts LCD display
Auto scan DC/AC Voltage, resistance, capacitance, diode and continuity
Data Hold/MAX/MIN recording mode
Auto Power Off
Wide capacitance range
Diode Check & Continuity Test

Specificati	ions	
Function	Range	Basic Accuracy
Voltage DC	600mV/6V/60V/600V	±0.8%
Voltage AC	600mV/6V/60V/600V	±1.0%
Resistance ( $\Omega$ )	600/60k/60k/600k/6M/60M	±1.0%
Capacitance (F)	$6n/60n/600n/6\mu/60\mu/600\mu/6m/60m$	±3.5%
Diode check	Open voltage 2.8Vdc, test current 1mA.	
Continuity test	Threshold 35 $\Omega$	

Size(HxWxD): 184mm x 37mm x 23mm Weight: 76g

Accessories: Two LR44(1.5V) button batteries and clamshell



Basic Accuracy

Weight: 255g

941

±1.0%

±1.0%

±1.2%

 $\pm 1.0\%$ 

±3.5%

940

4000

\*

Automatic DCV or ACV selection, Capacitance, Resistance,

Wide capacitance range, diode check & continuity test

Max Range

600V  $40M\Omega$ 

99.9%

10MHz

Accessories: Test leads, 9V battery, carrying case and gift box.

Auto Ranging & Auto Power Off \*

40mF

Size(HxWxD): 150mm x 70mm x 48mm

**Features** 

Continuity and Diode selection

Data Hold/MAX/MIN recording mode

6000 counts LCD display

Specifications

Auto/manual ranging

Auto Power Off

Function Voltage DC

Voltage AC

Resistance

Duty Cycle

Frequency

Capacitance

**Features** 

Digital display counts

Type K temperature input

Data Hold & display blacklight

## DT-9930/9931 11,000 Counts LCR Meters













Features		
	9930	9931
Digital display counts	11,000	11,000
Data Hold & Auto Ranging	*	*
MAX/MIN recording mode	*	*
Auto Power Off	*	*
DMM + LCR		*

Specificati	ions (Mul	timeter)		
Function	Max Range	Basic Accuracy	9930	9931
Voltage DC	1000V	±0.5%		*
Voltage AC	1000V	±0.8%		*
Current DC	1.1A	±1.2%		*
Current AC	1.1A	±1.8%		*
Frequency	10MHz	±1.5%		*
Duty Cycle	9.99%	±1.2%		*
Diode Check			*	*
Continuity Test			*	*

Specifications (LCR)				
Function	Max.Range	Max.Resolution	Basic Accuracy	
Resistance	$110.00 M\Omega$	$0.01\Omega$	±1.2% of rdg ±5 digits	
Capacitance	110.00uF	1pF	±3.0% of rdg ±30 digits	
Inductance	20H	1uH	±(2%+5)	

Size(HxWxD): 182mm x 82mm x 55mm Weight: 360g Accessories: Test leads and 9V battery, gift box with carrying case.

DT-9935 Professional LCR Meter

9930 is new 11,000 Counts LCR Meter

9931 is new 11,000 Counts digital multimeter with LCR function

## Safety Conformance

- EN61010-1 CAT IV 600V, CAT III 1000V (9931)
- Full ranges protection



Da bembd H a tich a sing



**Model 9931** 



Model 9930





Model 936

936 is a high performance smart digital multimeter with automatic selection DC/ACV, providing wide application in HAVC, factories, schools and at home, etc.

All inputs are protected to EN 610101-1 CATIII 600V/ CATII 1000V.

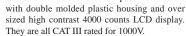
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**DT-940/941 Compact Digital Multimeters** 940 Series are new compact multimeters



## Safety Conformance

- EN61010-1 CAT IV 600V, CAT III 1000V
- Double molded plastic housing
- 1000V input protection on all ranges
- 10A/600V fuse input protection on current ranges



61010-02-033





Specifications Function Max Range Basic Accuracy 940 941 Voltage DC 600V +0.5%

Size(HxWxD): 150mm x 70mm x 48mm Weight: 255g Accessories: Test leads, 9V battery, Temperature Probe (941), carrying case and gift box.

voltage DC	000 v	±0.5 /0		
Voltage AC	600V	±1.2%	*	*
Current DC	10A	±2.5%	*	*
Current AC	10A	±3.0%	*	*
Resistance	$40 \mathrm{M}\Omega$	±0.8%	*	*
Capacitance	100μF	±3.0%	*	*
Frequency	10MHz	±1.5%	*	*
Temperature	760°C/1400°F	±3.0%		*
Duty Cycle	9.99%	±1.2%	*	*
Diode Check & Continuity Test		*	*	

## DT-925 Voltage & Current Calibrator / DMM with Voltage & Current Calibrator



Model 941

925 Voltage/Current calibrator is a portable instrument for calibrating process devices and • Adjustable -199.9mV to +199.9mV DCA source. measuring process signals. It brings you into • Current calibrator drives loads up to 500 ohms. the field of precision measurement.

- Adjustable 0-24mA current source.

- The instrument measures a two-wire current loop.

Specifications (s	tandard source)		
Function	Range	Display Resolution	Accuracy
Current source	0-19.99mA	0.01mA	±(0.25%FS+1d)
Current source	0-24mA	0.1mA	±(0.5%FS+1d)
DC mV source	-199.9mV to	0.1mV	±(0.25%FS+1d)
DC III v source	+199.9mV		
Specifications (m	easurement)		
Range	0-19.99mA	0.01mA	±(0.25%FS+1d)
	0-24mA	0.1mA	±(0.5%FS+1d)

Size(HxWxD): 150mm x 70mm x 48mm Accessories:

Weight: 236g

Test leads, 9V battery and gift box with carrying case.

## 9935 LCR Meter features with an innovative automatic selection technology, automatically measuring L,C and R with Q, D and $\theta$ by just turn on the meter.The testing frequency is up to 10 k Hzand it can output up to 100kHz test frequency. It provides high accuracy with four or five terminal Kelvin measurements.

Overload Indication

Lower Battery Indication

Auto Power Off

Specification	าร
Inductance	
Ranges	20uH-2000H
Resolution	0.001uH
Basic Accuracy	±(0.2+5d)
Capacitance	
Ranges	20pF-20mF
Resolution	0.001pF
Basic Accuracy	±(0.2+3d)
Resistance	
Ranges	$20\Omega$ - $2000M\Omega$
Resolution	$0.001\Omega$
Basic Accuracy	±(0.2+2d)
DC Resistance	
Ranges	$20\Omega$ - $2000M\Omega$
Resolution	$0.001\Omega$
Basic Accuracy	±(0.2+2d)
Q (quality)	
Ranges	0.000-999
Resolution	0.001
D (dissipation)	
Ranges	0.000-999
Resolution	0.001
Theta	
Ranges	±90 degree
Resolution	1 degree



EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033 Size(HxWxD): 220mm x 96mm x 60mm Weight: 360g Accessories: Test leads and 6 x 1.5V "AA" batteries, gift box with carrying case.

www.cem-instruments.com

E-mail:cemyjm@cem-instruments.com

Model 9935

21 digital Multifunction Environment Meter have been designed to combine the functions of Sound Level Meter, Light Meter, Humidity Meter, Temperature Meter and digital multimeter. They are ideal Multifunction Environment Instruments

Basic Accuracy

 $\pm (0.8\% \pm 2d)$ 

 $\pm (1.2\% \pm 2d)$ 

 $\pm (1.8\% \pm 7d)$ 

 $\pm (0.8\% \pm 2d)$ 

 $\pm (0.8\% \pm 2d)$ 

 $\pm (3.0\% \pm 3d)$ 

±(1.2%±2d)

 $\pm (1.5\% \pm 4d)$ 

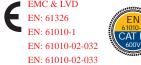
 $\pm (2.5\% \pm 5d)$ 

 $\pm (2.5\% \pm 5d)$ 

DT-51/61









**Specifications** 

Voltage DC 600V

Voltage AC Current DC

Current AC

Resistance

Frequency

Capacitance

Max Range

10A

10A

Temperature 760°C/1400°F

Duty Cycle 0.1%~99.9%

40MO

9,999MHz

200uF

40mF

Diode Check Open voltage 2.8Vdc

Continuity Threshold 30Ω



- Plant/General Maintenance
- HVAC/R
- Transportation/Automotive Cooling and Reheating
- Serving areas
- Food service Equipment Cold storage
- Max Range Resolution Basic Accuracy 20.000Lux 0.1Lux ±0.5%±10d Sound 100dB 0.1dB ±3.5dB Humidity 95%RH 0.1%RH +5%RH 1300°C ±3%±1d 0.1°C Temperature Voltage DC 600V 0.1mV ±0.5%±2d Voltage AC 600V 100mV ±1.2%±10d Current DC 10A 0.1uA ±1.0% ±2d 2ΜΩ ±0.8% ±2d

 $0.1\Omega$ 

**Size(HxWxD):** 121mm x 60.6mm x 40mm Weight: 280g Accessories: Rubber holster, 9V battery, Test leads and K-Type temperature probe..

## DT-991 Series & 200 Series/9932FC High Performance Digital Multimeters







Model 991

991 Series:
<b>Size(HxWxD):</b> 121.5mm x 60.6mm x 40mm
Weight: 150g

Bat. Test 9V(6mA); 1.5V(100mA)

clamshell

200 Series:

m Size(HxWxD): 146mm x 66.2mm x 41.5mm Weight: 200g

(201, 202, 202T, 204, 204T) and 9V battery, gift box.





EMC & LVD EN: 61326 EN: 61010-1



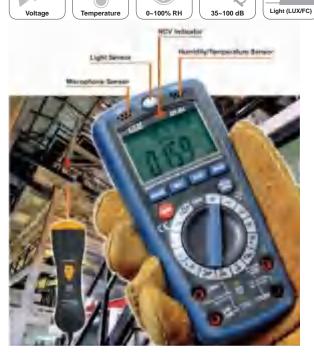
Model 9932FC

Specifications (9932FC)					
Function	Max Range	Min Resolution	Basic Accuracy		
Voltage DC	1000V	0.1mV	±(1.2%+2d)		
Voltage AC	750V	0.1mV	±(0.8%+3d)		
Current DC	20A	0.1uA	±(1.5%+3d)		
Current AC	20A	0.1uA	±(1.8%+5d)		
Resistance	$40 \mathrm{M}\Omega$	0.1Ω	±(1.0%+2d)		
Capacitance	100uF	10pF	±(3.5%+5d)		
Frequency	9.999MHz	0.001Hz	±(1.2%+3d)		
Duty Cycle	99.9%	0.1%	±(1.2%+2d)		
Temperature	1000°C/1832°F	0.1°C/°F	±(3%+2°C/°F)		
Diode Check	1.5VDC test 0.3mA cur	1.5VDC test 0.3mA current			
Continuity Check	Threshold 30Ω, continuity beeper 2.7kHz				



**Size(HxWxD):** 197mm x 88.4mm x 41.2mm Weight: 635g

Accessories: Rubber holster, Test leads, K-type temperature probe, 9V battery, RS-232 PC cable and Software diskette, Gift box with carrying case.









The model 61 is 6 in 1 Digital Multimeter with Environment Measurement. It has been designed to combine the functions of Sound Level Meter, Light Meter, Humidity Meter, Temperature Meter & Non-contact AC voltage detector.

The model 51 is without temperature (°F) range. They are ideal Multifunction Environment & DMM Instruments with scores of practical applications for professional and home use.

The Sound Level function can be used to measure noise in factories, schools, offices and home, etc, checking acoustics of studios, auditoriums and hi-fi installations.

The Light function is used to measure illuminance in the field. It is fully cosine corrected for the angular incidence of light. The sensitive component of light used in the meter is a very stable, long life silicon ciode. The Humidity/Temperature uses a humidity/semiconductor sensor and K type thermocouple.

The DMM function include ACV, DCV, ACA, DCA Resistance, Capacitance, Frequency, Duty Cycle, Diode, Continuity test and Non-contact AC voltage detector.

Specification	Max Range	Max Resolution	Basic Accuracy	
- unouon	20,000 Lux	TABLE TESSELLION	Busic Fieduracy	
Light	40,000 Lux	0.1 Lux	±5%±10d	
Sound	100dB	0.1dB	±3.5dB	
Humidity	99%RH	0.1%RH	±3.5%RH	
<b>m</b>	-20 ~ 750 °C	0.1° up to 400°,1° over 400°	±3%±3℃	
Temperature	-4 ~1400°F	0.1° up to 400°,1° over 400°	±3%±5°F	
NCV	50-1000V			
Voltage DC	600V	0.1mV	±0.5% ±2d	
Voltage AC	600V	0.1mV	±1.2%±10d	
Current AC	10A	0.1uA	$\pm 1.0\% \pm 2d$	
Current DC	10A	0.1uA	$\pm 1.0\% \pm 2d$	
Resistance	$40 \mathrm{M}\Omega$	0.1Ω	±0.8%±2d	
Capacitance	100uF	0.01nF	±3.5%	
Frequency	10MHz	0.001Hz	±1.5%	
Duty Cycle	99.9%	0.1%	±1.2%	
Diode Check	Open voltage 2.8VI	Open voltage 2.8VDC; Test current lmA		
Continuity Test	Threshold 30Ω			

Size(HxWxD): 170mm x 79mm x 50mm Weight: 342g Accessories: 9V battery, Test leads and K-Type temperature probe. Infrared Temperature Probe (Option IR-82)

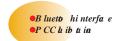


Model 51



Model 61











Model 9626 Meterbox Pro





InfraRed Thermometer sensor

















9626/9627/9628 are the new Professional Digital Multimeters which provide much safer measurements with double molded plastic housing design and IP67 waterproof function. 9628 performance like datalogger & True RMS AC voltage and current measurements, 50,000 counts resolution and a 0.03% basic DC accuracy within the reach of more customers. The large LCD display with analog bargraph and backlit ensure that readings are easy to read under all circumstances.

All inputs are protected to EN 610101-1 CATIV 600V/CATIII 1000V.

## Safety Conformance

- EN61010-1 CAT IV 600V, CAT III 1000V
- 1000V input protection on all ranges
- 10A/1000V & 0.5A/1000V fuses protection on current ranges









Features			
	9626	9627	9628
$50{,}000$ counts high resolution (0.01mV, 0.01 $\mu A,$ 0.01 $\Omega)$			*
Larger 50000 counts display with bargraph	6000 counts LCD dispay	6000 counts LCD dispay	Negativity LCD Display
AC+DC Measurement	*	*	*
9999 Readings memories		*	*
AC bandwidth (voltage/current)	3kHz	3kHz	10kHz
Analog bargraph/segment	*/60	*/60	*/60
True RMS measurement	*	*	*
1000V input protection on all ranges	*	*	*
4-20mA process loop measurements with % reading		*	*
Backlight for LCD, knob Switch	*	*	*
Data Hold/MAX/MIN recording mode	*	*	*
IP67 Waterproof and Auto Power Off	*	*	*
Wide capacitance range	*	*	*
Bluetooth interface with Meterbox pro software		*	*
Powerful Working light	*	*	*
Built-in InfraRed Thermometer	*	*	
Low pass fiter (VFD)	VFD	VFD	LPF

Specifications	S				
Function	Max. Range	Max.Resolution	Basic Accuracy		
Voltage DC	1000 V	$10\mu V$	±0.03% (9628) ±0.5% (9626/9627)		
Voltage AC	1000V	10μV	±1.0%		
Current DC	10A	0.01μΑ	±1.0%		
Current AC	10A	0.01μΑ	±1.5%		
Resistance	60ΜΩ	$10 \mathrm{m}\Omega$	±0.3%		
Duty Cycle	99.9%	0.1%	±1.2%		
Frequency	10MHz	0.001Hz	±0.1%		
Capacitance	60mF	10PF	±3.5%		
IR Temperature	-20 ~ 750 °C/ -4 ~1400°F	0.1° up to 400°,1° over 400°	±1%±1°C/1.8°F		
Temperature	-50°C to 1300°C -58°F to 2372°F	0.1°C/°F	±1.0%		
Diode Check	Test current < 0.5mA MAX 3V				
Continuity Test					

Weight: 342g

www.cem-instruments.com

Size(HxWxD): 161mm x 76mm x 51mm Accessories: Test leads, 9V battery, Type K temperature probe, gift box with carrying case and Software

**DT-61H** 









The model 61 is 6 in 1 Digital Multimeter with Environment Measurement. It has been designed to combine the functions of Sound Level Meter, Light Meter, Humidity Meter, Temperature Meter & Non-contact AC voltage detector.

- The Sound Level function can be used to measure noise in factories, schools, offices and home, etc, checking acoustics of studios, auditoriums and hi-fi installations.
- The Light function is used to measure illuminance in the field. It is fully cosine corrected for the angular incidence of light. The sensitive component of light used in the meter is a very stable, long life silicon ciode. The Humidity/Temperature uses a humidity/semiconductor sensor and K type thermo-
- The DMM function include ACV, DCV, ACA, DCA Resistance, Capacitance, Frequency, Duty Cycle, Diode, Continuity test and Non-contact AC voltage detector.
- Backlight for LCD, knob Switch
- Built-in InfraRed Thermometer

Specificat	tions				
Function	Max Range	Max. Resolution	Basic Accuracy		
Light	20,000 Lux	0.1 Lux	±5%±10d		
Light	40,000 Lux	0.1 Lux			
Sound	100dB	0.1dB	±3.5dB		
Humidity	99%RH	0.1%RH	±3.5%RH		
Tomomomotormo			±3%±3°C		
Temperature	-20 ~ 750 °C/ -4 ~1400°F	0.1° up to 400°,1° over 400°	±3%±5°F		
IR Temperature			±1%±1°C/1.8°F		
NCV	50-1000V				
Voltage DC	600V	0.1mV	±0.5% ±2d		
Voltage AC	600V	0.1mV	±1.2%±10d		
Current AC	10A	0.1uA	±1.0% ±2d		
Current DC	10A	0.1uA	±1.0%±2d		
Resistance	40ΜΩ	0.1Ω	±0.8%±2d		
Capacitance	100uF	0.01nF	±3.5%		
Frequency	10MHz	0.001Hz	±1.5%		
Duty Cycle	99.9%	0.1%	±1.2%		
Diode Check	Open voltage 2.8VDC; Test current lmA				
Continuity Test	Threshold $30\Omega$				



Model 61H







Size(HxWxD): 161mm x 76mm x 51mm Weight: 342g

Accessories: 9V battery, Test leads and K-Type temperature probe.







9998 Professional True RMS Industrial Digital Multimeter with oscilloscope functions and TFT color LCD

Meterbox iMM software & cloud server support to transfer the measured data to customer's smartphone

display, providing fast A/D converting sampling time, high accuracy, built-in datalogging and Trend Capture

features. Android Platform permits smart multifunctions such as updating software on line, PC calibration etc.



















**Specifications** 

Display Size

**Oscilloscope Functions** 

	Features
5	50,000 counts 320 x 240 TFT color LCD display
2	20MHz bandwidth and 50ms/s realtime sample rate
I	Logging function with trend capture and over 10,000 data logging
I	Free software to calibrate accuracy
1	00kHz bandwidth (voltage/current)
İ	AC, AC+DC True RMS measurements
(	0.025% DCV accuracy with fully PC calibration
5	Saves measurements, records events and trends
2	20 times/sec. A/D convert fast sampling time
I	Peak capture (records transients as fast as 250µs)
ľ	Max/Min/Avg with time stamp (records signal fluctuation)
ľ	Moto winding and low ohm (50 $\Omega$ ) measurement range
I	Low pass filter
I	Bluetooth interface to smartphone / PC





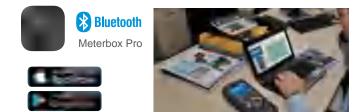
**Model 9990** 

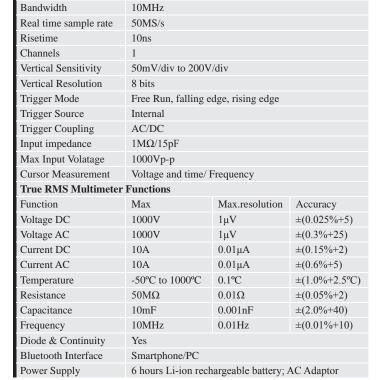


10MHz Oscilloscope

## Bluetooth interface to smartphone /PC

- · Remote measurement of voltage, current, resistance, capacitance and other electrical parameter
- Measurement data can be transmitted to smart phones via Bluetooth and visually analyzed and stored
- Users can annotate and save each measurement
- Data can be shared to e-mail and other platforms





3.5" color LCD; 320 x 240 pixels

Size(HxWxD): 220mm x 91mm x 56mm Weight: 630g

Accessories: Test leads, Li-ion batteries, Type K temperature probe, Bluetooth and Software, gift box with carrying case.

## Safety Conformance

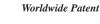
- EN61010-1 CAT IV 600V, CAT III 1000V
- 1000V input protection on all ranges
- 10A/1000V & 0.8A/1000V fuses protection on current ranges

## Safety Conformance

- EN61010-1 CAT IV 600V, CAT III 1000V
- 1000V input protection on all ranges
- 10A/1000V & 0.8A/1000V fuses protection on current ranges

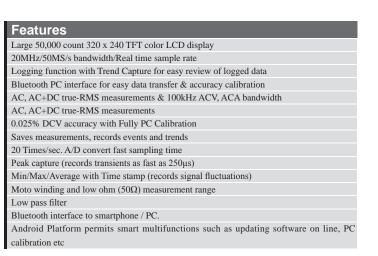


**Bluetooth** Meterbox Pro



EMC & LVD EN: 61326 EN: 61010-1

EN: 61010-02-032 EN: 61010-02-033



Specifications				
Oscilloscope Functions				
Display Size	3.5" color LCD; 320	x 240 pixels		
Bandwidth	20MHz			
Real time sample rate	50MS/s			
Risetime	10ns			
Channels	1			
Vertical Sensitivity	50mV/div to 200V/d	iv		
Vertical Resolution	8 bits			
Trigger Mode	Free Run, falling edg	e, rising edge		
Trigger Source	Internal			
Trigger Coupling	AC/DC			
Input impedance	$1M\Omega/15pF$			
Max Input Volatage	1000Vp-p			
Cursor Measurement	Voltage and time/ Fre	equency		
True RMS Multimeter Fun	ctions			
Function	Maximum	Max, resolution	Accuracy	
Voltage DC	1000V	1μV	$\pm (0.025\% + 5)$	
Voltage AC	1000V	1μV	$\pm (0.4\% + 40)$	
Current DC	10A	0.01μΑ	$\pm (0.15\% + 2)$	
Current AC	10A	0.01μΑ	$\pm (0.6\% + 5)$	
Temperature	-200°C to 1350°C	0.1°C	±(1.0% + 2.5°C)	
Resistance	50ΜΩ	$0.01\Omega$	$\pm (0.05\% + 2)$	
Capacitance	10mF	0.001nF	$\pm (1.0\% + 5)$	
Frequency	10MHz	0.01Hz	$\pm (0.005\% + 1)$	
Diode and Continuity	Yes			
PC Interface	Bluetooth			
Power Supply	6 hours Li-ion rechargeable battery; AC Adaptor/charger			



Test leads, Li-ion batteries, Type K temperature probe, Bluetooth and Software, gift box with carrying case.



10MHz Oscilloscope Function



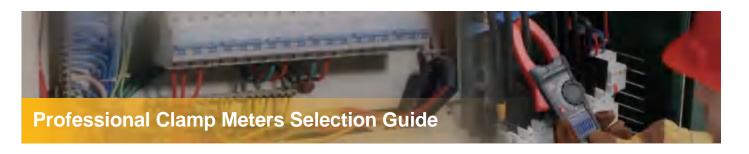
Fast response time

Trend Capture function

Multifunction Selectable

# **Professional AC, AC/DC Autoranging Clamp Meters**







# Professional AC/DC True RMS InfraRed Thermal Clamp Meter with Datalogging, Bluetooth connectivity

DT-9581 Clamp Meter with Thermal imaging is troubleshooting and diagnosing tool for electrical equipment that can quickly check hot spots on high-voltage equipment and transformers, and safely detect overheating of system components, fuses, wires, insulators, connectors, splices and switches to prevent safety hazards. The clamp meter's advanced electrical features – True RMS, VFD, Loz in AC measurement and fast A/D converting sampling time and wide range of functions provide fast and reliable way to identify overloaded circuits. The connectivity to Thermview+ App via Bluetooth can transmit images and readings to a smartphone, to save time and simplify on data collection, reporting and sharing.



## Professional 1000A AC, AC/DC True RMS Clamp Meters

DT-9380/9381/9381A Industrial clamp meter with advanced features – True RMS, Loz (DT-9381A) and variable frequency drive (VFD) filtering functions (DT-9381A) offer advanced troubleshooting performance. The meters help users accurately analyze voltage/current in complex machinery by including inrush (DT-9381A) and wide range of current/voltage 1000V and 1000A. You can also use it to measure temperature, capacitance and frequency.



## AC True RMS Fork Clamp Meter With white LED Blacklight

DT-390 is a versatile troubleshooting tool to carry to every job site. It can be used to check voltage and current with one compact tool and also to check resistance, capacitance, continuity and diode test. Its Open Jaw current measurement allows you check current up to 200A without breaking the circuit. The Auto-sense feature enables the meter to recognize the input and automatically switch to the correct mode. Its double molded test leads stow neatly in the back of the tester, making it easy to carry and use. Negativity LCD display, backlight for button and knob switch and flashlight make it easy to see in dark location.



## 3000A True RMS AC Flex Clamp Meter

DT-320 is made with a narrow, 18-inch (457mm) flexible coil clamp. Unlike hard jaw clamp meters, the DT-320 coil clamp can be manoeuvred, snaked and bent to reach into areas that are obstructed or difficult to reach, it allows you easily take measurements in tight location to simplify difficult current measurements with wide range of 3000A current. The True RMS measurements is for accurate readings of noisy, distorted and non-sinusoidal waveforms.



## CATIV 1000V 2000A AC, AC/DC True RMS Clamp Meters

3398B/3398W Professional True RMS Clamp Meters provide accurate AC, AC/DC Current and Voltage readings regardless of waveforms. These meters can be used in most industrial and commercial applications where non-linear loads distort the Current or Voltage waveform.

155

# Professional AC/DC True RMS Clamp Meters with 80x80 InfraRed Thermal Imager



## Features

Built-in Thermal Imager with 80x80 InfraRed resolution quickly and safely identifies hot spots without contact

2.4" TFT color 6000 counts LCD display with 240x320 pixels for easy and clear viewing of images and readings

True RMS measurement for ACV / ACA / LoZ for ACV measurement

Low pass filter for accurate measurement of variable frequency drive (VFD) signals

1.4" (37mm) Jaw opening

Flexible current probe (320B/320BS optional) expands the measurement range to 3000

AC, AC+DC True RMS measurement & 1KHz ACV, ACA bandwidth

A/D convert fast sampling time: 10 times/sec

Peak capture as fast as 500µS & Inrush current

Min/Max/Avg with Time stemp (records signal fluctuations)

With Bluetooth connect to Thermview+ smart phone App for documentation reporting

Logging function with Trend capture for easy review of logged data

Double molded plastic housing for safe testing and flashlight for dark location

Specifications					
				9481	9581
Thermal Imager					
IR resolution	80x80 pixels				*
Field of View (FOV)	21° x 21°				*
Thermal sensitivity/ NETD	< 0.08°C /80mk	ζ			*
Image frequency	50Hz				*
Object temperature range	-20 to 260°C (-4	4 to 500°F)			*
Spectral range	8-14 μm				*
Color palettes	Iron/Rainbow/C	Grey/Grey Inverted	/Feather		*
Accuracy	±2°C (±3.6°F) o	$\pm 2^{\circ}$ C ( $\pm 3.6^{\circ}$ F) or $\pm 2\%$ of reading			*
True RMS Multimet	er Functions				
Function	Maximum	Max. resolution	Best Accuracy		
Voltage DC	1000V	100mV	$\pm (0.5\% + 5d)$	1500V	*
Voltage AC	1000V	100mV	$\pm (1.2\% + 5d)$	1500V	*
Current DC	1000A	0.01A	$\pm (2\% + 8d)$	*	*
Current AC	1000A	0.01A	$\pm (2.5\% + 5d)$	*	*
Flexible A	3000A	0.01A	$\pm (3.0\% + 5d)$	*	*
Resistance	$60 \mathrm{M}\Omega$	$0.1\Omega$	$\pm (0.8\% + 5d)$	*	*
Capacitance	100mF	0.01nF	$\pm (3.0\% + 5d)$	*	*
Frequency	10MHz	0.01Hz	$\pm (0.2\% + 5d)$	*	*
Inrush Current	1000A	1A		*	*
Temperature	1000°C/1832°F		±(1.5%+3°C)	*	*
Diode & Continuity	Yes			*	*
Interface	Bluetooth	*	*		
Power Supply	Li-ion rechargea	able battery		*	*

Size(HxWxD): 95mm x 270mm x 42mm Weight: 550g

Accessories: Test leads, gift box with carrying case, Temperature probe Li-ion rechargeable battery,

AC Charger















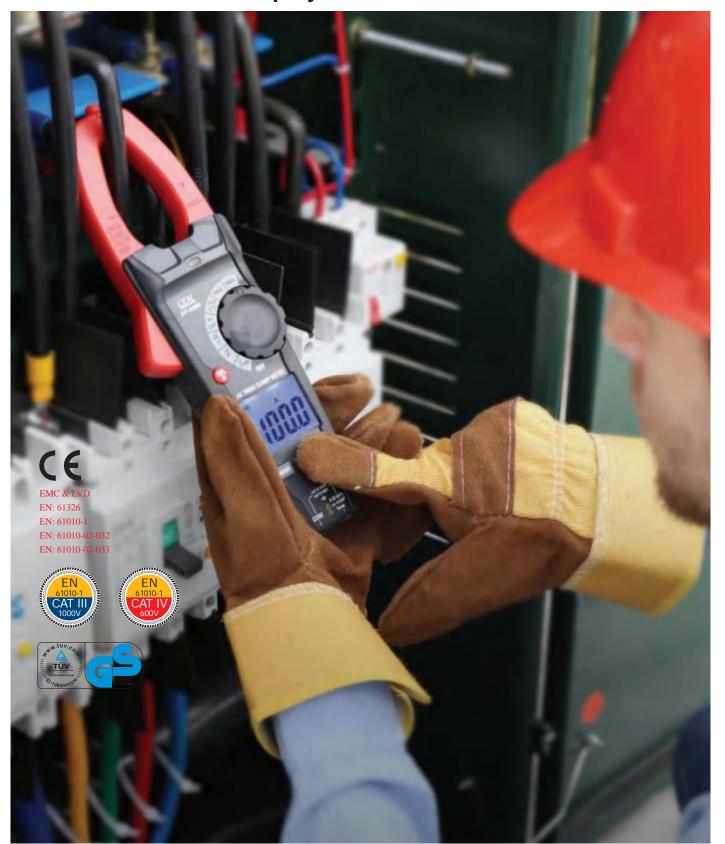


# DT-9380/9380A/9381/9381A/9382

Professional 1000A AC, AC/DC True RMS Clamp Meters with TFT color LCD display



# Professional 1000A AC, AC/DC True RMS Clamp Meters with TFT color LCD display













The 9380/9381/9382/9383 series clamp meters provide fast A/D converting sampling time, high accuracy, built-in datalogging offer all needed features for measurement. It is with modern bodies and jaws design for perfect handheld and tight place testing. A large backlit display (on most models) is easy to see and a handy data hold keeps measurements on the display.

- Double molded plastic housing
- True RMS measurement for ACV & ACA
- Flexible current probe expands the measurement range to 3000 ACA (9383)

Features					
	9380	9380A	9381	9381A	9382
Current measurement	AC	AC	AC/DC	AC/DC	AC/DC
Display counts	4000	6000	4000	6000	6000
1.8"TFT color LCD display counts					*
AC True RMS	*	*	*	*	*
10kHz bandwidth (voltage/current)					
Data Hold & Peak Hold		*		*	*
Max /Min Hold	*		*		*
REL (Zero) Function			*	*	*
Flashlight and Backlight	*	*	*	*	Flashlight
Auto Power Off	*	*	*	*	*
Low battery indication	*	*	*	*	*
100ms Inrush current		*		*	*
Low input impedance prevents false readings due to "ghost voltage" (LoZ)		*		*	*
Low pass filter for accurate measurement of variable frequency drive (VFD) signals		*		*	*
1.9" (48mm) Jaw opening	*	*	*	*	*
Bluetooth interface					*
3000A ACA flexible clamp					*
Trend capture function					*
Fast response time					10 times/sec.
100 Graph Data review					*
NCV Function	*	*	*	*	*
100 Graph Data review	*	*	*	*	*

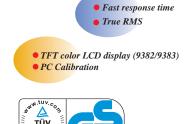
Specifications							
Function	Max Range	Basic Accuracy	9380	9380A	9381	9381A	9382
Voltage DC	1000V	$\pm (0.5\% + 2d)$	*	*	*	*	*
Voltage AC	1000V	$\pm (1.0\% + 5d)$	*	*	*	*	*
Current DC	1000A	$\pm (2.0\% + 5d)$			*	*	*
Current AC	1000A	$\pm (2.5\% + 8d)$	*	*	*	*	*
ACA flexible	3000A	$\pm (2.5\% + 8d)$					*
Resistance	60ΜΩ	$\pm (3.0\% + 5d)$	$40 \mathrm{M}\Omega$	*	$40 \mathrm{M}\Omega$	*	*
Temperature	1000°C/ 1832°F	±(1.0%+3d)	*	*	*	*	*
Capacitance	100mF	$\pm (2.5\% + 5d)$	*	*	*	*	*
Frequency	10kHz	$\pm (0.5\% + 2d)$	*	*	*	*	*
Inrush Current	1000A	$\pm (2.5\% + 2d)$		*		*	*
Continuity check	Continuity check Buzzer sounds at $50\Omega$						
Diode test Test current 0.3mA							

### Size(HxWxD): 250mm x 78mm x 40mm Weight: 350g

Accessories: Test leads, gift box with carrying case, Temperature probe and 1.5V AAA x 3 batteries (9380/9381/9380A/9381A) Li-ion battery, Software(9382/9383) Flexible clamp (9382)













**Model 9381** 

Model DT-320BS

**Model 9382** 





EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032



Features







9281

CEM DT-9280/9281/9282 clamp meters provide fast A/D converting sampling time, high accuracy offer all needed features for measurement. It is with modern bodies and jaws design for perfect handhold and tight place testing. A clear backlit display (on most models) is easy to see and a handy data hold keeps measurements on the display.

Professional clamps featuring Low impedance (LoZ) mode and choice of advanced model with Low Pass Filter (VFD) and inrush functions (9282)

9280

4	1			
	•	Fast	response	tim
	•	True	<b>RMS</b>	







Model 9282





**Model 9281** 

Meterbox Pro

Current measurement	AC	AC/DC	AC/DC
Display counts	6000	6000	6000
OLED display			*
Backlight & Flashlight	*	*	*
AC True RMS	*	*	*
Low pass filter (VFD)	*	*	*
Data Hold	*	*	*
Peak Hold	*	*	*
REL (Zero) Function		*	*
Auto Power Off	*	*	*
Low battery indication	*	*	*
100ms Inrush current	*	*	*
1.3" (34mm) Jaw opening	*	*	*
Bluetooth interface			*
Fast response time	*	*	*
LoZ Voltage measurement			*
NCV Function	*	*	*

Specification	าร						
Function	Max Range	Basic Accuracy	9280	9281	9282		
Voltage DC	1000V	±(0.5%+2d)	*	*	*		
Voltage AC	1000V	±(1.0%+5d)	*	*	*		
Current DC	600.0A	±(2.0%+5d)		*	*		
Current AC	600.0A	±(2.5%+8d)	*	*	*		
Resistance	60ΜΩ	±(3.0%+5d)	*	*	*		
Temperature	1000°C/ 1832°F	±(1.0%+3d)	*	*	*		
Capacitance	100mF	±(2.5%+5d)	*	*	*		
Frequency	100kHz	$\pm (0.5\% + 2d)$	*	*	*		
Inrush Current	600.0A	±(1.5%+2d)	*	*	*		
Continuity check	Buzzer sounds at 50	Buzzer sounds at $50\Omega$					
Diode test	Test Current < 0.5mA MAX 3V						

Size(HxWxD): 239mm x 72mm x 40mm Weight: 318g

Accessories: Test leads, gift box with carrying case, temperature probe and 1.5V AAA x 3 batteries





The 9180 Series clamp meters provide fast A/D converting sampling time, high accuracy, built-in datalogging offer all needed features for measurement. It is with modern bodies and jaws design for perfect handhold and tight place testing. A large backlit display (on the most of models) is easy to see and a handy data

- Double molded plastic housing (9180/9181/9182)
- True RMS measurement for ACV & ACA

hold keeps measurements on the display.













Features				
	9180C	9180	9181	9182
Current measurement	AC	AC	AC/DC	AC/DC
Display counts	4000	4000	4000	4000
AC True RMS	*	*	*	*
Low pass filter (VFD)		*	*	*
Data Hold	*	*	*	*
Peak Hold /MAX/ MIN	MAX/ MIN	*	*	*
REL (Zero) Function		*	*	*
Flashlight and Backlight	*	*	*	*
Auto Power Off	*	*	*	*
Low battery indication	*	*	*	*
100ms Inrush current		*	*	*
1.18" (30mm) Jaw opening	*	*	*	*
LoZ Voltage				*
NCV Function	*	*	*	*

Specification	ns						
Function	Max Range	Basic Accuracy	9180C	9180	9181	9182	
Voltage DC	1000V	$\pm (0.5\% + 2d)$	600V	*	*	*	
Voltage AC	1000V	$\pm (1.0\% + 5d)$	600V	*	*	*	
Voltage VFD	600V			*	*	*	
LoZ Voltage	<600V					*	
Current DC	400.0A	$\pm (2.0\% + 5d)$			*	*	
Current AC	400.0A	$\pm (2.5\% + 8d)$	*	*	*	*	
Resistance	40ΜΩ	$\pm (3.0\% + 5d)$	*	*	*	*	
Temperature	1000°C/ 1832°F	$\pm (1.0\% + 3d)$		*	*	*	
Capacitance	100mF	$\pm (2.5\% + 5d)$	4mF	*	*	*	
Frequency	ACV 100kHz	$\pm (0.5\% + 2d)$	ACV 10kHz	*	*	*	
Inrush Current	400.0A	$\pm (1.5\% + 2d)$		*	*	*	
Diode test	Test Current < 0.5n	Test Current < 0.5mA MAX 3V			*	*	
Continuity check	Buzzer sounds at $50\Omega$						

Size(HxWxD): 225mm x 72mm x 40mm

Weight: 294g

 $\textbf{Accessories:} \ \text{Test leads, gift box with carrying case, Temperature probe and } 1.5V\ AAA\ x\ 3\ batteries$ 



**Model 9181** 



Model 9180C (Single molded plastic housing)

**AC True RMS Fork Clamp Meter With white LED Blacklight** 

# DT-390/391

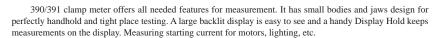
## AC True RMS Fork Clamp Meter With white LED Blacklight











Features						
			390	0	39	91
200A AC Current measur	ement		*		2	k
Digital display counts			600	00	60	00
Display type(Negativity d	lisplay)		*		*	k
Compact size			*		2	k
Data Hold & MAX/MIN	Function		*		*	k
Peak Value & Inrush Curr	ent				*	k
Backlight for button, knot	b Switch & Flash	nlight	*		*	k
Low battery indication			*		*	k
17mm Jaw opening			*		*	k
Auto sense Voltage	*		*	k		
NCV	*		2	k		
Low Z & True RMS	*		×	k		
Non contact voltage test					*	k
Specifications						
Function	Max Range	Basic Ac	curacy	390		39
Voltage DC	1000V	±(0.8%+	3d)	*		*
Voltage AC	1000V	±(1.0%+	3d)	*		*
Current AC	200A	±(3.5%+	5d)	*		*
Resistance	60MΩ	±(3.0%+	5d)	*		*
Capacitance	6000mF	±(2.5%+	5d)	*		*
Non contact voltage test	600V	±(2.5%+	5d)			*
LoZ (<600V)				~3K9	Ω	
Continuity check	Buzzer sounds at $50\Omega$					
Diode test	Te	st current 0	.35mA	3V		



EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033 EN 61243-3:2014 (379)







## DT-379 Voltage Tester

Features	
LCD/LED Indication Range	e: 6 V to 1000 V dc and ac/ 12 V to 1000 V dc and ac
Independent ELV indicator situation of no battery power	LED, indicates if >50 V ac/120 V dc is present even in the er or main circuit failure
Data HOLD	
Backlight for button & Fasl	nlight
Beeper for Phase/ACV	
19 mm Probe Tip distance v	when docked
Auto Voltage detection/ Ful	l range Polaritydetection
Operation time Duration Ti	me =30 seconds, Recovery time Recovery Time =240 second



EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033 EN 61243-3:2014 (379)

www.cem-instruments.com





Specifications		
Function	Max Range	Basic Accuracy
Current AC	200A	$\pm (3.5\% + 5d)$
LEDs Voltage range	12 V to 1000 V ac/dc	Frequency range: 0 / 40 Hz to 400 Hz, Auto power on : $\geq \! \! 12$ V ac/dc
LCD Voltage range	6V to 1000V ac/dc	$\pm (3~\%~rdg + 5~digits),$ Frequency range:0 / 40 Hz to 400 Hz, Auto power on: $\ge \! 6~V$ ac/dc
Internal basic load impedance/ Peak current	Maximum 3.5 mA at 1000 V 350 k $\!\Omega\!$ / Is <3.5 mA (no RCD tripping)	
Continuity Test	0 to 400 $k\Omega$	nominal resistance +50 % , Test current ${\leq}5~\mu A$
Resistance Measurement	$0~\Omega$ to 1999 $\Omega$	$\pm (5~\%~rdg~+10~digits)~@~20~^{\circ}C,$ Temperature coefficient: $\pm 5~digits~/~10~K,$ Test current : $\leq \! 30~\mu A$

Size(HxWxD): 230mm x 44mm x 66mm Weight: 259g

Accessories: Test leads, gift box with carrying case, Two "1.5V AA" batteries.



163 www.cem-instruments.com E-mail:cemyjm@cem-instruments.com

# Professional 600A AC, AC/DC True RMS Clamp Meters **Built-in InfraRed Thermometers**











Features			
	395	396	397
Current measurement	AC	AC/DC	AC/DC
Display counts	6000	6000	6000
AC True RMS	*	*	*
Low pass filter (VFD)	*	*	*
Peak Hold & Data Hold	*	*	*
REL (Zero) Function		*	*
Backlight for LCD, knob Switch & Flashlight	*	*	*
Low battery indication & Auto Power Off	*	*	*
100ms Inrush current			*
1.3" (34mm) Jaw opening	*	*	*
Fast response time	*	*	*
LoZ Voltage measurement	*	*	*
NCV Function	*	*	*

Specification	ns							
Function	Max Range	Basic Accuracy	395	396	397			
Voltage DC	1000V	$\pm (0.5\% + 2d)$	*	*	*			
Voltage AC	1000V	$\pm (1.0\% + 5d)$	*	*	*			
Current DC	600.0A	$\pm (2.0\% + 5d)$		*	*			
Current AC	600.0A	$\pm (2.5\% + 8d)$	*	*	*			
Resistance	60ΜΩ	$\pm (3.0\% + 5d)$	*	*	*			
Temperature	1000°C/ 1832°F	$\pm (1.0\% + 3d)$	*	*	*			
IR Temperature	-20 ~ 750 °C/ -4 ~1400°F	$\pm 1\% \pm 1$ °C/1.8 °F						
Capacitance	100mF	±(2.5%+5d)	*	*	*			
Frequency	100kHz	$\pm (0.5\% + 2d)$	*	*	*			
Inrush Current	600.0A	$\pm (1.5\% + 2d)$	*	*	*			
Continuity check	Buzzer sounds at $50\Omega$	Buzzer sounds at $50\Omega$						
Diode test	Test Current < 0.5mA MAX	X 3V						

Size(HxWxD): 239mm x 44mm x 66mm Weight: 318g

Accessories: Test leads, gift box with carrying case, temperature probe and 1.5V AAA x 3 batteries

## DT-398 AC Leakage Current Tester

Accurate AC digital clamp meter for leakage current measurement

AC current measurement: 0 ~ 100A

AC voltage measurement: 0 ~ 600V

1μA ultra high resolution on 4.000 mA range

Shield transformer jaws to minimize the effect of external stray magnetic field.

ACA Five Ranges (40mA, 400mA, 4A, 40A, 100A) for all application.

A filter circuit is designed to eliminate the effect of high frequency noise and harmonics for AC current

Large 3 3/4 digits LCD

Fast bargraph display (30 times/sec.) for transient observation.

Continuity and Frequency measurements. Max/Min, Data Hold functions, and Relative Measurement

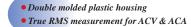
Easy single rotary switch for any function selection

600V overload protection for ohm measurement

Specifications						
Function	Range	Resolution	Basic Accuracy			
Current AC	4mA/40mA/400mA/4A/40A/100A	$1\mu A{\sim}100mA$	±(2.0%+3d)			
Voltage AC	400V	0.1V	$\pm (1.5\% + 10d)$			
Resistance	$40\sim400\Omega$	0.1Ω	$\pm (1.0\% + 2d)$			
Continuity Test Threshold $40\Omega$ , Continuity Beeper 2.5KHz						
1.2" (30mm) Clamr	n jaw onening					

Size(HxWxD): 239mm x 44mm x 66mm

Accessories: Test leads, gift box with carrying case, temperature probe and 1.5V AAA x 3 batteries





• 100ms Inrush current







Model 395









# Professional 50,000 Conuts Heavy Duty AC, AC/DC True **RMS Autoranging Clamp Meters with Dual Type K Inputs**



The 3380 series clamp meters offer all needed features for measurement, design for perfect handhold and tight place testing. A large backlit display is easy to see and a handy data hold keeps measurements on the display. Dual type K inputs for temperature measuring support more application.

DT-3380/3381/3382/3383/3386

- Double molded plastic housing
- True RMS measurement for ACV & ACA

Features					
	3380	3381	3382	3383	3386
Current measurement	AC	AC/DC	AC	AC/DC	AC/DC
LCD display counts	50000	50000	50000	50000	50000
AC True RMS	*	*	*	*	*
Dual type K inputs	*	*	*	*	
Display with backlight	*	*	*	*	*
Data Hold & Peak Hold	*	*	*	*	*
Dual type K inputs	*	*	*	*	single
REL (Zero) Function & Max /Min	*	*	*	*	*
Auto Power Off	*	*	*	*	*
Low battery indication	*	*	*	*	*
1.9" (48mm) Jaw opening	*	*	*	*	*
NCV Detection & flashlight	*	*	*	*	*
3000A ACA Flexible clamp					*
Inrush Current					*
Bluetooth interface			*	*	

Specifications								
Function	Max Range	Basic Accuracy	3380	3381	3382	3383	3386	
Voltage DC	600V	±(0.1%+4d)	*	*	*	*	1000V	
Voltage AC	600V	$\pm (1.0\% + 3d)$	*	*	*	*	1000V	
Current DC	1000A	$\pm (2.5\% + 5d)$		*		*	1000A	
Current AC	1000A	$\pm (2.5\% + 5d)$	*	*	*	*	1000A	
DC μA/mA Current	5000.0μA 500.00mA	±(1.0%+3d)	*	*	*	*		
AC μA/mA Current	5000.0μA 500.00mA	±(1.5%+30d)	*	*	*	*		
Resistance	50ΜΩ	$\pm (3.0\% + 5d)$	*	*	*	*	*	
Temperature	1000°C/1832°F	±(1.0%+2.5°C)	*	*	*	*	*	
Capacitance	5mF	$\pm (3.5\% + 10d)$	*	*	*	*	*	
Frequency	10MHz	$\pm (0.3\% + 2d)$	*	*	*	*	*	
ACA flexible clamp	3000A	$\pm (2.8\% + 8d)$					*	
Continuity check	sheck Buzzer sounds at $35\Omega$					50Ω		
Diode test	Diode test Test current 0.3mA						*	

Size(HxWxD): 230mm x 76mm x 40mm

Weight: 315g

Accessories: Test leads, gift box with carrying case, temperature probe and 9V battery.









## DT-3370B/3371B/3372B/3373/3376

Professional Heavy Duty AC, AC/DC True RMS Autoranging Clamp Meters

The 3370B series clamp meters offer all the features you need to fit the way you work. The bodies and jaws fit perfectly in your hand and into tight places. A large backlit display is easy to see and a handy Display Hold keeps measurements on the display.

- Double molded plastic housing
- True RMS measurement for ACV & ACA





EMC & LVD

EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033





Features					
	3370B	3371B	3372B	3373	3376
Current measurement	AC	AC/DC	AC/DC	AC/DC	AC/DC
LCD display counts with backlight	4000	4000	6000	6000	6000
AC True RMS	*	*	*	*	*
Flashlight	*	*	*	*	*
Data Hold & Peak Hold	*	*	Data Hold	Peak Hold	*
Max /Min			*	*	*
REL (Zero) Function	*	*	*	*	*
Auto Power Off	*	*	*	*	*
Low battery indication	*	*	*	*	*
Analog Bargraph / 61 seg.	* / 41 seg.	* / 41 seg.	*	*	*
1.9" (48mm) Jaw opening	*	*	*	*	*
NCV Detection & flashlight	*	*	*	*	*
Inrush Current				*	*
3000A ACA Flexible clamp					*

Specification	ns								
Function	Max Range	Basic Accuracy	3370B	3371B	3372B	3373	3376		
Voltage DC	1000V	$\pm (0.5\% + 1d)$	600V	600V	*	*	*		
Voltage AC	1000V	$\pm (1.5\% + 2d)$	600V	600V		*	*		
Current DC	1000A	$\pm (2.0\% + 5d)$		*		*	*		
Current AC	1000A	$\pm (2.5\% + 4d)$	*	*		*	*		
Resistance	$60 M\Omega$	$\pm (3.0\% + 5d)$	40M	40M		*	*		
Temperature	1000°C/ 1832°F	±(3.0%+3°C)	*	*	*	±(1.0%+3°C)	±(1.0%+3°C)		
Capacitance	10mF	$\pm (2.5\% + 5d)$	4000 uF	4000uF	6mF	6000uF	6000uF		
Frequency	10MHz	$\pm (1.2\% + 2d)$	*	10kHz	*	10MHz	10MHz		
Inrush Current	1000A	$\pm (1.5\% + 2d)$	*	*			*		
ACA Flexible clamp	3000A	$\pm (3.5\% + 10d)$					*		
Continuity check	Buzzer soun	Buzzer sounds less than $50\Omega$							
Diode test	Test current	Test current 0.3mA							

Size(HxWxD): 230mm x 76mm x 40mm

Weight: 315g

Accessories: Test leads, gift box with carrying case, temperature probe and 9V battery.





Drop-proof to 2M



1000A AC, AC/DC Clamp Meters



3391/3392/3395 Series Professional True RMS Clamp Meters provide accurate AC, AC/DC current and voltage readings regardless of waveforms. These meters can be used in most industrial and commercial applications where non-linear loads distort the Current or Voltage waveform.



• Peak Hold Function(3392/3392W/3392BT)



EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033





DT-3390/3391/3391W/3392/3392W/3392BT/3395





Features				
	3390	3391/3391W	3392/3392W/3392BT	3395
True RMS measurements		*	*	*
Digital display counts	4000	4000	4000	6000
Electronic overload protection	*	*	*	*
Analog Bargraph/segments			* /41	* /61
Continuity buzzer & Diode check	*	*	*	*
Data Hold function	*	*	*	*
Peak Hold function			*	Min./Max.
Inrush current measurement				
DCA Zero function			*	*
Auto Power Off	*	*	*	*
Low battery indication	*	*	*	*
AC/DC Current	AC	AC	*	*
2" (52mm) Clamp jaw opening	*	*	*	*
NCV Detection	*	*	*	*
Bluetooth data transmission			3392BT	
Wirelss USB interface		3391W	3392W	

Specifications								
Function	Max Range	Basic Accuracy	Max. Resolution	3390	3391 3391W	3392 3392W 3392BT	3395	
AC Current	1000 A	$\pm (2.5\% + 5d)$	10mA	*	*	*	*	
DC Current	1000 A	$\pm (3.0\% + 4d)$	10mA			*	*	
AC Voltage	600V	$\pm (0.8\% + 2d)$	0.1mV	*	*	*	*	
DC Voltage	600V	$\pm (1.0\% + 4d)$	0.1mV	*	*	*	*	
Resistance	$40M\Omega$	$\pm (1.0\% + 4d)$	0.1Ω	*	*	*	*	
Capacitance	40mF	$\pm (3.0\% + 5d)$	0.01nF	100μF	100μF	*	$4000 \mu F$	
Frequency	10MHz	$\pm (1.2\% + 3d)$	0.01MHz	*	*	4kHz	*	
Temperature	1000°C/1832°F	$\pm (3.0\% + 5d)$	1°C/°F		*	*	*	
		,						

Size(HxWxD): 271mm x 100mm x 47mm

Weight: 508g

Accessories: Test leads, gift box with carrying case, 9V battery and temperature probe (3391/3391W/3392/3392W/ 3392BT/3395/3397)





Model 3392

**Model 3372** 

169

Model 3371B

CE



Model 3369T-BT

DT-3369T-BT professional 1000A AC/DC clamp meter provides multi-function for 1000A AC/DC, voltage, resistance, capacitance, frequency, temperature, duty cycle and continuity. This is with 6000 counts digital LCD display and analog bargraph, with bluetooth work with Meterbox Pro App to transmit and share data.

Features
6000 Counts digital display with 60 segments analog bar
Electronic overload protection
Continuity buzzer & Diode check
Data Hold function & Backlight
DCA Zero function
Min/Max Hold function
Low battery indication & Auto Power Off
AC/DC Current
True RMS measurement
1.2" (30mm) Clamp jaw opening
Inrush current function & Peak Voltage function
Bluetooth interface
NCV Detection: 100V to 600V AC

Specification	S					
Function	Max Range	Basic Accuracy	Max. Resolution			
DC Current	1000A	±(2.5%+5d)	1mA			
AC Current	1000A	±(3.0%+4d)	10mA			
DC Voltage	600V	$\pm (0.8\% + 2d)$	0.1mV			
AC Voltage	600V	±(1.0%+4d)	0.1mV			
Resistance	60ΜΩ	±(1.0%+4d)	0.1Ω			
Capacitance	6000μF	±(3.0%+5d)	0.01nF			
Frequency	10MHz	±(1.2%+3d)	0.001Hz			
Duty Cycle	99.9%	±(1.2%+3d)	0.1%			
Temperature	1000°C/1832°F	±(3.0%+3d)	0.1°C/°F			
Inrush current	1000A	0.1A	±(2.0%+5d)			
Continuity check	Threshold $50\Omega$ , test	t current <1mA				
Diode test	Test current of 1.5mA typical, open circuit voltage <3V DC typical					

Size(HxWxD): 229mm x 80mm x 49mm Weight: 303g

Accessories: Test leads, gift box with carrying case, 9V battery and temperature probe.



3345/3360 Series Professional True RMS Clamp Meters provide accurate AC, AC/DC Current and Voltage readings regardless of waveforms. These meters can be used in most industrial and commercial applications where non-linear loads distort the Current or Voltage waveform.















**Model 3360** 

Features										
	3343T	3345	3347	3347W	3360	3361	3363	3367	3366	3368
True RMS measurements	*	*	*	*						
Digital display counts	4000	4000	4000	4000	6000	6000	6000	6000	6600	6600
AC/DC Current	AC/DC	AC	AC/DC	AC/DC	AC	AC	AC/DC	AC/DC	AC	AC/DC
1.2" (30mm) Clamp jaw opening	*	*	*	*	*	*	*	*		
Electronic overload protection	*	*	*	*	*	*	*	*	*	*
Continuity buzzer & Diode check	*	*	*	*	*	*	*	*	*	*
Data Hold function	*	*	*	*	*	*	*	*	*	*
Analog Bargraph/segments	*	*	*	*	*/60	*/60	*/60	*/60	*/60	*/60
Peak Hold function		*	*	*						
DCA Zero function	*		*	*			*	*		*
MAX/MIN Hold function					MAX/MIN	MAX/MIN	MAX/MIN	MAX/MIN	MAX/MIN	MAX/MIN
Auto Power Off		*	*	*	*	*	*	*	*	*
Low battery indication	*	*	*	*	*	*	*	*	*	*
Inrush current function									*	*
USB interface				*						
Wireless transmitter				915MHz						
Communication Distance				≤ 100m						

Specification	ons											
Function	Max Range	Basic Accuracy	Max. Resolution	3343T	3345	3347/ 3347W	3360	3361	3363	3367	3366	3368
AC Current	1000 A	$\pm (2.5\% + 5d)$	10mA	*	*	*	*	*	*	*	*	*
DC Current	1000 A	±(3.0%+4d)	10mA	*		*			*	*		*
AC Voltage	600V	$\pm (0.8\% + 2d)$	0.1mV	*	*	*	*	*	*	*	*	*
DC Voltage	600V	$\pm (1.0\% + 4d)$	0.1mV	*	*	*	*	*	*	*	*	*
Resistance	$40 \mathrm{M}\Omega$	$\pm (1.0\% + 4d)$	0.1Ω	*	*	*	$60 M\Omega$	$60 \mathrm{M}\Omega$	$60 \mathrm{M}\Omega$	$60 M\Omega$	66ΜΩ	66ΜΩ
Capacitance	40mF	$\pm (3.0\% + 5d)$	0.01nF	100μF	*	*	*	*	*	*	40mF	40mF
Frequency	10MHz	$\pm (1.2\% + 3d)$	0.01MHz	100kHz	4kHz	4kHz	*	*	*	*	10kHz	10kHz
Duty Cycle	99.9%	±(1.2%+3d)	0.1%				*	*	*	*	*	*
Temperature	1000°C 1832°F	±(3.0%+5d)	1°C/°F	*	*	*		*	*	*	*	*
Inrush current	1000A	0.1A	±(2.0%+5d)								*	*
Continuity check	Threshold 4	40Ω, test current <0	).5mA	*	*	*	*	*	*	*	*	*
Diode test	Test curren <3V DC ty		open circuit voltage	*	*	*	*	*	*	*	*	*

Size(HxWxD): 229mm x 80mm x 49mm Weight: 303g

 $\textbf{Accessories:} \ \ \text{Test leads, gift box with carrying case, 9V battery; temperature probe } (3343T/3345/3347W/3361/3363/3367/3366/3368)$ 

USB cable and Software(3347W)

EN: 61326

EN: 61010-1

EN: 61010-02-032

EN: 61010-02-033

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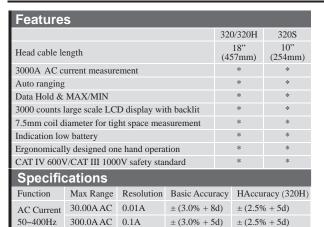
3000A True RMS AC Flex Clamp Meter

3000A True RMS AC Flex Clamp Meters

# DT-320/320B/320S/320H

## 3000A True RMS AC Flex Clamp Meters





True RMS 3000A AC 1A  $\pm (3.0\% + 5d)$   $\pm (2.5\% + 5d)$ **Size(HxWxD):** 180mm x 106mm x 28mm Accessories: Clamshell, 1.5V AAA x 2 battery

EN: 61010-1

EN: 61010-02-032

EN: 61010-02-033



Model 320S

## DT-320B/320BS 3000A AC Flex Clamp Adaptor

Features	
18"(457mm) head cable length (320B)	
10"(254mm) head cable length (320BS)	
3000A AC current measurement	
Slide switch to change range	
Voltage output to universal voltage meters	
7.5mm coil diameter for tight space measurement	
2 meter extension cable	
Low Bart. LED indicator	
Ergonomically designed one hand operation	
CAT IV 600V/CAT III 1000V safety standard	
Specifications	
Y .	

Specific	opecinications							
Function	Max Range	Measurement Range	Basic Accuracy	Output Voltage				
100	30A AC	≤30.00A	100mV/A	± 3.0%				
AC Current 50~400Hz	300A AC	30.0A-300.0A	10mV/A	± 3.0%				
30~40011Z	3000A AC	300A-3000A	1mV/A	± 3.0%				

Size(HxWxD): 180mm x 106mm x 28mm

Weight: 210g

Accessories: Clamshell, 1.5V AAA x 2 batteries



## DT-388 Flexible AC Current Clamp meter with Datalogger

C current True RMS	measurements
000 counts display wi	th backlight & Analogue Bar Graph
lectronic overload pro	otection
ata Hold & inrush fur	nction
nrush Current	
luetooth interface	
aw opening 457mm (1	8 in) coil
000A ACA flexible cla	amp
auto Power Off	
ow battery indication	

Specifications	
AC current range	0.5A to 3000A AC
Resolution	0.01A
Accuracy	$3\% \pm 5$ digits (50Hz to 400Hz)
Menory	Record up to 16000 readings
Safety rating CAT IV 600V, CAT III	1000V

Size(HxWxD): 230mm x 76mm x 40mm

Accessories: Gift box with carrying case, 1.5V AAA x 2 batteries, APP Software.

EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033

www.cem-instruments.com



Weight: 315g

www.cem-instruments.com

E-mail:cemyjm@cem-instruments.com

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3398/3398B/3398W Series Professional True RMS Clamp Meters provide accurate AC, AC/DC Current and Voltage readings regardless of waveforms. These meters can be used in most industrial and commercial applications where non-linear loads distort the

## DT-3398/3398B/3398W CATIV 1000V 2000A AC, AC/DC True RMS Clamp Meters



# CATIV 1000V 2000A AC, AC/DC True RMS Clamp Meters



Current or Voltage waveform.

EN: 61326 EN: 61010-1 EN: 61010-02-032





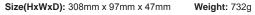


Peak Hold Function Inrush Current Measurement

2000A True RMS

Features			
	3398	3398B	3398W
AC/DC Current	AC	AC/DC	AC/DC
Clamp jaw opening	2" (52mm)	2" (52mm)	2" (52mm)
Digital display counts	6000	6000	6000
Electronic overload protection	CAT IV 1000V	CAT IV 1000V	CAT IV 1000V
True RMS measurements	*	*	*
Analog Bargraph/segments		* /61	* /61
Continuity buzzer & Diode check	*	*	*
Data Hold & Peak Hold function	*	*	*
Flash light & Black light function	*	*	*
MAX/ MIN	*	*	*
Inrush current measurement	*	*	*
DCA Zero function	*	*	*
NCV Detection	*	*	*
Auto Power Off	*	*	*
Low battery indication	*	*	*
V AC+DC			*
THDf / THDr			25th harmonic
Phase rotation indication			*
Bluetooth data transmission		*	*
Low pass filter			*

Specifications						
Function	Max Range	Basic Accuracy	Max. Resolution	3398	3398B	3398W
AC Current	2000 A	±(2.5%+5d)	1A	*	*	*
DC Current	2000 A	±(3.0%+4d)	1A		*	*
AC Voltage	1000V	$\pm (0.8\% + 2d)$	0.1mV	*	*	*
DC Voltage	1000V	±(1.0%+4d)	0.1mV	*	*	*
Resistance	60ΜΩ	$\pm (1.0\% + 4d)$	0.1Ω	*	*	*
Capacitance	10mF	$\pm (3.0\% + 5d)$	0.01nF	*	*	*
Electronic Frequency	100kHz	$\pm (1.2\% + 3d)$	0.01kHz	*	*	*
Temperature	1000°C/1832°F	$\pm (3.0\% + 5d)$	1°C/°F		*	*
Total Harmonic Distortion	99.9%	0.1%	$\pm (3\% + 10d)$			*
Harmonic distortion measurement	99.9%	0.1%	±(5% + 10d)			*
Active Power	999.9KW		A.error x v.reading + V.error x A.reading			*
Power Fartor	-1.0 ~ 0, 0 ~ 1.0		$\pm (3\% + 1d)$			*
Continuity check	Buzzer sounds at $50\Omega$					
Diode test	Test current <0.5mA Max 3V					



Accessories: 1.5V AA x 3 batteries and Temperature probe (3398B/3398W), test leads, gift box with carrying case.





Model 3398W

www.cem-instruments.com E-mail:cemyjm@cem-instruments.com











High Resolution

3170 Milliamp clamp meter measures mA signals for PLC and control system analog I/O, with extension cable for measurements in tight locations

Features
High accuracy 0.5%
0.01 mA resolution and sensitivity
0.18 in or 4.5mm max. diameter of measurable conductor
Measuring 4 to 20 mA signals without "breaking the loop"
Measuring mA signals for PLC and control system analog I/O
Dual backlit display with both mA measurement and percent of 4 to 20 mA span
Measurement Spotlight illuminates where hard to see wires in dark enclosures
Detachable clamp with extension cable for measurements in tight locations
Measuring 10 to 50 mA signals in older control systems by using the 99.9 mA range
Automatically change 4 to 20 mA output for remote testing
Power saving features, auto-off, backlight timeout extend battery life
Hold function captures and displays changing measurements

Specifications				
Function	Range/ Resolution	Accuracy		
mA measurement	0 to 20.99 mA	0.5% + 5 counts		
	21.0mA to 100.0 mA	1.5% + 5 counts		

Size(HxWxD): 215mm x 55mm x 36mm Accessories: Gift box with carrying case

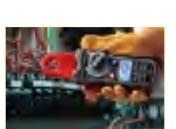
& two "AA" 1.5V batteries.

Weight: 200g

## DT-338 Mini AC/DC Clamp Meter



EMC & LVD EN: 61326 EN: 61010-1 CAT III EN: 61010-02-032 EN: 61010-02-033



Model 338

The 338 is new designed to verify the presence of load current, voltage and resistance, etc. The small bodies and jaws fit perfectly in your hand and a large backlit display is easy to read.

Features	
0.8" Small jaw size	
1mA high resolution	
True RMS AC clamp-on multime	eter
Type K Temperature function	
Digital clamp tester for AC/DC of	current measurement
Providing wide measuring range	from very small to large current
Designed to safety standard IEC	$61010\mbox{-}2\mbox{-}032\mbox{: CAT~III}~600\mbox{V}$ and pollution degree 2.
4000 Counts LCD display	
Auto power off & Data hold fund	etion
Peak hold ,Max/Min hold and Re	elative functions
Advanced functions include Cap	acitance, Frequency

Specifications			
Function	Max. Range	Max. Resolution	Basic Accuracy
Current AC	80A	1mA	$\pm (2.5\% + 5d)$
Current DC	80A	1mA	$\pm (2.5\% + 4d)$
Voltage AC	400mV~600V	0.1mV	$\pm (2.0\% + 4d)$
Voltage DC	400mV~600V	0.1mV	$\pm (1.5\% + 3d)$
Resistance	$400\Omega{\sim}40M\Omega$	0.1Ω	$\pm (1.5\% + 2d)$
Frequency	5Hz~10MHz	0.001Hz	±(1.2%+3d)
Capacitance	40mF	0.001nF	$\pm (3.5\% + 10d)$
Temperature	-20°C~+760°C	0.1 °C	±(2.0%+3°C)
remperature	-4 °F~+1400 °F	0.1 °F	±(2.0%+3°F)
Diode Check	Test current of 0.3mA, Open circuit voltage 3.0V(338)		
Continuity Check	Threshold $50\Omega$		

Size(HxWxD): 210mm x 70mmx 37mm Weight: 200g Accessories: Test leads, Gift box with carrying case, 9V battery.

## Features

Large tranceformer jaws of 68mm diameter makes it possible to clamp on all three or four wires (3 phases) together for leakage current measurement. Frequency filter switch to eliminate the effect of the harmonics.

Measurement from mA up to AC 1000A

True RMS enables an accurate measurement for distorted waveforms.

Peak hold function

Data hold function: Allows for easy reading in dimly light or hard-to-reach locations

Large LCD display with backlight

International safety standard IEC61010-1 CAT.III 600V

Specifications				
Function	Range	Range	Accuracy(50/60Hz)	Accuracy(40~1kHz)
	200mA	0.1mA	$\pm (1.5\% + 10d)$	$\pm (3.0\% + 10d)$
	2A	1mA	$\pm (1.5\% + 10d)$	$\pm (3.0\% + 10d)$
AC Current	20A	10mA	$\pm (1.5\% + 10d)$	$\pm (3.0\% + 10d)$
	200A	100mA	$\pm (2.0\% + 10d)$	$\pm (3.5\% + 10d)$
	1000A	1A	$\pm (5.5\% + 10d)$	±(10%+10d)
AC Voltage	600V	0.1V	$\pm (1.0\% + 5d)$	
DC Voltage	600V	0.1V	±(1.0%+5d)	
Resistance	$600\Omega$	$0.1\Omega$	±(1.0%+5d)	
Continuity test	Threshold 40Ω, Continuity Beeper 2KHz			
Conductor size	Ф68mm max.			
Frequency response	40Hz-1kHz			
Effect of external stray magnetic field Φ15mm 100A	10mA AC max.			
Applicable standards	IEC 61010-1 CAT.III 600V IEC 61010-2-032			

**Size(HxWxD):** 250mm x 113mm x 45mm Weight: 490g Accessories: , Test leads, Gift box with carrying case and 9V battery.







## DT-9810H Mini AC Leakage Current Tester with LPF Measurement

- Shielded transformer jaw opens to 1.2"
- 100µA high resolution
- Low pass filter (LPF) for accurate measurement
- Least affected by external magnetic field, providing wide measuring range from very small to large current
- Designed to safety standard IEC 61010-2-032: over-voltage CATIII 300V and pollution degree 2.
- Data hold function to allow for easy reading in dimly lit or hard-to-reach locations
- Dynamic range of 2000 counts full scale
- Auto power off

Specifications				
Function	Resolution	Basic Accuracy		
200mA	0.1mA	$\pm (2.5\% + 8d)$		
2A	1mA	$\pm (2.5\% + 8d)$		
200A	0.1A	$\pm (2.5\% + 8d)$		

Size(HxWxD): 182mm x 61mm x 34mm Weight: 225g

Accessories:

Gift box with carrying case and 9V battery







Model 9810H

40000

Model 3351

<u>CEM</u>

3351 are True RMS 1500A AC/DC Clamp Meters, 3352 is a True RMS Power Meter, which provide much more safe measurements with double molded plastic housing design. True RMS AC/DC voltage and current measurements, 40,000 counts and 0.1% basic DC voltage accuracy within the reach of more customers. The large LCD display with analog bargraph and backlit ensures that readings are easy to read under all circumstances.

This series can test the current for motors, lighting, etc. is easy with their rush current function. All inputs are protected by EN 610101-1 CATIV 600V/CATIII 1000V.

EMC & LVD EN: 61326

EN: 61010-1

EN: 61010-02-032 EN: 61010-02-033

Peak Hold Function
Inrush current measurement

• 1500A True RMS • 40000 Counts(3351/3352)













Model 3350

reatures		
	3351	3352
Current measurement	AC/DC	AC/DC
Power clamp meter		*
LCD display counts	40000	40000
AC True RMS	*	*
Display with backlight	*	*
Inrush current measurement	*	*
Max /Min, Data Hold	*	*
REL (Zero) Function	*	*
Auto Power Off	*	*
Low battery indication	*	*
Analog Bargraph / 41 seg.	*	*
2.16" (55mm) Jaw opening	*	*
NCV Detection	*	*

Specifications				
Function	Max Range	Basic Accuracy	3351	3352
Current DC	1500A	±(2.0%+10d)	*	*
Current AC	1500A	±(2.8%+10d)	*	*
AC kW/kVA	900.0kW	$\pm (3.0\% + 10d)$	*	
( AC kW/kVA TR	MS 0-600V, 0-150	0A, 50/60Hz)		
DC kW/kVA	900.0kW	$\pm (2.5\% + 10d)$	*	
( DC kW/kVA 0-600V, 0-1500A, 50/60Hz)				
Power Factor	0.3~1	$\pm (2.5\% + 10d)$	*	
Voltage DC	1000.0V	$\pm (0.1\% + 5d)$	*	*
Voltage AC	750.0V	$\pm (0.5\% + 5d)$	*	*
Resistance	$40.000 \mathrm{M}\Omega$	$\pm (0.5\% + 4d)$	*	*
Temperature	1000°C/ 1832°F	±(1.0%+1°C/1°F)	*	*
Capacitance	40.00mF	±(2.5%+5d)	*	*
Duty Cycle	10.0 to 95.0%	±(0.5%+2d)	*	*
Frequency	40.000MHz	±(1.2%+2d)	*	*
Inrush Current	1500A	±(1.5%+2d)	*	*
Continuity check	Buzzer sounds at $50\Omega$			
Diode test	Test current 0.3mA			

Size(HxWxD): 295mm x 100mm x 46mm Weight: 537g

**Accessories:** Test leads, gift box with carrying case and 9V battery temperature probe.

3349W/3349W-BT 1000A AC/DC power quality True RMS clamp meter measure power and power factor, total harmonic distortion, individual harmonics, as well as AC/DC voltage, current, capacitance, inrush current anakysis, and phase sequence. The low pass filter enables voltage and current measurements on variable frequency drives. It allows quick selection of the numerous measurement features on the large LCD display.

- Double molded plastic housing
- True RMS measurement for ACV & ACA







Drop-proof to 2M





Features
True RMS
Non-contact voltage detection
Inrush current measurement for motors
Low pass filter for variable frequency drives
Continuity Beeper
Min, Max and Smart Data Hold, Peak hold
Auto torch-light when clamping
Large 10,000 count display with active backlight and analog bar graph
Auto Power Off
Maximum jaw opening 1.63" (42mm)
CAT IV 600 V /CAT III 1000 V safety standard
Bluetooth interface (3349W-BT)
Meterbox iMM & cloud service

Specifications			
Function	Max Range	Max. Resolution	Basic Accuracy
	60.00A	100mA	±(2.5% +8d)
AC True RMS Current	1000A	1A	±(3% +8d)
DC Current	60.00A	100mA	±(2.5% +0.2A)
DC Current	1000A	1A	±(3% +8d)
DC Voltage	600.0mV, 6.000V, 60.00V, 600.0V, 1000V	0.1mV	±(0.8% +20d)
AC True RMS Voltage	6.000V, 60.00V, 600.0V, 1000V	1mV	±(1.0% +5d)
Resistance	$600.0\Omega$ , $6.000$ kΩ, $60.00$ kΩ, $600.0$ kΩ, $6.000$ MΩ, $60.00$ MΩ	0.1Ω	±(1% +4d)
Capacitance	6.000nF, 60.00nF, 600.0nF, 6.000uF, 60.00uF, 600.0uF, 6000uF	1pF	+(5% +30d)
Frequency	6.000Hz, 60.00Hz, 600.0Hz, 6.000KHz, 60.00KHz, 600.0KHz, 10MHz	0.001Hz	+(1.0% +5d)
Frequency	10Hz to 10kHz, 40Hz to 100Hz		±(1.0% +5d)
Duty Cycle	0.5%~99.9%	0.1	+(1.2% +10d)
Temperature	-50°C~+1000°C, -58 °F~+1832°F	0.1 °C/ °F	+(3% +5°C/9°F)
Total Harmonic Distortion	99.9%	0.1%	$\pm (3\% + 10d)$
Harmonic distortion measurement	99.9%	0.1%	±(5% + 10d)
Active Power	999.9KW		A.error x V.reading + V.error x A.reading
Power Factor	-1.0 ~ 0, 0 ~ 1.0		±(3% + 1d)
Diode test	Forward DCA is approx.1mA, open circuit Voltage MAX . 3V		
Continuity check	Buzzer sounds at $50\Omega$		



Accessories:

Accessori

Test leads, temperarure probe, gift box with carrying case, 9V battery.



Model 3349W



**DT-3399** 



3353 Professional True RMS 1000A AC Watt Clamp Meter provides accurate Watt, AC Current and Voltage readings regardless of waveforms.

Features
Analysis for Single Phase and Balanced 3 phase system
True RMS Value (Voltage and Current)
Large dual LCD Display with Backlight
USB interface
Data Hold , MIN / MAX measurement
True power / apparent power / power factor measurement
Auto Ranging & Auto Power Off
Overflow Indication
Manual Data Memory and Read (99 sets)
NCV Detection
2.16" (55mm) Jaw opening

Specificati	ions	
Function	Range	Basic Accuracy
AC Voltage	15V/100V/300V/750V	±(1.2%+5)
AC Current	40A/100A/400A/1000A	±(2%+5)
True Power	0.60kW—750kW	±(3%+5)
Apparent Power	0.60kVA—750kVA	±(3%+5)
Reactive Power	0.60kVAr—750kVAr	±(4%+20)of 15V/1000A else±(4%+5)
Power Factor	0.3-1	±(2%+20)
Phase Angle	0°-90°	±1°
Frequency	20Hz-200Hz	±(0.5%+5)
Energy	1-9999kWh	±(3%+2)

Size(HxWxD): 295mm x 100mm x 46mm

Weight: 537g

Accessories:

Test leads, gift box with carrying case and 9V battery, USB Cable, CD Software.

DT-3348 True RMS 1000A AC/DC Watt Clamp Meter

Model 3353



3348 Professional True RMS 1000A AC/DC Watt Clamp Meter provides accurate Watt, AC/DC Current and Voltage readings regardless of waveforms.





DC/AC True Power to 240kW



Model 3348	

Features	
True RMS AC Voltage and Current	
DC and AC True Power to 240kW	
1.2"(30mm) Clamp jaw opening	
Electronic overload protection	
Continuity buzzer & Diode check	
Data Hold function	
DCA Zero function	
Auto Power Off	
Low battery indication	
AC/DC Current	

Specifications						
Function	Max Range	Max. Resolution	Basic Accuracy			
AC Current	1000 A	0.1A	$\pm (2.5\% + 5d)$			
DC Current	1000 A	0.1A	$\pm (3.0\% + 4d)$			
AC Voltage	600V	0.1mV	$\pm (0.8\% + 2d)$			
DC Voltage	600V	0.1mV	$\pm (1.0\% + 4d)$			
Resistance	$40 \mathrm{M}\Omega$	0.1Ω	$\pm (1.0\% + 4d)$			
Frequency	10MHz	0.01MHz	±(1.2%+3d)			
AC Power	240kW	10W	$\pm (3.0\% + 5d)$			
DC Power	240kW	10W	$\pm (2.5\% + 5d)$			

Size(HxWxD): 229mm x 80mm x 49mm Weight: 303g

Accessories:

Test leads, gift box with carrying case & 9V battery

## Features AC/DC Current 2" (52mm) Clamp jaw opening 60,000 Counts LCD digital display CAT IV 1000V Electronic overload protection A AC+DC, V AC+DC True RMS measurements Analog Bargraph/segments Inrush current measurement & MAX/ MIN Data Hold & Peak Hold function Flash light & Black light function DCA Zero function NCV Detection Auto Power Off & Low battery indication THDf / THDr 25th harmonic Phase rotation indication Bluetooth data transmission Low pass filter

Specifications				
Function	Max Range	Basic Accuracy	Max. Resolution	
AC Current	2000 A	$\pm (2.5\% + 5d)$	1A	
DC Current	2000 A	$\pm (3.0\% + 4d)$	1A	
AC Voltage	1000V	$\pm (0.8\% + 2d)$	0.1mV	
DC Voltage	1000V	±(1.0%+4d)	0.1mV	
Resistance	60ΜΩ	$\pm (1.0\% + 4d)$	0.1Ω	
Capacitance	10mF	$\pm (3.0\% + 5d)$	0.01nF	
Electronic Frequency	100kHz	±(1.2%+3d)	0.01kHz	
Temperature	1000°C/1832°F	$\pm (3.0\% + 5d)$	1°C/°F	
Total Harmonic Distortion	99.9%	0.1%	$\pm (3\% + 10d)$	
Harmonic distortion measurement	99.9%	0.1%	$\pm (5\% + 10d)$	
Active Power	999.9KW		A.error x v.reading + V.error x A.reading	
Power Fartor	-1.0 ~ 0, 0 ~ 1.0		$\pm (3\% + 1d)$	
Continuity check	Buzzer sounds at $50\Omega$			
Diode test	Test current <0.5mA Max 3V			

Size(HxWxD): 308mm x 97mm x 47mm Weight: 732g

Accessories: 1.5V AA x 3 batteries and Temperature probe, test leads, gift box with carrying case

# EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033





Model 3399

## DT-3355 Earth Ground Clamp Meter

Features
Large LCD display with backlight
Span of Jaw: 28mm for a long jaw; 32mm for a round jaw:
Protection Level: Double insulation
Structural Feature: In the jaw way
Range Shift: Automatic
External Magnetic Field: 40A/m
External Electric Field: 1V/m
Single Measuring Time: 1 second
Measurement Resistance Frequency: 1kHz
Maximum Resistance Measurement Resolution: 0.001 $\Omega$
Resistance Measurement Range: $0.01\text{-}1000\Omega$

Specifications					
Function	Max Range	Max. Resolution	Basic Accuracy		
Resistance	$0.01{\sim}1000\Omega$	0.001Ω	±(1.0%+10d)		
Current	0 ~ 20 A	1mA	±(2.5%+2d)		

**Size(HxWxD):** 288mm x 100mm x 95mm Weight: 1154g (for long jaw); 1120g (for round jaw). Accessories: Gift box with carrying case and 9V battery.







Model 3355

# **Compact AC, AC/DC Autoranging Clamp Meters**







## 400A AC, AC/DC True RMS Clamp Meters with Inrush current

**DT-9180** Series clamp meters provide fast A/D converting sampling time, high accuracy, built-in datalogging offer all needed features for measurement. It is with modern bodies and jaws design for perfect handhold and tight place testing. A large backlit display (on the most of models) is easy to see and a handy data hold keeps measurements on the display.



## 1000A AC/DC True RMS Autoranging Clamp Meter

**DT-356H** offer all needed features for measurement, is designed to perform in the toughest environments and provide noisy-free, reliable results, to help you diagnose all kinds of electrical problems. Its compact design is well suitable for perfect handhold and measurement in tight and crowd place. True RMS measurement is for accurate reading of non-linear signals. Commercial and residential electricians use it to verify the present of load current, continuity of circuit, switches, fuse and contacts.



## **Compact AC, AC/DC Autoranging Clamp Meters**

**DT-371** series clamp meters offer all needed features for measurement. It is with small bodies and jaws design for perfect handhold and tight place testing. A large backlit display (on most models) is easy to see and a handy display hold keeps measurements on the display.



## Mini AC, AC/DC Clamp Meters

**FC-21/22** are compact mini amp clamp meters, are specifically designed to reach into very small areas and has a very low-current sensitivity. This amp clamp performs essential trouble-shooting tasks in plant maintenance, electrical, HVAC, and telecom work as well as residential, automotive, fleet maintenance, marine, and motorcycle electrical repair.



## Smaller sized, convenient-to-use AC current clamp-on Adaptor

**CP-09** is the ideal tool to extend the current ranges for all Multimeters.

The CP-09 is a 200A AC current clamp-on adaptor with voltage output via a standard banana

inputs to be connected to multimeters.









Model 9180A





• 400A AC

True RMS Clamp Meters



built-in datalogging offer all needed features for measurement. It is with modern bodies and jaws design for perfect handhold and tight place testing. A large backlit display (on the most of models) is easy to see and a handy data hold keeps measurements on the display.

The 9180A Series clamp meters providing fast A/D converting sampling time, high accuracy,

• True RMS measurement for ACV & ACA











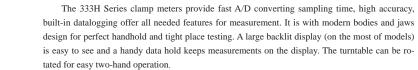
Features			
	9180A	9180B	9180H
Current measurement	AC	AC	AC
Display counts	2000	4000	4000
AC True RMS	*	*	*
Low pass filter (VFD)		*	
Data Hold	*	*	*
Peak Hold /MAX/ MIN	MAX/ MIN	MAX/ MIN	MAX/ MIN
REL (Zero) Function		*	
Flashlight and Backlight	*	*	*
Auto Power Off	*	*	*
Low battery indication	*	*	*
1.18" (30mm) Jaw opening	*	*	*
NCV Function	*	*	*

Specifications						
Function	Max Range	Basic Accuracy	9180A	9180B	9180H	
Voltage DC	1000V	$\pm (0.5\% + 2d)$	600V	*	600V	
Voltage AC	1000V	$\pm (1.0\% + 5d)$	600V	*	600V	
Voltage VFD	600V			*		
Current AC	400.0A	$\pm (2.5\% + 8d)$	*	*	*	
Resistance	40ΜΩ	$\pm (3.0\% + 5d)$	*	*	*	
Temperature	1000°C/ 1832°F	$\pm (1.0\% + 3d)$			*	
Capacitance	100mF	$\pm (2.5\% + 5d)$		*	4mF	
Frequency	ACV 10kHz	$\pm (0.5\% + 2d)$		*	*	
Inrush Current	400.0A	±(1.5%+2d)				
Diode test	Test Current <0.5mA M	IAX 3V	2V	*	2V	
Continuity check	Buzzer sounds at $50\Omega$					

Size(HxWxD): 225mm x 72mm x 40mm

Weight: 294g

Accessories: Test leads, gift box with carrying case, Temperature probe and 1.5V AAA x 3 batteries



- Single molded plastic housing
- True RMS measurement for ACV & ACA

• 400A AC, A	C/DC
True RMS (	lamp Meter

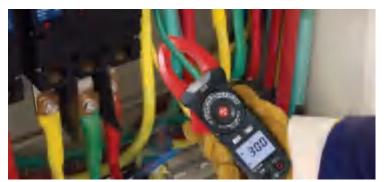
Features						
	333H	335	335H	336		
Current measurement	AC	AC	AC/DC	AC/DC		
Display counts	2000	4000	4000	4000		
AC True RMS	*	*	*	*		
Low pass filter (VFD)				*		
Data Hold	*	*	*	*		
MAX/ MIN	*	*	*	*		
REL (Zero) Function			*	*		
Backlight/ Auto Backlight	*	*	*	*		
Auto Power Off	*	*	*	*		
Low battery indication	*	*	*	*		
1.18" (30mm) Jaw opening	*	*	*	*		
NCV Function	*	*	*	*		
Live test			*	*		

Specifications						
Function	Max Range	Basic Accuracy	333H	335	335H	336
Voltage DC	600V	$\pm (0.5\% + 2d)$	*	*	*	*
Voltage AC	600V	$\pm (1.0\% + 5d)$	*	*	*	*
Voltage VFD	600V					*
Current DC	400.0A	$\pm (2.0\% + 5d)$			*	*
Current AC	400.0A	$\pm (2.5\% + 8d)$	*	*	*	*
Resistance	40ΜΩ	$\pm (3.0\% + 5d)$	*	*	*	*
Temperature	1000°C/ 1832°F	$\pm (1.0\% + 3d)$		*	*	*
Capacitance	100mF	$\pm (2.5\% + 5d)$		*	*	*
Frequency	ACV 100kHz	$\pm (0.5\% + 2d)$		*	*	*
Continuity check	Buzzer sounds at $50\Omega$					
Diode test	Test Current < 0.5mA MAX 3V					

Size(HxWxD): 125mm x 65mm x 38mm

Weight: 284g

Accessories: Test leads, gift box with carrying case, Temperature probe and 1.5V AAA x 3 batteries









EN: 61010-02-032 EN: 61010-02-033





Model 333H



Model 335H

Model 9180H

(Single molded plastic housing)

Compact AC,AC/DC Autoranging Clamp Meters



350H series clamp meters offer all the features you need to fit the way you work. The small bodies and jaws fit perfectly in your hand and into tight places. Slender housing design is good to measure by one hand. A large backlit display (on most models) is easy to see and a handy display hold keeps measurements on the display. Measuring starting current for motors, lighting, etc.

- Double molded plastic housing
- Auto Power Off



Model 350H



Model 351H









Features			
	350H	351H	352
Current measurement	AC	AC/DC	AC
LCD display counts	4000	4000	2000
AC True RMS	*	*	*
Data Hold	*	*	*
REL(Zero) Function	*	*	
Auto Power Off	*	*	*
Low battery indication	*	*	*
1.2"(30mm) Jaw opening	*	*	*
NCV Detection	*	*	*

Specificat	ions					
Function	Max. Range	Max Resolution	Best Accuracy	350H	351H	352
Voltage DC	600V	$100 \mu V$	$\pm (0.5\% + 8d)$	*	*	*
Voltage AC	600V	1mV	$\pm (1.2\% + 3d)$	*	*	*
Current DC	400A	10mA	$\pm (2.5\% + 5d)$		*	
Current AC	400A	10mA	$\pm (2.5\% + 5d)$	*	*	1mA
Resistance	$40 \mathrm{M}\Omega$		$\pm (2.0\% + 3d)$	*	*	20ΜΩ
Temperature	760°C/1400°F		±(1.5%+5d)	*	*	*
Capacitance	4mF		$\pm (3.0\% + 5d)$	*	*	
Frequency	10kHz		±(1.2%+5d)	*	10kHz	
Continuity check		Buzzer	sounds at $50\Omega$			
Diode test		Test cu	arrent 0.5mA			

Size(HxWxD): 198mm x 66mm x 36mm Weight: 230g

Accessories: Test leads, gift box with carrying case, temperature probe and Two"AAA"1.5V batteries.

The 355 series clamp meters offer all needed features for measurement. It with small bodies and jaws design for perfect handhold and tight place testing. A large backlit display (on most models) is easy to see and a handy display hold keeps measurements on the display.



- Double molded plastic housing
- True RMS measurement for ACV & ACA
- Auto Power Off

Features	Features						
	355	356	356H	357	355W	356W	
Current measurement	AC	AC/DC	AC/DC	AC/DC	AC	AC/DC	
LCD display counts	6000	6000	6000	40000	6000	6000	
AC True RMS	*	*	*	*	*	*	
Display with backlight	*	*	*	*	*	*	
Data Hold	*	*	*	*	*	*	
Max /Min	*	*	*	*	*	*	
REL (Zero) Function	*	*	*	*	*	*	
Auto Power Off	*	*	*	*	*	*	
Low battery indication	*	*	*	*	*	*	
Analog Bargraph / 61 seg.	*	*	*	*	*	*	
1.57" (40mm) Jaw opening	*	*	*	*	*	*	
NCV Detection	*	*	*	*	*	*	
USB interface					*	*	
Wireless transmitter					433MHz	915MHz	
Receive sensitivity	-109dBm						
Communication distance					$\leq 100 \text{m}$		

Specifications							
Function	Max Range	Basic Accuracy	355/355W	356/356W	356H	357	
Voltage DC	600V	$\pm (0.5\% + 1d)$	*	*	*	*	
Voltage AC	600V	±(1.5%+2d)	*	*	*	*	
Current DC	1000A	$\pm (2.0\% + 5d)$		*	*	*	
Current AC	1000A	$\pm (2.5\% + 4d)$	*	*	*	*	
Resistance	60ΜΩ	$\pm (3.0\% + 5d)$	*	*	*	*	
Temperature	760°C/ 1400°F	$\pm (3.0\% + 3d)$	*	*	*	*	
Capacitance	4000uF	$\pm (2.5\% + 5d)$	*	*	4mF	*	
Frequency	10MHz	±(1.2%+2d)	*	10kHz	10kHz	10kHz	
Inrush Current	600A	$\pm (1.5\% + 2d)$					
Continuity check	Buzzer sounds	at 50Ω					
Diode test	Test current 0.3	mA					

Size(HxWxD): 230mm x 76mm x 40mm

Weight: 315g

Accessories: Test leads, gift box with carrying case, temperature probe and 9V battery. USB cable and Software(355W/356W)





EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033



Model 356H

## DT-370/370T

## Heavy Duty 200A AC Open-Jaw Clamp Meter



Model 360



EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033



Model 362







The 360 series clamp meters offer all needed features for measurement. It with small bodies and jaws design for perfect handhold and tight place testing. A large backlit display (on most models) is easy to see and a handy Display Hold keeps measurements on the dis-

- Double molded plastic housing
- Inrush current function (366 only)
- Auto Power Off

Features	Features								
	360	361	362	363					
Current measurement	AC	AC	AC/DC	AC/DC					
Max. Resolution	1mA	1mA	10mA	10mA					
LCD display counts	2000	4000	4000	4000					
AC True RMS				*					
Display with backlight	*	*	*	*					
Data Hold	*	*	*	*					
Max Hold	*								
Zero Function			*	*					
Auto Power Off	*	*	*	*					
Low battery indication	*	*	*	*					
Peak Current				*					
1.2" (30mm) Jaw opening	*	*	*	*					

Specifications							
Function	Max Range	Basic Accuracy	360	361	362	363	
Voltage DC	600V	±(0.5%+1d)	*	*	*	*	
Voltage AC	600V	±(1.5%+2d)	*	*	*	*	
Current DC	400A	$\pm (2.0\% + 5d)$			*	*	
Current AC	400A	±(2.5%+4d)	*	*	*	*	
Resistance	$40 \mathrm{M}\Omega$	±(3.0%+5d)	$20 \text{M}\Omega$	*	*	*	
Temperature	1000°C/1832°F	±(3.0%+3d)		*	*	*	
Capacitance	100uF	±(2.5%+5d)			*	40mF	
Frequency	10MHz	±(1.2%+2d)			*	*	
Continuity check	Buzzer sounds at $50\Omega$						
Diode test	Test current 0.3mA						

Size(HxWxD): 197mm x 70mm x 40mm

Weight: 183g

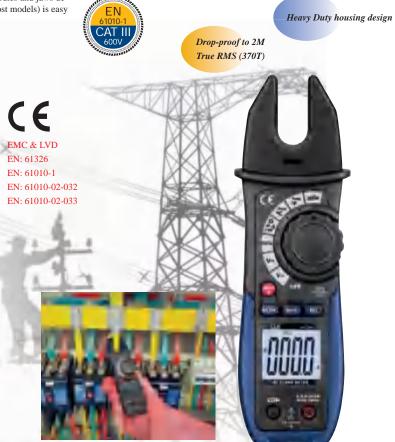
Accessories: Test leads, gift box with carrying case, Temperature probe(361,362, 363, 366 only) and 9V battery.

	370 clamp meter offers all needed features for measurement. It has small bodies and jaws de-
5	sign for perfectly handhold and tight place testing. A large backlit display (on most models) is easy
1	to see and a handy Display Hold keeps measurements on the display.

Features		
	370	370T
200A AC Current measurement	*	*
Digital display counts	4000	6000
Compact size	*	*
REL Function	*	*
Data Hold	*	*
Backlit Controls	*	*
Low battery indication	*	*
17mm Jaw opening	*	*
Auto sense Voltage		*
NCV	*	*
Low Z & True RMS		*

Specificati	ons						
Function	Max Range	Basic Accuracy	370	370T			
Voltage DC	600V	$\pm (1.5\% + 3d)$	*	*			
Voltage AC	600V	±(1.2%+3d)	*				
	000 V	$\pm (0.9\% + 5d)$		*			
Current AC	200A	$\pm (3.5\% + 5d)$	*	*			
Resistance	$40 \mathrm{M}\Omega$	$\pm (3.0\% + 5d)$	*	60Meg			
Tomamomotomo	760°C/ 1400°F	$\pm (3.0\% + 3d)$	*				
Temperature	1000°C/ 1832°F	$\pm (3.0\% + 3d)$		*			
Capacitance	100uF	$\pm (2.5\% + 5d)$	*	6000uI			
Frequency	10MHz	$\pm (1.2\% + 2d)$	*	*			
Low Z	>150K *						
Continuity check	Buzzer sounds at $50\Omega$						
Diode test	7	Test current 0.3mA					

Size(HxWxD): 230mm x 82mm x 40mm Weight: 230g Accessories: Test leads, gift box with carrying case, temperature probe and Two"AAA"1.5V batteries.



## DT-380/381/382/383 Compact AC, AC/DC Autoranging Clamp Meters

The 380 series clamp meters offer all the features you need to fit the way you work. The small bodies and jaws fit perfectly in your hand and into tight places.

Features				
	380	381	382	383
Current measurement	AC	AC	AC/DC	AC/DC
LCD display counts	2000	4000	2000	4000
Data Hold	*	*	*	*
REL (Zero) Function			*	*
Auto Power Off	*	*	*	*
Low battery indication	*	*	*	*
1.2" (30mm) Jaw opening	*	*	*	*
NCV Detection	*	*	*	*
Flashlight	*	*	*	*

<b>Specificatio</b>	ns					
Function	Max Range	Basic Accuracy	380	381	382	383
Voltage DC	600V	$\pm (0.5\% + 1d)$	*	*	*	*
Voltage AC	600V	$\pm (1.5\% + 2d)$	*	*	*	*
Current DC	400A	$\pm (2.0\% + 5d)$			200A	*
Current AC	400A	$\pm (2.5\% + 4d)$	*	*	200A	*
Resistance	$40 \mathrm{M}\Omega$	$\pm (3.0\% + 5d)$	20ΜΩ	*	$20M\Omega$	*
Temperature	1000°C/ 1832°F	$\pm (3.0\% + 3d)$	*	*	*	*
Capacitance	100uF	$\pm (2.5\% + 5d)$		*		*
Frequency	10MHz	$\pm (1.2\% + 2d)$		10kHz		10kHz
Continuity check		Buzzer sou	ands at 50	Ω		
Diode test		Test curr	ent 0.3mA	A		

Size(HxWxD): 230mm x 82mm x 40mm

Weight: 230g

Test leads, gift box with carrying case, temperature probe and Two"AAA"1.5V batteries.



Model 383

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The FC-31/32/33 Series are designed to verify the presence of load current, Non-contact voltage and flashlight, etc. The small bodies and jaws fit perfectly in your hand and a large backlit display is easy to read.

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EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033



Features							
	31	32	33	35	36		
True RMS					*		
AC/DC Voltage, Resistance, Continuity, Diode check				*	*		
Digital display counts	2000	2400	2400	2000	2000-9999		
0.7" Jaw opening	*	*	*	*	*		
Non-contact Voltage detector and Flashlight	*	*	*	*	*		
AC Current		*	*	*	*		
DC Current		*	*		*		
Data Hold function	*	*	*		*		
MAX/MIN function	MAX			MAX	*		
DCA Zero function		*	*		*		
Peak Hold function					*		
Auto Power Off	*	*	*	*	*		
Low battery indication	*	*	*	*	*		
Backlight Display		*	*	*	*		

Specifications									
Function	Max Range	Basic Accuracy	Max. Resolution	31	32	33	35	36	
	2A	$\pm (3.0\% + 8d)$	1mA			*			
A.C. C	20A	$\pm (3.0\% + 8d)$	10mA	*					
AC Current	80A	$\pm (3.0\% + 8d)$	100mA			*			
	200A	$\pm (3.0\% + 8d)$	100mA	*	*		*	*	
	2A	$\pm (2.8\% + 8d)$	1mA			*			
	80A	$\pm (2.8\% + 8d)$	100mA			*			
	200A	$\pm (3.0\% + 8d)$	100mA		*			*	
	40~51Hz	$\pm (1.2\% + 5d)$	0.01Hz		*				
Frequency	51~510Hz	$\pm (1.2\% + 3d)$	0.1Hz		*				
	0.51~1kHz	$\pm (1.2\% + 3d)$	0.001kHz		*				
Voltage DC	600V	$\pm (0.5\% + 1d)$					0.2-600V auto	600.0V	
Voltage AC	600V	$\pm (1.5\% + 2d)$					0.2-600V auto	600.0V	
Resistance	$20M\Omega$	$\pm (3.0\% + 5d)$					$0.2k\text{-}20M\Omega$ auto	$999.9\Omega$	
Diode	Diode Open circuit voltage 1.5V, Test current 0.3mA (FC-35 only)								
Continuity	Buzzer sounds at $100\Omega$ (FC-35/36 only)								
Non-contact Voltage detection: 100~600VAC									

Model FC-31

Model FC-33

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www.cem-instruments.com

E-mail:cemyjm@cem-instruments.com

Non-Contact Voltage Detector

• Flashlight

Digital Clamp Meter

Size(HxWxD): 178mm x 65mm x 32mm Weight: 170g
Accessories: Test leads, clamshell with carrying case and
Two "AAA"1.5V batteries.

## FC-21/22 Mini AC, AC/DC Clamp Meters

	Model F	EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033
EN 61010-1 CAT III 600V		Model FC-22

Features		
	FC-21	FC-22
Current measurement	AC	AC/DC
Inrush current measurement		*
Data Hold	*	*
DC zero function		*
Backlit LCD display	*	*
Non-contact AC voltage detection	*	*
Auto Power OFF	*	*
Chacifications		

Specifications								
Function	Max Range	Resolution	Basic Accuracy	FC-21	FC-22			
AC Current	40.00A AC	0.01A	$\pm (3.5\% + 10d)$	*	*			
50/60 Hz True RMS	400.0A AC	0.1A	$\pm (2.8\% + 8d)$	*	*			
AC Current	40.00A AC	0.01A	$\pm (2.8\% + 10d)$	*	*			
400 Hz True RMS	400.0A AC	0.1A	$\pm (2.8\% + 8d)$	*	*			
DC Cymront	40.00A DC	0.01A	$\pm (2.5\% + 10d)$		*			
DC Current	400.0A DC	0.1A	$\pm (2.8\% + 8d)$		*			

Size(HxWxD):153mm x 57mm x27mm Weight: 138g Accessories: clamshell & 2 x "AAA" batteries

easy to see and a handy Display Hold keeps measurements on the display.

The 371 series clamp meters offer all needed features for measurement. It is with small bodies and

jaws design for perfect handhold and tight place testing. A large backlit display (on most models) is

- Double molded plastic housing
- Auto Power Off



1.2" (30mm) Jaw opening







Features							
	371	371B	371BL	372	373	375	375BT
Current measurement	AC	AC	AC	AC	AC/DC	AC/DC	AC/DC
Max. Resolution	1mA	1mA	1mA	1mA	10mA	10mA	10mA
LCD display counts	2000	2000	2000	4000	4000	4000	6000
AC True RMS	*					*	*
Display with backlight	*	*	*	*	*	*	*
Data Hold	*	*	*	*	*	*	*
Max Hold	*					*	*
Zero Function					*	*	*
Auto Power Off	*	*	*	*	*	*	*
Low battery indication	*	*	*	*	*	*	*
Bluetooth							*
1.2" (30mm) Jaw opening	*	*	*	*	*	*	*

Specifications									
Function	Max Range	Basic Accuracy	371	371B	371BL	372	373	375	375BT
Voltage DC	600V	$\pm (0.5\% + 1d)$	*	*	*	*	*	*	*
Voltage AC	600V	$\pm (1.5\% + 2d)$	*	*	*	*	*	*	*
Current DC	400A	$\pm (2.0\% + 5d)$					*	*	*
Current AC	400A	$\pm (2.5\% + 4d)$	*	*	*	*	*	*	*
Flexible A	3000A	$\pm (3.0\% + 5d)$							*
Resistance	$40 \mathrm{M}\Omega$	$\pm (3.0\% + 5d)$	20ΜΩ	$20 M\Omega$	$20 M\Omega$	*	*	*	$60 \text{M}\Omega$
Temperature	1000°C/1832°F	$\pm (3.0\% + 3d)$		*				*	*
Capacitance	100uF	$\pm (2.5\% + 5d)$					*	$4000 \mu F$	6000μF
Frequency	10MHz	$\pm (1.2\% + 2d)$				*	*	*	*
Continuity check	Buzzer sounds at $50\Omega$		*	*	*	30Ω	30Ω	*	*
Diode test	Test current 0.3mA		*	*	*	*	*	*	*



Weight: 183g

Accessories: Test leads, gift box with carrying case, temperature probe(371B,

375, 375BT, 376 only), 1.5Vx2 "AAA" batteries.



Model 371



**Bluetooth** 

Model 375BT



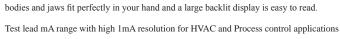


High Resolution





Model 339



Data Hold freeze the displayed value Auto Power Off

39 .7"
7"
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The 339 is new designed to verify the presence of load current, voltage and resistance, etc. The small

Specification	ıs				
Function	Max. Range	Max. Resolution	Basic Accuracy	337	339
Current AC	80A	1mA	±(2.5%+5d)	*	*
Current DC	80A	1mA	$\pm (2.5\% + 4d)$	*	*
Voltage AC	400mV~600V	0.1mV	$\pm (2.0\% + 4d)$	*	*
Voltage DC	400mV~600V	0.1mV	±(1.5%+3d)	*	*
Resistance	$400\Omega{\sim}40M\Omega$	0.1Ω	$\pm (1.5\% + 2d)$	*	*
Frequency	5Hz~10MHz	0.001Hz	±(1.2%+3d)	*	*
% Duty	5%~99.9%	0.1%	±(1.2%+3d)	*	
Capacitance	40mF	0.001nF	$\pm (3.5\% + 10d)$	100uF	500.0uF
Tomomomotypus	-20°C~+760°C	0.1 °C	±(2.0%+3°C)		*
Temperature	-4 °F~+1400 °F 0.1 °F ±(2.0%+3°F)				*
Diode Check	*	*			
Continuity Check Threshold 50Ω					*

Size(HxWxD): 210mm x 70mmx 37mm

Weight: 200g

Accessories:

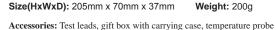
Test leads, Gift box with carrying case, 9V battery.



The 330H series are designed to verify the presence of load current, voltage and resistance, etc. The small bodies and jaws fit perfectly in your hand and a large backlit display is easy to read.

Features					
	330H	332/332T	333/333T	335	336
Max. Resolution to	AC	AC/DC	AC/DC	AC	AC/DC
Current measurement	1mA	10mA	10mA	0.1uA	0.1uA
LCD display counts	2000	4000	4000	4000	4000
AC True RMS	*	332T	333T		
Display with backlight	*	*	*	*	*
Data Hold	*	*	*	*	*
Max Hold	*				
Zero Function		*	*	*	*
0.9" (23mm) Jaw size	*	*	*	*	*

Specifications								
Function	Max Range	Basic Accuracy	330H	332	333	335	336	
Voltage DC	600V	$\pm (0.5\% + 1d)$	*	*	*	*	*	
Voltage AC	600V	$\pm (1.5\% + 2d)$	*	*	*	*	*	
Current DC	400A	$\pm (2.5\% + 5d)$		*	*			
Current AC	400A	$\pm (3.0\% + 4d)$	*	*	*	*	*	
Resistance	20ΜΩ	$\pm (3.0\% + 5d)$	*	$40 \mathrm{M}\Omega$	$40 \mathrm{M}\Omega$	$40 \mathrm{M}\Omega$	$40 \mathrm{M}\Omega$	
Temperature	1000°C/1832°F	$\pm (3.0\% + 3d)$			*	*		
Capacitance	100uF	$\pm (2.5\% + 5d)$		*	*	*	*	
Fraguenav	150KHz	. (1.20/ . 2.4)		*	*	*		
Frequency	10MHz	$\pm (1.2\% + 2d)$					*	
Continuity	Buzzer sounds at 100Ω		50Ω	*	*	*	*	
Diode	Test current 0.3mA; Open circuit voltage 1.5V		*	*	*	*	*	



(333, 335 only) and Two "AAA" 1.5V batteries.



EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033



## DT-9809 AC Leakage Current Tester

AC leakage current tester 9809 is a multifunction clamp meter with very good resolution of 10uA. It is very useful for power system to check and installation. With the measuring range up to 100A, this tester is great for appliance installation or for car applications

- 10uA high resolution
- Large 3<sup>3</sup>/4 (4000 counts) LCD display
- Auto Power Off
- Shielded transformer jaw opens to 1.2"
- Max/Min, Data Hold, Low battery indication
- Overload protection



EN: 61326 EN: 61010-1 EN: 61010-02-032

EN: 61010-02-033



Specifications							
Function	Range	Resolution	Basic Accuracy				
Current AC	40mA~100A	10uA~100mA	$\pm (2.0\% + 3d)$				
Voltage AC	400V	0.1V	$\pm (1.5\% + 10d)$				
Resistance	$40\sim400\Omega$	0.1Ω	$\pm (1.0\% + 2d)$				
Continuity Test	Threshold 40Ω, Continuity Beeper 2.5KHz						
1.2" (30mm) Clamp jaw opening							

Size(HxWxD): 209mm x 43mm x 30mm

Weight: 200g

Accessories: Test leads, holster, gift box with carrying case, 9V battery



EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033

Model 3315

1000A AC, AC/DC Clamp Meter

1.2" (30mm) Clamp jaw opening

3340 Series Clamp Meters provide accurate AC, AC/DC Current and Voltage readings regardless of waveforms. These meters can be used in most industrial and commercial applications where non-linear loads distort the Current or Voltage waveform.

- Electronic overload protection
- Data Hold function
- DCA Zero function
- Low battery indication
- Auto Power Off



EMC & LVD

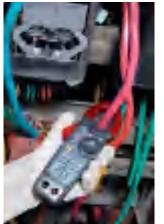




EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033

3340	3341	3343
2000	4000	4000
AC	AC	AC/DC
*	*	
*	*	*
*	*	*
*	*	*
		*
*		
*	*	*
*	*	*
	2000 AC * * * *	2000 4000 AC AC  * *  * *  * *  * *  * *

Model	33/11





Specifications									
Function	Max Range	Basic Accuracy	Max. Resolution	3340	3341	3343			
AC Current	1000 A	±(2.5%+5d)	10mA	*	*	*			
DC Current	1000 A	±(3.0%+4d)	10mA			*			
AC Voltage	600V	±(0.8%+2d)	0.1mV	*	*	*			
DC Voltage	600V	±(1.0%+4d)	0.1mV	*	*	*			
Resistance	$40 \mathrm{M}\Omega$	±(1.0%+4d)	0.1Ω	20M	*	*			
Capacitance	40mF	±(3.0%+5d)	0.01nF		100μF	100μF			
Frequency	10MHz	±(1.2%+3d)	0.01MHz		*	100kHz			
Duty Cycle	99.9%	±(1.2%+3d)	0.1%		*	*			
Temperature	1000°C 1832°F	±(3.0%+5d)	1°C/°F		*	*			

Size(HxWxD): 229mm x 80mm x 49mm Weight: 303g

Accessories: Test leads, gift box with carrying case, 9V battery; two "AAA" batteries(3340) and temperature probe (3341/3343)



Model 3312

Model 3311

EN: 61010-02-032

EMC & LVD EN: 61326 EN: 61010-1

EN: 61010-02-033





3309 Series Professional 1000A/2000A AC, AC/DC Clamp Meters provide many functions for professional AC current and voltage measurements including resistance, capacitance and diode test, etc. With mid-size and tear-drop shaped jaw, it is easy to use in crowded cable areas and other tight places.

Features							
	3309	3310	3311	3312	3313	3315	3316
Current measurements	AC	AC	AC	AC	AC/DC	AC/DC	AC/DC
True RMS measurements	*					*	
Digital display counts	2000	4000	4000	4000	4000	4000	4000
Electronic overload protection	*	*	*	*	*	*	*
Continuity buzzer & Diode check	*	*	*	*	*	*	*
Data Hold function	*	*	*	*	*	*	*
Peak Hold							*
MAX/MIN	*						
DCA Zero function					*	*	*
Auto Power Off	*	*	*	*	*	*	*
Low battery indication	*	*	*	*	*	*	*
Display with backlight	*	*	*	*	*	*	*
2.16" (55mm) Clamp jaw opening	*	*	*	*	*	*	*

Specifications										
Function	Max Range	Basic Accuracy	Max. Resolution	3309	3310	3311	3312	3313	3315	3316
AC Current 2000	2000 4	±(2.5%+5d)	100mA	600A	1000 A	1000 A	*	*	*	*
	2000A	000A ±(2.5%+3u)	10mA	*						
DC Current	2000A	$\pm (2.5\% + 5d)$	100mA					*	*	*
AC Voltage	1000V	$\pm (1.0\% + 4d)$	0.1mV	750V	*	*	*	*	*	*
DC Voltage	1000V	$\pm (0.5\% + 4d)$	0.1mV	*	*	*	*	*	*	*
Resistance	$40 \mathrm{M}\Omega$	$\pm (1.0\% + 2d)$	$0.1\Omega$	$20M\Omega$	*	*	*	*	*	*
Frequency	10MHz	$\pm (1.2\% + 2d)$	0.001Hz		*	*	*	*	*	*
Capacitance	40mF	$\pm (3.0\% + 5d)$	0.01nF		*	*				

Size(HxWxD): 270mm x 107mm x 50mm Weight: 554g Accessories: Test leads, gift box with carrying case, 9V battery.

# CP-12/CP-1000

AC/DC Clamp-on Adaptors





CP-03C AC/DC Clamp-on adaptor with bluethooth interface

CP-03A/CP-03B High Resolution AC, AC/DC Clamp-on Adaptors. Providing non-invasive Current measurements to 4A with resolution to 1mA for AC, DC/AC Current. The adaptors are perfect for low current automotive, industrial control or appliance repair. CP-03C AC/DC Clamp-on adaptor with bluethooth interface.

Specifications								
Function	Range	Output	Sensitivity	Basic Accuracy	CP-03A	CP-03B/03C		
Current	4A	100mV/A	0.01A/mV AC	$\pm (2.5\% + 0.06A)$	AC			
	40A	10mV/A	0.1A/mV DC/AC	$\pm (2.5\% + 0.03A)$	AC	DC/AC		
	400A	1mV/A	1A/mV DC/AC	$\pm (2.8\% + 0.03A)$	AC	DC/AC		
Clamp jaw	opening		1.2" (30mm)					
Non-contac	ct voltage d	letector	50-600VAC					

EN: 50081-1, 50082-1 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033



Size(HxWxD): 150mm x 58mm x 35mm Weight: 205g Accessories:

Test leads, 9V battery and clamshell

## CP-09 Smaller sized , convenient-to-use AC current clamp-on Adaptor

CP-09 is the ideal tool to extend the current ranges for all Multimeters. The CP-09 is a 200A AC current clamp-on Adaptor with voltage output via a standard banana inputs to be connected to multimeters.

Specifications									
Function	Range	Output	Sensitivity	Basic Accuracy					
Current AC	200A	1mV/A	1A/mV AC	±2%					
0.7" (18mm) Clamp jaw opening									

Size(HxWxD): 80mm x 66mm x 31mm

Weight: 80g

Accessories: Test leads and clamshell





# Model CP-1000

EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033

Oscilloscope, Multimeter, or other voltage measurement device.

- CP-12 AC Clamp-on Adaptor provides non-invasive Current measurements to 10A with resolution to 10mA for AC Current.
- CP-1000 is an AC/DC Clamp-on Adaptor.

The CP-12/1000 are compatible with any Test Tool, Power Harmonics Analyzer,

pecifications										
unction	Range	Output	Sensitivity	Basic Accuracy	CP-12	CP-1000				
Current	10A	1mV/100mA	0.1 A/mV DC	$\pm (3.0\% + 0.06A)$	AC					
ACA/DCA	100A	1mV/A	1A/mV DC	$\pm (3.5\% + 0.03A)$	AC					
	600A	0.1 mV/A	10A/mV DC	$\pm (3.0\% + 0.03A)$		AC/DC				
	1000A	0.1 mV/A	10A/mV DC	$\pm (3.0\% + 0.03A)$	AC	AC/DC				
Clamp jaw o	ppening: 1.	2" (30mm)								

Size(HxWxD): 229mm x 80mm x 49mm Accessories: Weight:303g Test leads, gift box with carrying case and 9V battery.

Model CP-12

## CP-10/11 High Resolution Mini AC/DC Clamp-on Adaptors

The CP-10/11 are compatible with any Test Tool, Power Harmonics Analyzer, Oscilloscope, Multimeter, or other voltage measurement device.

- 0.5" (12.5mm) Clamp jaw opening (CP-10)
- 0.9" (23mm) Clamp jaw opening (CP-11)

EMC & LVD EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033

Specifications									
Function	Range	Output	Sensitivity	Basic Accuracy	CP-10	CP-11			
Current	2A	100mV/A	0.01 A/mV AC/DC	±3.5%	*				
AC/DC	80A	10mV/A	1A/mV AC/DC	±3.5%	*				
	40A	10mV/A	0.1A/mV AC/DC	±3.5%		*			
	400A	1mV/A	1A/mV AC/DC	±3.5%		*			

Size(HxWxD): 190mm x 70mm x 40mm

Weight: 200g Accessories:

Test leads, gift box with carrying case and 9V battery.



## AC-008/008S Line Splitter

Measuring AC current on a 2-wire or 3-wire power cord to 15A

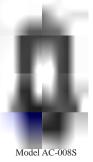
Providing easy and safe measurements of current without the need to separate the

Plugging the power connector into the line splitter separates the hot/live conductor from the neutral

Features voltage check function

EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033







Size(HxWxD): 210mm x 48mm x 38mm Accessories: gift box with carrying case. Weight: 230g

# **Professional Electrical & Power Testers**







## **Multifunction Installation Tester**

DT-6650 rugged Multifunction Installation Tester with 3.5" TFT color LCD display, provides insulation resistance, earth resistance, loop impedance, voltage, RCD, PFG and PSC testing. It is designed for software system and ensure the safety of electrical installations in domestic, commercial and industrial applications. 6650 series can ensure the fixed wiring is safe and correctly installed. It's fast sampling and dual display, clear symbols and exceptionally wide viewing angle are for easy and safe readings.



## Three-phase Power Quality Analyzer with InfraRed Thermal Imager

7760 Three-phase Power Quality and Energy Analyzer with InfraRed Thermal Imager offers the best power quality analysis and the ability to monetarily quantify energy losses. It can measure voltage, current, frequency, power, power energy flicker, harmonics and inter-harmonics etc. 7760 helps locate, predict, prevent, and troubleshoot power quality problems in three-phase and single-phase power distribution systems.



## 3in1 Professional Insulation Tester with Thermal Imager

DT-6509 Professional Insulation Tester & High Resolution Micro-ohm Meter with True RMS InfraRed Thermal Image Multimeter design, providing fast A/D converting sampling time, high accuracy, with datalogging features. advanced system Platform permits smart multifunctions such as updating software on line, PC calibration etc.

Thermview+ software & cloud server support to transfer the measured data to the customer's smartphone for edit and storage.



## **Electrical Tester**

DT-9331 Two-pole Voltage and Continuity Tester provides you fast and accurate test results you need. It is with large, easy-to-use buttons, bright backlight and clear audible and physical indicator designed which can provide convenient measurement. Enhanced ergonomic design is easy to use (even with gloves on).

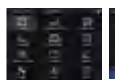


## **Non-Contact AC Voltage Detectors**

The Non-contact AC Voltage Testers are easy to use — just touch the tip to a terminal strip, outlet, or supply cord. When the tip glows red and the unit beeps, you know there's voltage present. Electricians, maintenance, service, safety personnel, and homeowners can quickly test for energized circuits in the workplace or at home.

# **Three-phase Power Quality Analyzer with InfraRed Thermal Imager**











www.cem-instruments.com

E-mail:cemyjm@cem-instruments.com









Thermal Imager Specifications (Only 7761)						
IR resolution	120x90 pixels					
Field of View (FOV)	50° x 38°					
Thermal sensitivity/NETD	< 0.06°C /60mK					
Image frequency	30Hz					
Object temperature range	-20 to 400°C (-4 to 752°F)					
Spectral range	8-14 μm					
Color palettes	Iron/Rainbow/Grey/Grey Inverted					
Accuracy	$\pm 2$ °C ( $\pm 3.6$ °F) or $\pm 2$ % of reading					

Accuracy	±2°C (±3.6°F) or	$\pm 2$ °C ( $\pm 3.6$ °F) or $\pm 2$ % of reading				
Three-phase Pov	wer Quality and Ene	rgy Analyz	zer Specifications (7760/7761)			
	Range	Resolution	Accuracy			
Volt						
Vrms (AC+DC)	1V to 1000V phase to neutral	0.1V	$\pm$ 0.5% of nominal voltage			
Vpk	1Vpk to 1400 Vpk	1V	5% of nominal voltage			
Voltage Crest Factor (CF)	1.0 > 2.8	0.01	±5 %			
Amps (accuracy excluding	clamp accuracy)					
Amps (AC +DC)	0.5A to 6000A	0.1A	$\pm$ 0.5% $\pm$ 5counts			
Apk	8400 Apk	1 Arms	± 5%			
A Crest Factor (CF)	1 to 10	0.01	± 5%			
Hz						
Hz	42.500 Hz to 460 Hz	0.001 Hz	$\pm 0.01$ Hz			
Watts (VA, var)	max 6000 MW,	0.1W to 1MW	$\pm$ 1% $\pm$ 10counts			
Power factor	0 to 1	0.001	$\pm0.1\%$ @ nominal load conditions			
Harmonics						
Harmonic order (n)	DC, 1 to 50 Grouping: Harmon	ic groups accordi	ing to IEC 61000-4-7			
Inter-harmonic order (n)	OFF, 1 to 50 Grouping: Harmonic	and Interharmoni	c subgroups according to IEC 61000-4-7			
Volts	0.0 % to 100 % (%f)	0.1%	$\pm 0.1\% \pm n \times 0.1\%$			
voits	0.0 to 1000 V (Absolute)	0.1V	± 5%			
Amps	0.0 % to 100 % (%f)	0.1%	$\pm 0.1\% \pm n \times 0.1\%$			
Amps	0.0 to 600A (Absolute)	0.1A	$\pm$ 5% $\pm$ 5counts			
Watts	0.0 % to 100 % (%f or %r)	0.1%	± n x 2%			
watts	Depends on clamp scaling and V ne	ominal (Absolute)	$\pm$ 5% $\pm$ n x 2% $\pm$ 10counts			
Phase Angle	-360° to +0°	1°	± n x 1°			
Flicker						
Plt, Pst, Pst(1min) Pinst	0.00 to 20.00	0.01	± 5%			
Unbalance						
Volts	0.0% to 20.0%	0.1%	± 0.1%			
Amps	0.0% to 20.0%	0.1%	± 1%			
Inrush mode	Arms(AC+DC)					
Memory	Screens & data					

7760/7761 Three-phase Power Quality and Energy Analyzer offers the best power quality analysis and the ability to monetarily quantify energy losses. It can measure voltage, current, frequency, power, power energy flicker, harmonics and inter-harmonics etc.

7760/7761 helps locate, predict, prevent, and troubleshoot power quality problems in three-phase and single-phase power distribution systems.

7761 Is three-phase Power Quality and Energy Analyzer with InfraRed Thermal Imager.

## Features:

- Built-in Thermal Imager design quickly identifies hot spots without contact (7761)
- 120x90 Infrared resolution
- Bluetooth BLE instant share function & WiFi
- Power inverter efficiency
- Power wave data capture
- Waveform capture
- Automatic transient mode • Fully Class-A compliant
- Mains signaling
- 50/60Hz measurement
- Troubleshoot
- Highest safety rating in the industry
- Measure all three phases and neutral
- Automatic trending
- System-Monitor
- Logger function
- View graphs and generate reports

**Size(HxWxD):** 240mm x 160mm x 100mm Weight: 1.2kg

### Accessories:

ACA current clamp sensor, USB cable, Software and gift box.









**Specifications** (6650/6651/6652)

 $125V (0\% \sim +10) \quad 0.125 \sim 4000 M\Omega \quad 0.001 M\Omega$ 

Resolution

 $0.001\Omega$ 

 $0.01\Omega$ 

 $0.1\Omega$ 

 $0.01\Omega$ 

Terminal Voltage

Low OHM

Range

 $4.000\Omega$ 

 $40.00\Omega$ 

 $400.0\Omega$ 

Range

Continuity

Range  $(\Omega)$ 0.00~999

Range  $(\Omega)$ 

RCD Testing

Test current x1/2, x1, x2, x5 Voltage and Frequency

0.00~999

**Continuity Beeper** 

Short circuit current LOOP Resistance L-PE (Hi-Amp) Range  $(\Omega)$ 0.00~999

## **Multifunction Installation Tester**

6650/6651/6652 rugged Multifunction Installation Tester with 3.5" TFT color LCD display, provides insulation resistance, earth resistance, loop impedance, voltage, RCD, PFG and PSC testing. It is designed for software system and ensure the safety of electrical installations in domestic, commercial and industrial applications. 6650 series can ensure the fixed wiring is safe and correctly installed. It's fast sampling and dual display, clear symbols and exceptionally wide viewing angle are for easy and safe readings.



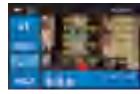






www.cem-instruments.com

E-mail:cemyjm@cem-instruments.com



## Features 6650 3-Phase quality power analyzer 3.5" TFT color LCD display with 320x240 pixels Fast high current loop test Variable RCD current mode for customized settings PASS/FAIL indication for RCD tests Select voltage measurement between L-N, L-PE and N-PE Support SD memory and USB and Bluetooth interface Internal memory Safe Earth Volt Touchpad detects raised earth voltages >50 V, indicating potential dangerous situations. Slim probes designed with test button For easy, always reliable and accurate compensation of test leads and mains cords. Bluetooth interface

6652	CE
*	
*	EMC & LVD EN: 61326
*	EN: 61010-1
*	EN: 61010-02-032
*	EN: 61010-02-03
*	
*	
*	
*	
*	
*	





Model 6650

Model 6651

 $250V (0\% \sim +10) \quad 0.250 \sim 4000M\Omega \quad 0.001M\Omega$  $\pm (2\%+10)$  1mA@load 250k $\Omega \leq 1$ mA  $500V (0\% \sim +10)$  0.500~4000MΩ 0.001MΩ  $\pm (2\%+10)$  1mA@load 500k $\Omega \leq 1$ mA  $1000V (0\% \sim +10)$   $1.000\sim 4000M\Omega$   $0.001M\Omega$  $\pm (3\%+10)$  1mA@load 1M $\Omega$   $\leq 1$ mA Max.open Circuit Overload Protection Accuracy  $\pm(1.5\%+30)$ 5.8V 250Vrms ±(1.5%+3) Max.open Circuit Operation Resistance Overload Protection Resistance≤35Ω 5.0V ±1VDC >200mA ±(4% of reading+6 digits) L-PE(No Trip): Measuring Current:15mA / Range of the Voltage Used:195V a.c.~260V a.c.(50,60Hz) ±(5% of reading+6 digits) L-N: Measuring Current: 2.0A / Range of the Voltage Used: 195V a.c. ~260V a.c. (56,60Hz) Max. Resolution  $(\Omega)$ Accuracy ±(4% of reading+4 digits) Accuracy ±(2% of reading+2 digits) 1-Phase quality power analyzer (6652)

 $\pm (2\%+10)$  1mA@load 125k $\Omega \leq 1$ mA





Size(HxWxD): 220mm x 96.5mm x 60.5mm

Measurement Range (V)/ AC-DC

Voltage THD / Current THD

80-500V/(45-400Hz)

Power (P, S, Q)

Current harmonics

Power factor Voltage harmonics

Weight: 631g

Accessories: Test leads, 8 x1.5V"AA" btteries, USB cable and Software, gift box with carrying case.

-1.00 ÷ 1.00

0.1 V ÷ 500 V

01% - 999%

0.00 A ÷ 199.9 A

The Insulation Multimeter combines a digital insulation tester with a full-featured, compact and handheld unit, which provides maximum versatility for both troubleshooting and preventative maintenance.

 $\bullet$  Wide range measurements from 125V to 1000V and up to 1000M $\Omega$ .

- Large 4000 counts digital display with bargraph and backlight.
- Polarization index measurement(PI).
- Auto ranging & Timer measurement function.
- Indication of output voltage and discharge voltage.
- Voltage output warning function.
- Auto power off and battery check.
- Safety standard IEC61010-1 CAT IV 600V



EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033





			-	3/17 3/3/202	A STATE OF THE PARTY OF THE PAR	- 1/1/4	The same of the sa	
Specifications			•					
Function	Insulation resistance				Voltage		Resistance	
Range	125V	250V	500V	1000V	AC/DCV	AC/DCmV	5VDC Output	
Measuring range (Auto ranging)	0.125~1000MΩ	0.250~1000ΜΩ	0.500~1000ΜΩ	1.000~1000ΜΩ	0~600.0V (50~1kHz)	0~500.00mV (50~1kHz)	$0 \sim 20.00\Omega$ $20.0 \sim 200.0\Omega$ $200 \sim 2000\Omega$	
Accuracy	±3%rdg ±2dgt				±1.5%rdg ±5dgt		±1.5%rdg ±3dgt	
Short Circuit Current	1mA approx				-			
Rated test Current (at load Resistance)	1mA@ load 125kΩ	1mA@ load 250kΩ	1mA@ load 500kΩ	1mA@ load 1MΩ	-			
Open circuit voltage	125VDC/+10%-0%	250VDC/+10%-0%	500VDC/+10%-0%	1000VDC/+10%-0%	-			
Continuity check	Buzzer sounds at $50\Omega$							
Display	4000 Counts							
Current consumption	About 30mA							
Safety standard	IEC 61010-1 CAT IV 600V	IEC 61010-1 CAT IV 600V Pollution Degree 2						
Power supply	DC12V: 8 x1.5V"AA" bat	teries						
Accessories	Test leads, Instruction Man	ual and 120V/250V AC	adaptor					

Size(HxWxD): 220mm x 96.5mm x 60.5mm Weight: 631g Accessories: Test leads, 8 x1.5V"AA" batteries, gift box with carrying case.

## DT-6611 LOOP/PSC Tester







Specifications			
Measurement specifications	Range	Resolution	Accuracy
Loop Impedance	$0.051999\Omega$	$0.011\Omega$	±(5%rdg.+5Digits)
Resistance neutral connector	$0.0519.99\Omega$	$0.01\Omega$	±(5%rdg.+5Digits)
Resistance phase connector	$0.0519.99\Omega$	$0.01\Omega$	±(5%rdg.+5Digits)
Resistance earth connector	$0.051999\Omega$	$0.011\Omega$	±(5%rdg.+5Digits)
Prospective short circuit current	020KA	1A	10A
Voltage	0440V	1V	±(3%rdg.+3Digits)
Mains frepuency	10200Hz	0.1Hz	±(1%rdg.+3Digits)
Contact voltage	25V/50V(selectable)		

## DT-6612 RCD Tester



Specifications					
	Range	Resolution	Accuracy		
Nominal test current	10/30/100/500mA/1A		(-0%+10%)+6Digits		
Current selection	0.5 x, 1x, 5 x nominal current				
Trip time	2000 ms at 0.5 x, 1x 50 ms at 5x	1ms	±(2%rdg.+2Digits)		
Ramp test	0.4 x to 1.4 times		10 %		
Mains voltage	230V	1V	+10%/-10%		

## The Insulation Multimeter combines a digital insulation tester with a full-featured, True RMS digital multimeter in a single, compact and handheld unit, which provides maximum versatility for both troubleshooting and preventative maintenance.

DT-9985/9985B/9985RF/9986

Insulation Tester with True RMS Multimeter

Features			
	9985	9985B/9985RF	9986
Save both time and money with Automatic calculation of			*
Polarization Index and Dielectric Absorption Ratio			
Slim probes designed with test button		9985B	
200 mA Continuity			*
Compare function (pass/fail) for fast repeatitive tests			*
Insulation test voltages 125V, 250V, 500V, 1000V	*	*	*
Insulation test: $0.001M\Omega$ to $4000M\Omega$	*	*	*
Auto discharge of capacitive voltage	*	*	*
Insulation test smoothing reading	*	*	*
Min/Max function	*	*	*
K-type thermocouple	*	*	*
Rugged, utility hard case	*	*	*
Auto power off to save battery power	*	*	*
True-RMS	*	*	*
Large LCD display with backlight	*	*	*
CAT III 1000V, CAT IV 600V measurement category	*	*	*
IP67 Waterproof and Auto Power Off	*	*	*
Wireless USB interface		*	*

Specification	JIIS (3303/33	85B/9985R	175500)		
Multimeter					
Function	Max Range	Resolution	Basic Accuracy		
DC Voltage	1000V	0.1V	±(0.06% reading + 4digits)		
AC Voltage	1000V	0.1V	$\pm (1.0\% \text{ reading} + 30 \text{ digits})$		
DC Current	10A	0.001A	$\pm (1.0\% \text{ reading} + 3 \text{ digits})$		
AC Current	10A	0.001A	±(1.5% reading + 30digits)		
Resistance	$40 \mathrm{M}\Omega$	$0.0001 \mathrm{M}\Omega$	$\pm (0.3\% \text{ reading} + 4 \text{ digits})$		
Frequency	40MHz	0.01MHz	$\pm (0.1\% \text{ reading} + 1 \text{ digits})$		
Duty Cycle	0.1 to 99.90%	0.01%	$\pm (1.2\% \text{ reading} + 2 \text{ digits})$		
Temperature	-50 to 1200°C	0.1°C	$\pm (1.0\% \text{ reading} + 2.5^{\circ}\text{C})$		
remperature	-58 to 2192°F	0.1°F	±(1.0% reading + 4.5°F)		
4-20mA%	-25 to 125%	0.01%	±50 digits		
Insulation					
Terminal Voltage	Range	Resolution	Accuracy	Test Current	Short circui current
	0.125~4.000MΩ	$0.001 \mathrm{M}\Omega$	±(2%+10)	1 A @l 11251-0	≤1mA
125V(0% ~10%)	$4.001{\sim}40.00M\Omega$	$0.01 \mathrm{M}\Omega$	±(2%+10)		
123 V (0% ~10%)	40.01~400.0MΩ	$0.1 \mathrm{M}\Omega$	±(4%+5)	1mA @load125kΩ	
	400.1~4000MΩ	1ΜΩ	±(5%+5)		
	0.250~4.000MΩ	$0.001 \mathrm{M}\Omega$	±(2%+10)		≤1mA
2501//00/ 100/	4.001~40.00MΩ	$0.01 \mathrm{M}\Omega$	±(2%+10)	1 A @L 1250LO	
250V(0% ~10%)	40.01~400.0MΩ	$0.1 \mathrm{M}\Omega$	±(3%+5)	1mA @load250kΩ	
	400.1~4000MΩ	1ΜΩ	±(4%+5)		
500V(0% ~10%)	$0.500\sim4.000M\Omega$	$0.001 \mathrm{M}\Omega$	±(2%+10)		≤1mA
	$4.001{\sim}40.00M\Omega$	$0.01 \mathrm{M}\Omega$	±(2%+10)	1mA @load1500kΩ	
	$40.01{\sim}400.0M\Omega$	$0.1 \mathrm{M}\Omega$	±(2%+5)	TIIIA @IOadT300K\$2	
	$400.1{\sim}4000M\Omega$	1ΜΩ	±(4%+5)		
1000V(0% ~0%)	1.000~4.000MΩ	$0.001 \mathrm{M}\Omega$	±(3%+10)		≤1mA
	4.001~40.00MΩ	$0.01 \mathrm{M}\Omega$	±(2%+10)	1m A @load1MO	
	40.01~400.0MΩ	$0.1 \mathrm{M}\Omega$	±(2%+5)	1mA @load1MΩ	
	400.1~4000MΩ	1ΜΩ	±(4%+5)		

**Size(HxWxD):** 220mm x 96.5mm x 60.5mm Weight: 631g

## Accessories:

Test leads, 6x1.5V"AAA" batteries, Type K temperature probe, USB cable and Software(9985RF/9986), gift box with carrying case.









Model 9985B



Model 9985RF

EN: 61326

• Built-in Thermal Imager design quickly identifies hot spots without contact

Model DT-320BS

3000A AC Flexible clamp (optional)

Safety Conformance

• EN61010-1 CAT IV 600V, CAT III 1000V

• 1000V input protection on all ranges

## **DT-6509**

#### 3 in 1 Professional Insulation Tester with Thermal Imager



















6509 Professional Insulation Tester & High Resolution Micro-ohm Meter with True RMS InfraRed Thermal Image Multimeter design, providing fast A/D converting sampling time, high accuracy, with datalogging features. advanced system Platform permits smart multifunctions such as updating software on line, PC

Thermview+ software & cloud server support to transfer the measured data to the customer's smartphone for edit and storage.

TFT color LCD display PC Calibration

> Insulation Tester • High Resolution Micro-ohm Meter • True RMS InfraRed Thermal Image Multimeter

Frateurs
Features
Built-in Thermal Imager design quickly identifies hot spots without contact
Large 240 x 320 3.5" TFT color 6000 counts LCD display
Insulation test voltages 125V, 250V, 500V, 1000V
Insulation test: $0.001M\Omega$ to $60.00G\Omega$
Polarization index measurement(PI).
1 u $\Omega$ High resolution micro-ohm meter
Logging function with Trend Capture for easy review of logged data
Low pass filter for accurate measurement of variable frequency drive (VFD) signals
AC, AC+DC true-RMS measurements & 1kHz ACV, ACA bandwidth
3000A Fexible Coil Current Measurements (Optional)
A/D convert fast sampling time: 10 Times/sec.
Peak capture (records transients as fast as 500µs)
Min/Max/Average with Time stamp (records signal fluctuations)
MicroSD memory card
Support capture screen capabilities
Bluetooth BLE instant share function
Easy to view and analyze images quickly

Thermal Imager							
IR resolution		80x80 pixels					
Field of View (FOV)		21° x 21°					
Thermal sensitivity/N	ETD	< 0.1°C@ +30	)°C(+80	6°F)/100mK			
Image frequency		50Hz					
Object temperature ra	inge	range: -20 to 2	260°C	(-4 to 500°F)			
Focus mode/ Focal le	ngth	Focus free/ 7.5	5mm				
Spectral range		8–14 μm					
Color palettes		IRON/Rainbo	w/Grey	/Grey Inverted	1		
Accuracy		±3°C (±5.4°F) 10°C-35°C, ob				nment tempera	
True RMS Multimet	ter Fun	ctions					
Function		Max. Range		Max. resolut	ion	Best Accura	
Voltage DC		1000V	100mV			±(0.09% + 3	
Voltage AC		1000V		100mV		$\pm (0.8\% + 5)$	
Current DC		10A		0.1μΑ		$\pm (0.9\% + 5)$	
Current AC		10A		0.1μΑ		±(1.2% + 5)	
Resistance		60ΜΩ		0.1Ω		$\pm (0.5\% + 5)$	
Capacitance		6000uF		0.01nF		±(1.2% + 8)	
Frequency (electrical	al)	10kHz 0.		0.01Hz		±(0.09% + 3	
Diode and Continuity	,	Yes					
Power Supply		6 hours Li-ion rechargeable battery; AC Adaptor/charger					
Insulation Tester							
Terminal Voltage	Ran	ge	Max	. Resolution	Acc	uracy	
125V(0% ~10%)	0.12	5~60.00GΩ			±(29	%+10)	
250V(0% ~10%)	0.25	0~60.00GΩ	0.00	0.001ΜΩ		%+10)	
500V(0% ~10%)	0.50	0~60.00GΩ	0.00111122			%+10)	
1000V(0% ~0%)	1.00	$1.000\sim60.00G\Omega$			±(39	%+10)	
Micro-ohm Meter							
60m			1μΩ			$25\% + 25\mu\Omega$	
Resistance	6001	n()		10μΩ		$25\% + 250\mu\Omega$	
	6Ω	6Ω		$100\mu\Omega$		$\pm (0.25\% + 2.5 \text{m}\Omega)$	





EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033









Model 6509

Size(HxWxD): 97mm x 210mm x 68mm Accessories: Test leads, Li-ion batteries, Type K temperature probe, Software, gift box with carrying case.

Insulation Tester & High Resolution Micro-ohm Meter with **True RMS InfraRed Thermal Image Multimeter** • Insulation Tester • High Resolution Micro-ohm Meter • True RMS InfraRed Thermal Image Multimeter

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6508B Professional Insulation Tester & High Resolution Meter with True RMS InfraRed Thermal Image Multimeter design, providing fast A/D converting sampling time, high accuracy, with datalogging features. advanced system Platform permits smart multifunctions such as updating software on line, PC calibration etc.



Model DT-320BS 3000A AC Flexible clamp (optional)

Model 6508B



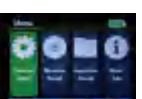
EN: 61010-02-032

EN: 61010-02-033











Features
Large 240 x 320 3.5" RGB color 6000 counts LCD display
Insulation test voltages 125V, 250V, 500V, 1000V
Insulation test: $0.001 M\Omega$ to $6000 M\Omega$
PI/DAR timed ratio tests
Logging function with Trend Capture for easy review of logged data
Low pass filter for accurate measurement of variable frequency drive (VFD) signals
AC, AC+DC true-RMS measurements & 1kHz ACV, ACA bandwidth
3000A Fexible Coil Current Measurements (Optional)
Peak capture (records transients as fast as 500µs)
Min/Max/Average with Time stamp (records signal fluctuations)
High voltage and overload indication
Lock power on function for hands-free operation
K-type thermocouple
Auto discharge of voltage test signal
Support capture screen capabilities
Bluetooth BLE instant share function
Easy to view and analyze images quickly
CAT III 1000V, CAT IV 600V measurement category

0 161 41				_			
Specificatio True RMS Multin		-4*					
Function	ieter Fun			Μ.	x. resolution		D t A
		Max. R	Ü				Best Accuracy
Voltage DC		1000V		1m	V		$\pm (0.5\% + 5)$
Voltage AC		1000V		1m	V		$\pm (1.0\% + 5)$
Low Z AC Voltage		600V		1m	V		$\pm (3.0\% + 40)$
Current DC		10A		0.1	μA		$\pm (0.9\% + 5)$
Current AC		10A		0.1	μΑ		$\pm (1.2\% + 5)$
AC 3000A Current		100mV	7/1A	1A	A		$\pm (2.5\% + 10)$
Temperature		-20°C to 1000°C		0.1/1°C		±(30% + 5°C)	
remperature		-4°F to 1832°F		0.1/1°F			2(3070 + 3 C)
Resistance	60ΜΩ			0.1Ω			$\pm (1.5\% + 5)$
Capacitance		6000μF	?	10pF			$\pm (3.0\% + 5)$
Frequency (electr	ical)	9.999k	Hz	1Hz			$\pm (0.09\% + 5)$
Diode and Continu	ity	Yes					
Power Supply		6 hours	rs Li-ion rechargeable battery;AC Adaptor/charger			laptor/charger	
<b>Insulation Tester</b>							
Terminal Voltage	Range		Max. Resolution		Accuracy	Te	st Current
125V(0% ~20%)	$0.125{\sim}6000M\Omega$		0.001140		±(2%+10)	1n	nA @load125k $\Omega$
250V(0% ~20%)	$0.250{\sim}6000M\Omega$				±(2%+10)	1n	nA @load250kΩ
500V(0% ~20%)	0.500~6	$\Omega$ M000	0.001ΜΩ		±(2%+5	1n	nA @load1500kΩ
1000V(0% ~20%)	1.000~6	000ΜΩ		±(3%+5)		1n	nA @load1MΩ

Size(HxWxD): 97mm x 210mm x 68mm Weight: 634g Accessories: Test leads, 6 x AA Batteries, Type K temperature probe, Software, gift box with carrying case.

The Insulation and Low Ohm Multimeter combines a digital insulation tester with a full-featured, True RMS digital multimeter in a single, compact and handheld unit, which provides maximum versatility for both troubleshooting and preventative maintenance.

	6505	65051
Rugged, utility hard case	*	*
Auto power off to save battery power	*	*
True-RMS	*	*
Data logged	*	*
Low pass filter for accurate measurement of variable frequency drive (VFD) signals	*	*
CAT III 1000V, CAT IV 600V measurement category	*	*
Bluetooth interface	*	*
Save both time and money with Automatic calculation of Polarization Index and Dielectric Absorption Ratio	*	*
Slim probes designed with test button	*	*
200 mA Continuity & Low Ohm range measurement	*	*
Compare function (pass/fail) for fast repeatitive tests	*	*
Insulation test voltages 125V, 250V, 500V, 1000V	*	*
Insulation test: $0.001 M\Omega$ to $5000 M\Omega$	*	*
Auto discharge of voltage test signal	*	*
Insulation test smoothing reading	*	*
K-type thermocouple	*	*
AC 3000A Current test		*

Basic Accuracy

 $\pm (1.0\% + 5)$ 

 $\pm (3.0\% + 3)$ 

 $\pm (1.0\% + 4)$ 

 $\pm (0.1\% + 1)$ 

 $\pm (1.0\% + 2)$ 

Accuracy

 $\pm (1.0\% + 2.5^{\circ}C)$ 

 $\pm (1.0\% + 4.5^{\circ}F)$ 

 $\pm (1.5\% + 3)$  5  $\pm 1V$ 

 $\pm (1.5\% + 5)$ 

Test Current

1mA @load125kΩ

1mA @load250kΩ

1mA @load1500kΩ

1mA @load1MΩ





Model 6505F



6505 6505F





Model 6505



Size(HxWxD): 97mm x 210mm x 68mm Weight: 634g

 $50.0 \sim 500.0\Omega$   $0.1\Omega$  $500 \sim 2000\Omega$   $1\Omega$ 

5.00~50.00Ω

Specifications

Low Z AC Voltage 600V

AC 3000A Current 3000A

Max Range

0.1V

0.1V

1mV

0.1V

0.001A

0.001A

0.01A

 $0.01\Omega$ 

0.001MHz

Resolution

Resolution Accuracy

 $0.125 \sim 5000 M\Omega$   $0.001 M\Omega$   $\pm (2\% + 10)$ 

 $0.250 \sim 5000 M\Omega$   $0.001 M\Omega$   $\pm (2\% + 10)$ 

 $0.500 \sim 5000 M\Omega$   $0.001 M\Omega$   $\pm (2\% + 10)$ 

 $0.000 \sim 5.000\Omega$   $0.001\Omega$   $\pm (1.5\% + 30)$ 

 $0.01\Omega$ 

1000V

1000V

10A

 $50M\Omega$ 

5000µF

50MHz

0.1 to 99.90%

-50 to 1200°C 0.1°C

-58 to 2192°F 0.1°F

 $1000V(0\% \sim 0\%)$   $1.000\sim 5000M\Omega$   $0.001M\Omega$   $\pm (2\% + 10)$ 

Function

DC Voltage

AC Voltage

DC Current

AC Current

Resistance Capacitance

Frequency

Duty Cycle

Temperature

**Insulation Tester** Terminal Voltage

125V(0% ~10%)

500V(0% ~10%)

Low Ohm Meter

Resistance

AC+DC Voltage

Accessories: Test leads, 6 x1.5V"AAA" batteries, Type K temperature probe and Software, gift box with carrying case.

Model DT-320BS 3000A A C Flexible clamp (or





Model DT-320BS 3000A AC Flexible clamp (optional)

Model 6505B





The Insulation and Low Ohm Multimeter combines a digital insulation tester with a full-featured, True RMS digital multimeter in a single, compact and handheld unit, which provides maximum versatility for both troubleshooting and preventative maintenance.

CE

EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033







Features
Lock power on function for hands-free operation
Rugged, utility hard case
Auto power off to save battery power
True-RMS
Low pass filter for accurate measurement of variable frequency drive (VFD) signals
CAT III 1000V, CAT IV 600V measurement category
Slim probes designed with test button
200 mA Continuity & Low Ohm range measurement
Insulation test voltages 125V, 250V, 500V, 1000V
Insulation test: $0.001 M\Omega$ to $4000 M\Omega$
Hight voltage and overload indication
Low Resistance function with zero mode
Auto discharge of voltage test siganl
Insulation test smoothing reading
AC 3000A Current test
Low Z AC Voltage test

Specificatio	ns	-	-	_	
Multimeter	113				
Function	Max Range	Max Resolution	Basic Accurac	у	
DC Voltage	1000V	0.1V	$\pm (0.5\%+5)$		
AC Voltage	1000V	0.1V	$\pm (1.0\% + 5)$		
Low Z AC Voltage	600V	1mV	±(3.0% + 40)		
AC+DC Voltage	1000V	0.1V	±(3.0% + 40)		
AC 3000A Current	3000A	0.01A	±(2.5%+10)		
m .	-20 to 1000°C	0.1°C	±(1.0% + 2.5°C)		
Temperature	-4 to 1832°F	0.1°F	±(1.0% + 4.5°F)		
Insulation Tester					
Terminal Voltage	Range	Max Resolution	Accuracy	Test Current	
125V(0% ~10%)	$0.125{\sim}4000M\Omega$	$0.001 \text{M}\Omega$	$\pm (2\%+10)$	$1 \text{mA}$ @load $125 \text{k}\Omega$	
250V(0% ~10%)	$0.250{\sim}4000M\Omega$	$0.001 \text{M}\Omega$	$\pm (2\%+10)$	$1 \text{mA}$ @load $250 \text{k}\Omega$	
500V(0% ~10%)	$0.500{\sim}4000M\Omega$	$0.001 \mathrm{M}\Omega$	$\pm (2\% + 10)$	$1mA$ @load $1500k\Omega$	
1000V(0% ~0%)	$1.000{\sim}4000M\Omega$	$0.001 \text{M}\Omega$	$\pm (2\%+10)$	$1mA$ @load $1M\Omega$	
Low Ohm Meter					
	Range	Resolution	Accuracy	Max. open Circuit Voltage	
Dagistanas	$0\sim400\Omega$	$0.001\Omega$	$\pm (1.0\% + 5)$	>5V	
Resistance	$400\Omega\sim4K\Omega$	$0.01\Omega$	$\pm (1.2\% + 5)$	>3 V	

Size(HxWxD): 97mm x 210mm x 68mm Weight: 634g

www.cem-instruments.com

E-mail:cemyjm@cem-instruments.com

**Accessories:** Test leads, 6 x1.5V"AA" batteries, Type K temperature probe and Software, gift box with carrying case.

3700 Battery Analyzer is ideal test tool for maintenance, troubleshooting and performance testing of individual stationary batteries and battery banks used in critical battery back-up applications. 3700 Battery Analyzers cover a broad range of battery test functions ranging from DC voltage and resistance tests to full condition testing using an automated string function testing and the test probe integrated infrared temperature measurement system. 3700 Battery Analyzer is designed for measurements on stationary batteries of all types.

Reduced testing complexity, a simplified workflow and an intuitive user interface provide a new level of ease-of-use in battery testing.

- The ideal test tool for maintenance, troubleshooting and performance testing of individual stationary batteries and battery banks used in critical battery back-up applications
- The intuitive user interface, compact design and rugged construction ensure optimum performance, test results and reliability
- Covers a broad range of battery test functions ranging from DC voltage and resistance tests to full condition testing using automated string function testing and the test probe integrated infra-red temperature measurement system
- Designed for measurements on stationary batteries of all types.



EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032

EN: 61010-02-033







#### Features

Key measurements: Battery resistance, DC and AC voltage, DC and AC current, ripple voltage, frequency and battery temperature

Sequence measurement mode: Automatic or manual sequence testing of battery strings with automatic measurement storage including voltage, resistance and temperature

Comprehensive logging: All measured values are automatically captured during testing and can be reviewed on the instrument before downloading for on the-go analysis

Optimized user interface: Quick, guided setup ensures the right data is captured every time, and the combined visual and audio feedback cues reduce the risk of measurement confusion

Safety CAT III 1000V, CAT IV 600V

Specifications				
Function	Max Range	Max Resolution	Basic Accuracy	
	$3m\Omega$	$0.001~\text{m}\Omega$	1 % + 8	
Battery resistance	$30 \text{m}\Omega$	$0.01~\text{m}\Omega$	0.8 % + 6	
Battery resistance	$300 \text{m}\Omega$	0.1 mΩ	0.8 % + 6	
	$3000 \text{m}\Omega$	1 mΩ	0.8 % + 6	
	6V	0.001V	0.09 % + 5	
DC V	60V	0.01V	0.09 % + 5	
DC V	600V	0.1V	0.09 % + 5	
	1000V	1V	0.09 % + 5	
ACV (45 Hz to 500 Hz with 800 Hz filter)	600V	0.1V	2 % + 10	
Frequency (displayed with AC V and AC A)	500Hz	0.1Hz	0.5 % + 8	
AC voltage ripple (20 KHz Max)	600mV	0.1mV	3 % + 20	
AC voltage rippie (20 Kriz Max)	6000mV	1V	3 % + 10	
Temperature	0 °C to 60 °C	1 °C	2 °C (4 °F)	
Meter mode	999 records for each measurement position with tim stamp			
Sequence mode	Up to 100 profiles and 100 profile templates (Each profile stores up to 450 batteries) with time stamp			

Size(HxWxD): 97mm x 210mm x 68mm Weight: 586g

#### Accessories:

Test leads, 6x1.5V "AAA" batteries, Type K temperature probe and Software, gift box with carrying case.



Model 3700



DT-5500/5520/5530





CE EMC & LVD

EN: 61326 EN: 61010-1 EN: 61010-02-032

EN: 61010-02-033

Model 5505

CE

CAT III 1000V



Accessories:

Test leads, "AA" Battery x 6 and gift box with carrying case. Size(HxWxD): 200mm x 92mm x 50mm Weight: 582g



Large dual LCD display with bargraph

When doing power installation, 5505 can provide some special help. When doing insulation test, it can provide 125V,250V, 500V and 1000V source for the test and under each range it can supply more 1mA current to feet the capacitance load. With the auto-range function, it can measure up to 4000 MegaOhm with the resolution of 1Kohm. These characteristics are also specified in the safety regulations in CE document.

- Auto-discharge of capacitive voltage for added user protection
- Live circuit detection prevents insulation test if voltage >30V is detected for added user protection
- Min/Max recording & Data Hold
- 1mA test current for MegOhm range at rated voltage
- 200mA short current for continuity range
- Additional test voltages 125V,250V,500V,1000V

Features
Meets IEC10101, CATIII 1000V
Large dual display with analog bargraph & backlight
Test hold & lock function for easy operation
Easy to carry testing package
Over range Indication
Low Battery Indication
Includes 6 AA batteries, test leads and plastic carrying case

Specifications					
	Range	Max Resolution	Basic accuracy		
Voltage AC	750V	1V	$\pm 1.2\%$ rdg $\pm 10$ dgts		
Voltage DC	1000V	1V	±0.8%rdg ±3dgts		
Resistance	$40\Omega, 400\Omega$	$0.01\Omega$ , $0.1\Omega$	±1.5%rdg ±6dgts		
Insulation Resistance	$4M,40M,400M,4000M\Omega$	1kΩ~1MΩ	±2.0%rdg ±6dgts		
Test Voltage & Current	125V/250V/500V/1000V & 1mA nominal				
Continuity Test	Active Sound Level: ≤40Ω, Test current ≤200mA				
Operating Temp	0°C~40°C(<80%R.H.)				
Storage Temp	-10°C~60°C(<70% R.H.)				
Power Source	1.5V "AA" size Battery x	6			



• 1mA test current for MegOhm range at rated voltage

• 200mA short current for continuity range

Features			
i eatures			
	5500	5520	5530
Meets IEC10101, CATIII 1000V	*	*	*
Large dual display with backlight	*	*	*
Test hold function for easy operation	*	*	ajc
Easy to carry testing package	*	*	*
Over range indication	*	*	sk:
Low battery indication	*	*	*
Measurement range( $\Omega$ )	200M/2000M		
		20M/200M/2000M	
			20M/200M/2000M

Specifications	5					
	Range	Max Resolution	Accuracy			
Voltage AC	750V	1V	±1.2%rdg ±10dgts			
Voltage DC	1000V	1V	±0.8%rdg ±3dgts			
Resistance	$200\Omega$ , $2000\Omega$	0.1Ω, 1Ω	±1%rdg ±2dgts			
Insulation Resistance	$200 \mathrm{M}\Omega$ , $2000 \mathrm{M}\Omega$	100kΩ~1MΩ	±3.5%rdg ±5dgts			
	20MΩ(5520 only)	10kΩ	±3.5%rdg ±5dgts			
Test Voltage	250V-200MΩ/500V-2	$250 \text{V} - 200 \text{M}\Omega / 500 \text{V} - 200 \text{M}\Omega / 1000 \text{V} - 2000 \text{M}\Omega,$ (500 V - 20 M $\Omega$ only 5520)				
Continuity Test	Active Sound Level:	Active Sound Level: ≤40Ω, Test current ≤200mA				
Operating Temp	0°C~40°C(<80%R.H.)					
Storage Temp	-10°C~60°C(<70%R.H.)					
Power Source	1.5V "AA" size Battery x 6					









Size(HxWxD): 200mm x 92mm x 50mm Weight: 582g



Model 5500

#### **Accessories:**

Test leads, "AA" Battery x 6 and gift box with carrying case.

#### DT-5503 Analogue Insulation Tester

The 5503 is a highly compact and easy to use Insulation and Continuity Tester. The instrument offers three insulation test ranges: 250V, 500V and 1000V, a  $3\Omega$  continuity range and a  $500\Omega$  resistance range. This meter is not only equipped with a "Live Circuit Warning" but also displays the actual AC voltage measurements of the mains supply.

Specifications	
DC Test Voltage	250V 500V 1000V
Measuring Ranges	$0\text{-}100\text{M}\Omega(1\text{M}\Omega); 0\text{-}200\text{M}\Omega(2\text{M}\Omega); 0\text{-}400\text{M}\Omega(4\text{M}\Omega)$
(Mid-Scale Value)	
Rated Current	1mA DC+20%, -0%
Output short Circuit Current	1.3mA DC approx
Accuracy Guaranteed Ranges	$0.05\text{-}10\text{M}\Omega \pm 5\%;\ 0.1\text{-}20\ \Omega \pm 5\%;\ 0.2\ \text{-}40\text{M}\Omega \pm 5\%;$
Accuracy	$\pm 7\%$ of Scale length at ranges other than above ranges

<b>Continuity Test Ran</b>	ges			
Accuracy	±1.5% of Scale Length			
Open Circuit Voltage Output	4.1VDC (Approx)			
Short Circuit Current Output	210mA Min			
AC Voltage Warning				
AC Voltage Range	0-600V AC for 30 seconds			
Accuracy	±5% of Scale Length			
Input Impedance	1.2ΜΩ			
General				
Withstand Voltage	7400V AC 50Hz or 60Hz for one minute between electrical			
	circuits and housing case			
Safety Standards	IEC 61010-1 CAT III			



Size(HxWxD): 200mm x 92mm x 50mm Weight: 546g

Accessories:
Test leads, "AA" Battery x 6 and gift box with carrying case.

Model 5503

FILE BANGE





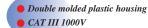
Electronic Digital Earth Resistance Tester is direct replacement of the conventional hand generator type tester. It is designed for measurement of the resistance of earthing used in the electrical equipment as well as for measurement of ground resistivity. It can be used for measurements of the other low regular and liquid resistances. It can also be used for measurement of voltage AC, voltage DC and resistance.

This instrument has wide application for testing earthing installation in power based industries, telecommunication networks and electrical traction systems etc.



EMC & LVD EN: 61326

EN: 61010-02-032 EN: 61010-02-033



## Features Meets IEC10101, CATIII 1000V Large dual display with backlight & Low Battery Indication Test hold function for easy operation Zero Automatic adjustment Sampling Rate: 2.5 times per second





Specifications					
	Range	Max Resolution	Accuracy		
Earth resistance	10Ω	0.01Ω	$\pm 2\%$ rdg $\pm 0.1\Omega$		
	100Ω	0.1Ω	±2%rdg ±3dgts		
	1000Ω	1Ω	±2%rdg ±3dgts		
Voltage AC	750V	1V	$\pm 1.2\%$ rdg $\pm 10$ dgts		
Voltage DC	1000V	1V	±0.8%rdg ±3dgts		
Resistance	200kΩ	$0.1 \mathrm{k}\Omega$	±1.0%rdg ±2dgts		
Continuity Test	Active Sound Level:	≤40Ω, Test current ≤20	0mA		
Operating Temp	0°C~40°C(<80%R.H.)				
Storage Temp	-10°C~60°C(<70% R.H.)				
Power Source	1.5V "AA" battery x	6			

Size(HxWxD): 200mm x 92mm x 50mm Accessories:

Weight: 582g

Test leads and "AA" Battery x 6, Rubber holster, 4-wire cable and iron rod x 2, gift box with carrying case.

### DT-5301 LOOP/PSC Tester

Custom microprocessor controlled for highest accuracy and reliability

- 3 LEDs for checking correct wiring status
- 15mA LOOP measurement: LOOP impedance 2000Ω range measurement is carried out with low test current(15mA)
- Direct reading of Prospective Short Circuit Current(PSC)
- Safe voltage measurement function

Model 5300B

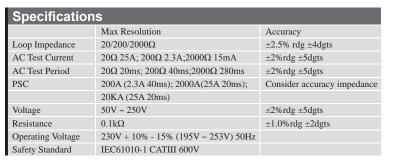
- Large custom digital display readout on all models
- Measure low loop resistance(resolution of  $0.01\Omega$ ) • Automatic lock-out if test resister overheats
- Visual indication of reversed phase and neutral wiring at socket

 Double molded plastic housing OCAT III 600V



EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033







Model 5301

Includes 6 "AA" batteries, test leads and carrying case

Double molded plastic housing



• CAT III 1000V





Custom microprocessor controlled for highest accuracy and reliability

- Safe voltage measurement function
- Large custom digital display readout on all models
- Visual indication of reversed phase and neutral wiring at socket

Specifications				
Measurement specifications	Ranges	resolution	accuracy	
Nominal test current	10/30/100/500mA/1A		(-2%+10%)+6Digits	
Current selection	0.5x, 1x, 2x, 5x nominal current			
	10-2000 ms at 0.5x			
Trip time	10-500 ms at 1x	1 ms	±(2%rdg. + 2Digits)	
mp mile	10-150 ms at 2x	1 1118	±(2%1dg. + 2Digits)	
	10-40 ms at 5x			
Ramp test	0.4x to 1.4 times nominal		10%	
	rated current			
Mains voltage	230(+10%/ -10%)V	1V	$\pm$ (2%rdg. + 2Digits)	



Size(HxWxD): 200mm x 92mm x 50mm

Weight: 582g **Accessories:** 

Test leads and "AA" Battery x 6, gift box with carrying case.

#### DT-5302 DMM with Kelvin(4-wire) small resistance measurement

- Four terminal Kelvin measurement
- 4000 counts 3<sup>3</sup>/4 digital LCD display with backlit
- High resolution to  $0.1 \text{m}\Omega$  with test current to 200 mA
- Low battery indication

Model 5554

• Over load protection on all ranges

Double molded plastic housing
CAT III 1000V

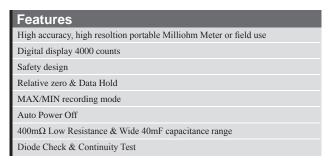
EMC & LVD

EN: 61326

EN: 61010-1

EN: 61010-02-032

EN: 61010-02-033



Specifications					
Function	Max. Range	Basic Accuracy			
Low Resistance	$400 \text{m}\Omega, 4\Omega, 40\Omega$	±(1.0%+5d)			
Voltage DC	1000 V	±(1.0%+2d)			
Voltage AC	1000V	±(1.2%+5d)			
Current DC	400mA	±(1.0%+2d)			
Current AC	400mA	±(1.2%+5d)			
Resistance	40ΜΩ	±(1.0%+5d)			
Canacitance	40mF	+(3.0%±10d)			

Size(HxWxD): 200mm x 92mm x 50mm Weight: 582g

Rubber holster, 4-wire cable and 6x1.5V "AA" battery, test leads, gift box with carrying case.





Size(HxWxD): 200mm x 92mm x 50mm

Weight: 582g

Accessories: Test leads and "AA" Battery x 6, gift box with carrying case.

Accessories:



Specifications	S						
Function	Insulation resistance				Voltage	Resistance	
Range	500V	1000V	2500V	5000V	AC/DCV		
Measuring range (Auto ranging)	$0{\sim}6.000 M\Omega$ $6{\sim}60.00 M\Omega$ $60{\sim}600.0 M\Omega$ $600{\sim}6000 M\Omega$	$0{\sim}6.000 M\Omega$ $6{\sim}60.00 M\Omega$ $60{\sim}600.0 M\Omega$ $600{\sim}6000 M\Omega$	$0{\sim}60.00 M\Omega$ $60{\sim}600.0 M\Omega$ $0.6{\sim}6.000 G\Omega$ $6{\sim}60.00 G\Omega$	$60{\sim}60.00M\Omega$ $60{\sim}600.0M\Omega$ $0.6{\sim}6.000G\Omega$ $6{\sim}60.00G\Omega$	0~600.0V (50~1kHz)	0~600.0Ω 600~6000Ω	
Accuracy	±5%rdg ±3dgt; ±20%	(>6GΩ or more)			±1.5%rdg ±5dgt	$\pm 1.5\%$ rdg $\pm 10$ dgt	
Short Circuit Current	1.3mA approx				-		
Rated test Current (at load Resistance)	1mA-1.2mA 0.5MΩ	1mA-1.2mA 1MΩ	1mA-1.2mA 2.5MΩ	1mA-1.2mA 5MΩ	-		
Open circuit voltage	500VDC/+20%-0%	1000VDC/+20%-0%	2500VDC/+20%-0%	5000VDC/+20%-0%	-		
Continuity check	Buzzer sounds at $50\Omega$						
Display	6000 Counts						
Current consumption	About 1000mA (Durin	g measurement)			25mA approx.		
Withstand voltage	5320V AC for 5 second	ds					
Safety standard	IEC 61010-1 CAT IV	500V Pollution Degree 2					
Power supply	DC12V: R14 x 8						
Dimension	198 ( L) x 148 (W) x 8	6 ( D) mm					
Weight	1438g approx.						
Accessories	Test leads, Instruction	manual and 120V/250V	AC adaptor				

7750 Appliance Tester has been developed for measurements of the protective conductor resistance with compensation of the measuring line, insulating resistance, the protective conductor current, the contact current, the device leakage current, the leakage current of the applied part, and input voltage, input current, effective power and apparent power. It is for safety-related testing of electrical appliances in compliance with DIN VDE 0701-0702 and DIN VDE 0751-1



## Features:

- Measurement of the protective conductor resistance with compensation of the measuring line
- Measurement of the insulating resistance
- Measurement of the protective conductor current (alternative leakage current measurement,
- direct current measurement or differential current measurement method)
- Measurement of the contact current (alternative leakage current measurement, direct current
- measurement or differential current measurement method)
- Measurement of the device leakage current (alternative leakage current measurement, direct current measurement or differential current measurement method)
- Measurement of the leakage current of the applied part (alternative leakage current measurement)
- or direct current measurement method)
- Functional test with measurement of input voltage, input current, effective power and apparent power
- Testing of IEC leads and extension cables



Specifications					
	Range	Resolution	Accuracy		Internal resistance
Measurement of the alternative leakage current	0.050~25.000mA	0.001mA	At 230 V AC ±10% ±15% of the measu		VDE 0701-0702 Ri 2k VDE 0751-1 Ri 1k
Measurement by means of the differential current measurement method	nt 0.050~25.000mA	0.001mA	At 230 V AC ±10% ±15% of the measu Manual / automatic	red vaue(from 100uA on)	VDE 0701-0702 Ri 2k VDE 0751-1 Ri 1k
	0.0~360V AC(50-60HZ)	0.1V	$U(V) \pm 15\%$ of the	measured vaue	
Test socket(functional)	0.10~20A AC(50-60HZ)	0.01A	$I(A) \pm 15\%$ of the m	neasured vaue	
Test socket(functional)	0~4000W	1W	P(W) ±15% of the	measured vaue	
	0~4000VA	1VA	$S(VA) \pm 15\%$ of the	measured vaue	
Safety extra-low voltage (PELV,SELV) measurement by means of probe	0.1~360 V AC/DC	0.1V	At 230 V AC ±10% ±15% of the measu		
LOW Ohm					
					NOMINAL VALUES
	0.00~20.00	$0.01\Omega$	+(1.5%+5)		12.0V +1VDC
LOW Ohm	RLO≤2.0Ω IN≥200mA	250Vrms			
	$20.0\sim200.0\Omega$	0.1Ω			
	200~2000	1Ω			
Insulation Specific	ations				
Terminal Voltage	Range	Resolution	Accuracy	Test Current	Short circuit current
	1.000~4.000 MΩ	$0.001 \mathrm{M}\Omega$	+(3%+10)		
1000V (0%~+10%)	4.001~40.00 MΩ	0.01ΜΩ	+(2%+10)		
	40.01~400.0 MΩ	0.1ΜΩ	+(3%+2)	1mA @load1MΩ	≤1mA
	400.1~1000 MΩ	1ΜΩ	+(4%+5)		

Size(HxWxD): 410mm x 300mm x 171mm Accessories : Test leads, Software and gift box.

Weight: 2.8kg

# AC Current and Voltage Dataloggers Large capacity for storing measuring data points ACA current clamp sensor (CP-09) Voltage sensor measure the floating voltage to meet CAT III 600V LCD to show some logging information easily Freely selectable measurement cycle from 1sec. to 24h Download collected data through USB interface Alarm display if user-defined max/min values exceed Analysis software used to view graph for logging data **CEM** DT-176CV1 AC VOLTAGE / CURRENT DATA LOGGER

## **DT-195**

#### AC Voltage Power Recorder with Dataloggers



The 195 is a datalogger for measuring and recording current ,voltage , active power, apparent power, Power Factor and Electrical Energy

The readings are saved in the logger and simply read out by your smartphone bluetooth interface.

The LCD can show measuring readings, MAX,MIN and alarm indication.







Features	
Record and software features include:	
Configurable recording interval	
Graphical and spreadsheet data summaries	
Min, Max, Average RMS values with time stamps	
Transient waveform recording	
Bluetooth interface	
Print tables, graphs and comprehensive formatted reports	
View, print and export data	

Specifications						
	Range	resolution	Accuracy			
AC Voltage	1-600V	1V	±(1.5% +5)			
AC Current	1-200A	1A	±(1.5% +5)			
Active powe	0-120000w	1W	P(W) ±15% of reading			
Apparent power	0-120000VA	1VA	$S(VA) \pm 15\%$ of reading			
Power Factor	0-1	0.01	±(5% +3)			
Input channel	Dual					
Frequency range	50/60Hz					
Reading memories	100000					
Measuring rate	1 sec. to 60min					
Analysis software	vsis software Windows 98 /2000/XP/Vista/Win7/8/10					



## DT-175CVS/175CV1/176CV2/177CV3 AC Current and Voltage Dataloggers

The 175CVS is a datalogger for measuring and recording current and voltage.

The 175CV1/176CV2/177CV3 are dataloggers for measuring and recording True RMS current and voltage.

The readings are saved in the logger and simply read out by your PC via USB interface. The LCD can show current readings, MAX, MIN and alarm indication.

Features							
	175CVS	175CV1	176CV2	177CV3			
Input channel	Dual	Single	Dual	Three			
Digital LCD Display	*	*	*	*			
ACV/Load current/Leakage current measurement	*	*	*	*			
True RMS measurement		*	*	*			
Data memory	100,000	100,000	256,000	256,000			
Wave memory		*	*	*			
MAX / MIN, Peak mode	MAX/MIN	*	*	*			
Time & Date Display	*	*	*	*			
Wave store		*	*	*			
Auto power off	*	*	*	*			
USB interface	*	*	*	*			
Manual and Automatic mode	*	*	*	*			

Specifications						
Function	Range	Basic Accuracy	175CVS	175CV1	176CV2	177CV3
AC Current (True RMS)	2-200A	±2%	*	*	*	*
AC Voltage (True RMS)	6-600V	±1.5%	*	*	*	*
Reading Memories 100,000 100,000 25					256,000	256,000
Measuring rate	1 sec. to 24h					
Analysis software	Analysis software windows 98/2000/XP/Vista/Win7/8/10					

Size(HxWxD): 114mm x 63mm x 34mm

Weight: 248g

Accessories: ACA current clamp-on adaptor (CP-09), USB cable, Software, battery and gift box.



EN: 61326

EN: 61010-1

EN: 61010-02-032

EN: 61010-02-033

EN: 61010-1

EN: 61010-02-032

EN: 61010-02-033

## **Digital RCD Tester**

#### DT-901 Phase Rotation indicator



The Phase Rotation Indicator is a handheld instrument designed to detect the rotary field of three-phase systems.

- 3 Phase indication
- Indication of phase rotation
- Clear LCD display
- No battery required

Features	
Nominal voltage	40V to 690V AC
Frequency range	15 to 400Hz
Current pickup	1mA
Nominal test current(per phase)	1mA
Power supply	From unit under test
Electrical safety	IEC61010/EN61010; IEC61557-7/EN61557-7
Protection level	CATIII 600V
Type of protection	IP40
Operating temperature	0°C to 40°C

CAT II

EMC & LVD

EN: 61010-1

EN: 61010-02-032

EN: 61010-02-033

EN: 61326

Size(HxWxD): 128mm x 68mm x 30mm Weight: 185g

#### DT-902 Motor and Phase Rotation Indicator

The Motor and Phase Rotation Indicator is a handheld, battery-operated Instrument designed to detect the rotary field of three-phase system and determine motor-rotation direction.

- Determine rotary field direction
- Non-contact rotary field indication
- Determine the motor connection
- Magnetic field detection

Features	
Nominal voltage rotary direction	1V to 400V AC
Nominal Voltage phase indirection	120V to 400V AC
Frequency range	2 to 400Hz
Test Current (per phase)	< 3.5 mA
Electrical safety	DIN, VDE 0411, IEC61010 DIN;IEC61557-7/EN61557-7
Protection level	CATIII 600V
Type of protection	IP40
Operating altitude	2000m
Operating temperature	0°C to 40°C

Size(HxWxD): 128mm x 68mm x 30mm

Weight: 185g

#### DT-903 Socket Polarity and Earth Leakage Tester



903 Socket Polarity and Earth Leakage Tester tests 3 wire 220V AC outlets and earth leakage circuit breakers(ELCB).

Specifications	
Power supply	From unit under test
Electrical safety	IEC61010/EN61010; IEC61557-7/EN61557-7
Protection level	CATIII 600V
Type of protection	IP40
Operating temperature	0°C to 40°C

Model 902

Size(HxWxD): 128mm x 68mm x 30mm

Weight: 185g

#### • 2000ms readout for testing latest delay action breakers.

- Fully programmed operation
- Accurate digital read out of tipping time
- Two neon lamps give quick check for correct wiring
- Operates from mains supply. No need for batteries
- Compact, light weight and simple to operate
- Zero cross circuit permits testing at 0° and 180° portion of sine wave at these two tests minimum(best) and maximum(worst) trip times will be displayed
- Data hold function to freeze the digital trip time displayed allows for easy readout and eliminates the possibility of reading



EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033





Model 904

Specifications			
	Max Resolution	Accuracy	
Trip current settings	5mA, 10mA, 30mA, 100mA, 300mA, 500mA		
Test Current (No Trip Test)	50% of circuit breaker trip current selected	$2000mS \pm 5\%$	
Test Current (Trip Test)	100% of circuit breaker trip current selected	$2000mS \pm 5\%$	
Test Current (Fast Trip Test)	250mA regardless of circuit	$40mS \pm 5\%$	
	breaker trip current selected		
Fault trip Time	2000mS (40mS for Fast Trip)	±2%rdg ±3dgts	
Resistance	0.1kΩ	±1.0%rdg ±2dgts	
Operating Voltage	220V, 230V, 240V AC ± 10%	± 3%	

Size(HxWxD): 128mm x 68mm x 30mm

Weight: 185g

#### DT-905A Socket Polarity Tester

The new ergonomic, easy to use socket tester is designed to make the electricians job easier and is ideal for first level indication for testing standard mains sockets.



EMC & LVD

EN: 61326

EN: 61010-1

EN: 61010-02-032

EN: 61010-02-033

• Clear LED indication of wiring status

Modern, ergonomic design

Compact and durable

• Simple to use, just plug into socket for autotest







Model 905A

### DT-906A Socket Polarity and Earth Leakage Tester

906A is a professional socket tester with modern, ergonomic and durable design, to test the safety of installed mains socket.

906A also checks 30mA RCDs, a unique soft-touch button tests that an RCD in the circuit trips within 300ms when a nominal 30mA earth fault current is applied; a further button, the earth volts touchpad, detects raised earth voltages above 50V AC, thus indicating potentially dangerous installations.

Three vivid bicolour LEDs and a buzzer on 906A provide a quick-to-check combination of signals which indicate correct wiring, missing earth, live/neutral reverse, earth/live reverse, missing neutaral, live faults, and those errors detected by the two pushbutton tests.

Size(HxWxD): 69mm x 67mm x 32mm Weight: 80g







EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033

EN 61010-1 CAT III 600V
----------------------------------

Features
Fully programmed operation
Accurate digital read out of tripping time and Current
450ms readout for testing latest delay action breakers
Two LED lamps give quick check for correct wiring
Compact, lightweight and simple to operate
Zero cross circuitry permits testing at 0° and 180° portion of sine wave

Specifications	
Operational voltage	195V - 253V /45 - 65Hz
Trip current settings	10mA, 30mA, 100mA, 300mA, 500mA, 650mA
Trip current measurement accuracy	±10% ±2digits
Trip time ranges	0ms - 300ms
Trip time accuracy	±5% ±3digits
Ramp test	x0.4 to 1.1 times nominal rated current, accuracy±10 %

Size(HxWxD): 200mm x 70mm x 45mm Accessories: Weight: 253g Test leads, 4 x "AA" batteries and Clamshell.

#### DT-9053 Circuit Analyzer

Model 9054









9053 insulation test has been evaluated and complies with insulation category III (overvoltage category III). Pollution degree II in accordance with IEC-644 indoor use.

- Digital LCD display with backlit
- Display update for voltage less than 2.5 second
- Over-range indication on all functions
- ACV True RMS measurement

Specifications			
	Range	Resolution	Accuracy
Line voltage	85.0~250.0 VAC	0.11V	$\pm 1.0\%$ rdg $\pm 0.2$ dgts
Peak line voltage	121.0~354.0 VAC	0.1V	$\pm 1.0\%$ rdg $\pm 0.2$ dgts
Frequency	45.0~65.0 Hz	0.1Hz	$\pm 1.0\%$ rdg $\pm 0.2$ dgts
%voltage drop	0.1% ~99.9%	0.1%	±2.5%rdg ±0.2dgts
Voltage loaded	10.0 ~ 250.0 VAC	0.1V	±2.5%rdg ±0.2dgts
Neutral-Ground V	0.0 ~ 10.0 VAC	0.1V	±2.5%rdg ±0.2dgts
Impedance-Hot neutral & Ground	$0.00\Omega \sim 3.00\Omega > 3\Omega$	0.01Ω	±2.5%rdg ±0.02dgts
GFCI Trip Time	1ms to 6.5ms counter	1ms	$\pm 1.0\%$ rdg $\pm 2ms$
GFCI Trip Current	6.0 ~ 9.0mA	0.1mA	$\pm 1.0\%$ rdg $\pm 2mA$
EPD Trip Current	30.0 ~ 37.0mA	0.1mA	$\pm 1.0\%$ rdg $\pm 2mA$

Size(HxWxD): 200mm x 70mm x 45mm Weight: 206g

Accessories: Clamshell

9050 Insulation Tester is designed according to standard EN61557-2, and also respects international electrical safety standard IEC 61010-1.

#### Specifications Output voltage 500V DC 500V, 1mA Nominal output current Measurement range 0, 300k, 400k, 500k, 600k, 700k, 800k, 900k, 1000kΩ,∞ 210 x 70 x 45mm Total weight 316g

#### Accessories:

Test leads, 4 x "AA" batteries and clamshell.

#### DT-9051 Earth Tester



Specifications	
Max input AC Voltage	400V±10%
Operating AC Voltage	230V±10%
Operating Frequency	50Hz±10%
Measurement range	$0\Omega$ , $5\Omega$ , $10\Omega$ , $30\Omega$ , $50\Omega$ , $100\Omega$
Fuse size	5 x 20mm/160mA

Size(HxWxD): 210mm x 70mm x 45mm Weight: 311g

Accessories:TL-905, 9V battery and clamshell.







Model 9050

## DT-9052 Earth and Continuity Tester

EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033

1888

Principle of measurement by "fault loop" for installations with neutral as per diagram indication
Earth loop measurement current less than the drop-out threshold of the

30mA circuit breakers Measurement of the earth resistance by 3  $^{1}/_{2}$  digit display from 0 to 1999 $\Omega$  (resolution  $1\Omega$  measurement updated every 1.5s)



- Two-colour back-lit LCD display
- IEC 61010-1 EN 61557-4
- Installation category III
- Class II IP40 ,IK06

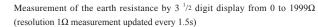
Specifications		
Accuracy	+/-(3%+1dgt)for pure resistance (range 0-2000Ω at 23°C+/-5°C)	
Operating voltage	230V(Ph/N)-10/+6%	
Operating frequency	50/60Hz	
Weight	340g	
Size	210 x 72 x 50mm	





## Principle of measurement by "fault loop" for installations with neutral as per

Earth loop measurement current less than the drop-out threshold of the 30mA circuit breakers





- Installation category III



diagram indication



CAT III

CE

EMC & LVD

EN: 61010-1

EN: 61010-02-032

EN: 61010-02-033

EN: 61326



• IEC 61010-1 EN 61557-4

- Class II IP40 ,IK06

Specifications			
Measurement Range	Accuracy		
$0.0\Omega$ -19.9 $\Omega$	$\pm~0.8~\Omega$		
$19.9\Omega - 99.9\Omega$	$\pm$ 6.5 $\Omega$		
100Ω -999Ω	$\pm$ 7.5 $\Omega$		
$1.00 \mathrm{k}\Omega$ - $2.00 \mathrm{k}\Omega$	$\pm~16.0~\Omega$		
Operating voltage	230V(Ph/N)-10/+6%		
Operating frequency	50/60Hz		
Weight	340g		
Size	210 x 72 x 50mm		

Size(HxWxD): 195mm x 70mm x 48mm Weight: 415g

Accessories: Clamshell.

#### DT-9056 Digital Earth Loop Tester

Model 9055

CEM err-sens



EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033



9056 insulation test has been evaluated and complies with insulation category III (overvoltage category III). Pollution degree II in accordance with IEC-644 indoor use.

- Digital LCD display with backlit
- Display update for voltage less than 2.5 times/second
- Over-range indication on all functions
- ACV True RMS measurement



Model 9056

Specifications			
	Range	Resolution	Accuracy
Line voltage	85.0~250.0 VAC	0.1V	$\pm 1.0\%$ rdg $\pm 0.2$ dgts
Peak line voltage	121.0~354.0 VAC	0.1V	$\pm 1.0\%$ rdg $\pm 0.2$ dgts
Frequency	45.0~65.0 Hz	0.1Hz	$\pm 1.0\%$ rdg $\pm 0.2$ dgts
%voltage drop	0.1% ~99.9%	0.1%	$\pm 2.5\%$ rdg $\pm 0.2$ dgts
Voltage loaded	10.0 ~ 250.0 VAC	0.1V	$\pm 2.5\%$ rdg $\pm 0.2$ dgts
Neutral-Ground V	0.0 ~ 10.0 VAC	0.1V	$\pm 2.5\%$ rdg $\pm 0.2$ dgts
Impedance-Hot neutral & Ground	$0.00\Omega \sim 3.00\Omega > 3\Omega$	0.01Ω	±2.5%rdg ±0.02dgts
GFCI Trip Time	1ms to 6.5ms counter	1ms	$\pm 1.0\%$ rdg $\pm 2$ ms
GFCI Trip Current	6.0 ~ 9.0mA	0.1mA	$\pm 1.0\%$ rdg $\pm 2$ mA
EPD Trip Current	30.0 ~ 37.0mA	0.1mA	$\pm 1.0\%$ rdg $\pm 2$ mA

Size(HxWxD): 195mm x 70mm x 48mm

Weight: 415g

Accessories: Clamshell.

#### Features • Outlet Tester functions: AFCI • GFCI Trip Current

AFCI, GFCI and AC Circuit Analyzer

● GFCI Trip Time

**DT-9057** 

- EPD Trip Current
- Neutral to Ground Voltage
- Hot, Neutral and Ground Impedance
- Open or Reversed wiring
- AC Load Tester: Selectable loads of 12, 15 and 20 Amps
- Measures loaded and unloaded AC Line Voltage
- Calculates and displays % Voltage Drop and Line Impedance

Quickly checks for correct wiring of AC outlet load handling capabilities plus Outlet Tester functions

- Displays Peak Line Voltage and Frequency
- Over-Temperature protection
- Complete with AC test cord

Specifications	
Measurement Range	Accuracy
AC Voltage	85.0 to 250.0V
Frequency	45.0 to 65.0Hz
Peak Line Voltage	350.0V
% Voltage Drop	0.1 to 99.9%

Size(HxWxD): 195mm x 70mm x 48mm

Weight: 415g

Accessories: Clamshell.



#### USB-10/20 USB DC Voltage/ Current Tester

USB-10/20 USB DC Voltage/ Current tester is used to inspect USB charger and portable power source of electronics products. USB-10/20 can output voltage, current, and power. Users can use this device to monitor charging status of any USB powered device.







Model USB-10

#### Features

- High/Low output voltage warning
- LCD display with backlight (USB-20)
- LED display (USB-10)
- Lightweight, portable, easy to use

Specifications	
Input Voltage Range (V)	3V-9V
Voltage Resolution	0.01V
Voltage Monitoring Accuracy	±1%
Current Monitoring Range (A)	0A~3A
Current Monitoring Accuracy	±(1%±2)
Current Resolution	0.01A





Model USB-20

Size(HxWxD): 23mm x 65mm x 13mm

Weight: 17g

## **Cable Locator**



The cable locator is a professional general purpose cable locator. It is ideal for tracing cables in walls and underground, locating fuses/breakers on final circuits and locating interruptions and short-circuits in cables and electrical floor heating systems. It can also be used for tracing metallic water and heating pipes. The unit is supplied as a complete kit comprising of a transmitter and receiver in a purposemade carry case. The receiver also incorporates a torch function for working in dimly lit locations.

- For all applications (live or dead cables) without additional instruments
- Set includes a transmitter and a receiver

LA-1012
Cable Locator

- Proven digitally coded sender signal guarantees clear signal identification
- Transmitter with LCD-display for transmitting level, transmitting code and external voltage
- Receiver with backlight LCD-display for level of receiving signal, code of receiving signal and live voltage indication
- Automatic or manual adjustment of receiving signal sensitivity
- Acoustical receiving signal switchable

**Technical Specifications** 

- Auto Power Off
- Additional torch lamp function for working in dark environment
- Additional transmitters are available for extension of to distinguish between several signals





Model LA-1012B Transmitter

Model LA-1012 Receiver

TAR











Frequency range	Transmitter: 060Hz
Output signal	Transmitter: 125kHz
Voltage	Transmitter: Up to 400V AC/DC
Tracing depth cable location	Receiver: 02.5 m wall/underground cables
Main voltage detection	Receiver: 00.4 m

Voltage measurement range Transmitter: 12V, 50V, 120V, 230V, 400V

Environmental Specifications						
Operating temperature	Transmitter: 0 to 40°C; Receiver: 0 to 40°C					
Storage temperature	Transmitter: -20°C to 60°C; Receiver: -20°C to 60°C					
Humidity (without condensation)	Transmitter: Max. 80% relative; Receiver: Max. 80% relative					
Operating altitude	Transmitter: Up to 2000 m; Receiver: Up to 2000 m					

## Safety Specifications

Electrical safety	EN 61010-1
Overvoltage category	CAT III 300V

#### LA-1012:

Size(HxWxD): 190mm x 60mm x 37mm

Weight: 229g LA-1012B:

Size(HxWxD): 128mm x 68mm x 30mm

Weight: 185g Accessories:

2 x 9V batteries, Crocodile clips, Test leads and gift box with carrying case.

Model AC-15

# Non-Contact detection of AC Voltage

The Non-contact AC Voltage Testers are easy to use — just touch the tip to a terminal strip, outlet, or supply cord. When the tip glows red and the unit beeps, you know there's voltage present. Electricians, maintenance, service, safety personnel, and homeowners can quickly test for energized circuits in the workplace or at home.

- High power rear flashlight
- Thinner probe tip for working with wall outlets
- Green LED means power on, flashing red LED with beeper means voltage detected
- Low battery selftest & Auto power off
- Two modes, green means high voltage mode, yellow means low voltage mode • Forward facing flashlight
- Flash and Beep rate increase as the detector gets closer to the voltage source helping the user pinpoint live circuits

  • Power ON/OFF swith & Silent Mode
- Pocket clip for easy storage
- CATIV-1000V, IP67 Water proof & 2m drop-proof
- ATEX certificate for AC-15Ex/AC-15Exs
  - High power rear flashlight • Dual Voltage Sensitivity detector
- IP67 Water proof & 2m drop-proof





Specificati	ons								
		AC-11	AC-11B	AC-11H	AC-15	AC-15B	AC-15S	AC-15Ex	AC-15 Ex
ACV Non-Conta	ct Detection	*	*	*	*	*	*	*	*
	12V to1000V	*		*	*			*	
Operating Range	24V to1000V		*			*			
	50V to1000V						*		*
(50Hz/60Hz)	100V to 1000V	*	*		*	*		*	
	200V to 1000V			*			*		*
IP67 Water proof	2m dı	op-proof	*	*	*	*	*	*	
Motor shaking							*		*
Ex ib IIB T4 (ATI							*	*	
Dual Voltage Sens	sitivity detector								
Red/Yellow/Gree	n LED indicators								
Flashlight functio	n								
Auto Power Off									
Beeper sounds									
System self test									
Switchable audible and silent mode									
Rugged, double n	nolded case								
CATIV-1000V									
Size(HxWxD)		160 x 2	20 x 23mm	155x26x23mm		160r	nm x 23mi	m x 25mm	
Weight		6	50σ	55σ			55g		

Accessories: Two "AAA" batteries and clamshell









Model AC-11H





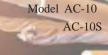


EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033



Model AC-6 AC-6B AC-6S AC-6F







Model AC-9

Accessories: Two "AAA" batteries and clamshell

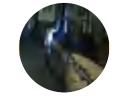
- Easy-to-use just touch the tip to an outlet or cord. When it glows red, you know there is voltage in the line.
- Fit in shirt pocket for convenience
- · All outer surfaces are non-conductive for safety
- Detects AC voltage without metallic contact



i catares													
		AC-6	AC-6B	AC-6S	AC-6H	AC-8	AC-8B	AC-8S	AC-9	AC-9B	AC-9C	AC-10	AC-10S
ACV Non-Contact	Detection	*	*	*	*	*	*	*	*	*	*	*	*
	24V to1000V			*				*					
Operating Range	50V to1000V	*			12V to	*							*
(50Hz/60Hz)	100V to 1000V		*	*	1000V		*	*	*	*			
	200V to 1000V								*	*	*	*	
Voltage Sensitivity	detector (Single)	*	*	Dual	Dual	*	*	Dual	*	*	*	*	*
Red LED indicator	rs	*	*	*	*	*	*	*	*	*	*	*	*
Yellow LED indica	ators			*	*			*					
Green LED indica	tors	*	*	*	*	*	*	*				*	*
Beeper sounds		*	*	*	*		*	*		*		*	*
Motor Shaking											*		
Flashlight function	1	AC-6F				*	*	*	*	*	*	*	*
Auto Power Off		*	*	*	*	*	*	*	*	*	*	*	*
Low battery self to	est	*	*	*	*	*	*	*				*	*
Power ON/OFF sv	vitch	*	*	*	*	*	*	*				*	*
Switchable audible	and silent mode	*	*	*	*							*	*
Rugged, double m	olded case	*	*	*	*	*	*	*	*	*	*	*	*
CATIII-1000V		*	*	*	*	*	*	*	*	*	*	*	*
Size(HxWxD) mm	Size(HxWxD) mm		35 x 19 x	22		1	58 x 21 x	25	1	176 x 22 x	26	135 x	19 x 22
Weight			45g				48g			50g		5:	5g



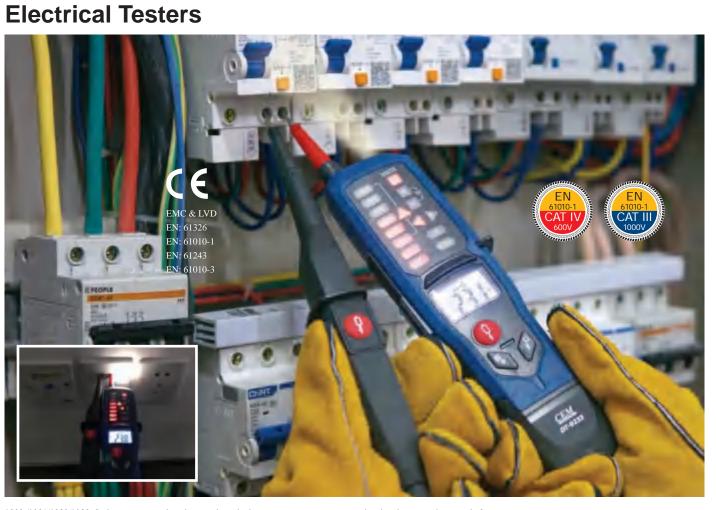






# **DT-9230/9231/9232/9233**Electrical Testers





9230 /9231/9232/9233 Series new two-pole voltage and continuity testers are now more rugged and easier to use than ever before.

- Fast test results the way you need them, with large, easy-to-use buttons, bright backlights, and clear audible and visible indicators designed for any work situation.
- Rugged, high-quality construction design includes a heavy duty molded case, a thicker cord with wear indicator, sturdy battery case, and well-fitting and durable probe protector.
- Enhanced ergonomic design feels good in your hand, is easy to use (even with gloves) and quick, secure probe docking.
- A complete family of testers with the features, functions, and price/performance to fit your applications and preferences.

#### AC-8M/AC-9M Magnet Space Testers

#### **GENERAL APPLICATIONS**

- Testing operating solenoid valves in pneumatic and hydraulic control equipment
- Testing relays with coils and electrically controlled solenoid valves in all types of vehicles and machineries
- Testing solenoid valves when servicing oil burners, the test lamp lights immediately and without metallic contact where there is a magnetic field, e.g. an activated coil in a solenoid valve. The test lamp responds to all kind of magnetic fields -from alternating current to direct current and to permanent magnets.

**Size(HxWxD):** 158mm x 21mm x 25mm (AC-8M)

Weight: 34g Accessories:

Two "AAA" batteries and clamshell



Features	9230	9231	9232	9233
Complies with EN 61243-3:2014	*	*	*	*
LED Indication Range: 12 V to 690 V dc and ac	*			
LED Indication Range: 12 V to 1000 V dc and ac		*	*	*
Independent ELV indicator LED, indicates if $>$ 50 V ac/120 V dc is present even in the event of no battery power or main circuit failure	*	*	*	*
LCD Indication Range: 6 V to 1000 V dc and ac			*	*
Resistance Measurement: LCD $3\frac{1}{2}$ digit (0 to 1999 $\Omega/1\Omega$ resolution)				*
LCD BacklightDisplay HOLD: Freeze/unfreeze display with voltage or resistance measurement			*	*
Fixed Impedance $\sim$ 350 k $\Omega$ ( $\leq$ 3.5 mA @ 1000 V)		*	*	*
Switchable Load by 2 pushbuttons (30 mA @ 230 V)		*		*
Vibration During Load (when 2 switchable load pushbuttons are pushed)		*		*
Single-Pole Phase Test (also operates with gloves)		*	*	*
Rotary Field Direction (also operates with gloves)		*	*	*
Continuity Test / Diode Test	*	*	*	*
Flashlight		*	*	*
Beeper for Continuity	*	*	*	*
Beeper for Phase/ACV		*	*	*
19 mm Probe Tip distance when docked	*	*	*	*
CAT III 1000 V / CAT IV 600 V	*	*	*	*
IP64	*	*	*	*

		9230	9231	9232	923
LEDs					
Voltage range	12 V to 690 V ac/dc	*			
voltage range	12 V to 1000 V ac/dc		*	*	*
Resolution	±12 V, 24 V, 36V, 50 V, 120 V,230 V, 400 V, 690 V	*			
Resolution	$\pm 12$ V, 24 V, 50 V, 120 V, 230 V, 400 V, 690 V, 1000 V		*	*	*
F	0 / 50 Hz to 60 Hz	*			
Frequency range	0 / 40 Hz to 400 Hz		*	*	*
Response time	≤0.5 second	*	*	*	*
Auto power on	≥12 V ac/dc	*	*	*	*
LCD					
Voltage range	6V to 1000V ac/dc			*	*
Resolution	±1V			*	*
Tolerance	±(3 % rdg + 5 digits)			*	*
Frequency range	0 / 40 Hz to 400 Hz			*	*
Response time	≤1 second			*	*
Auto power on	≥6 V ac/dc			*	*
Voltage detection	Automatic	*	*	*	*
Polarity detection	Full range	*	*	*	*
Range detection	Automatic	*	*	*	*
	Maximum 3.5 mA at 690 V 250 kΩ / Is <3.5 mA	*			
Internal basic load impedance Peak current	Maximum 3.5 mA at 1000 V 350 kΩ / Is <3.5 mA		*	*	*
impedance reak current	(no RCD tripping)		*	*	~
Operation time	Duration Time =30 seconds	*	*	*	*
Recovery time	Recovery Time =240 seconds	*	*	*	*
Switchable Load	$\sim$ 7 k $\Omega$		*		*
Peak current	Is $(load) = 150 \text{ mA}$		*		*
RCD tripping	I=30 mA @ 230 V		*		*
Continuity Toot	0 to 200 $k\Omega$	*			
Continuity Test	0 to 400 $k\Omega$		*	*	*
Accuracy	nominal resistance +50 %	*	*	*	*
Test current	≤5 μA	*	*	*	*
Single-pole Phase Test	100 V ac to 1000 V ac		*	*	*
Frequency range	40 Hz to 60 Hz		*	*	*
Rotary Field Indication			*	*	*
Voltage range (LEDs)	100 V to 1000 V (phase to earth)		*	*	*
Frequency range	50 Hz to 60 Hz		*	*	*
Resistance Measurement	$0~\Omega$ to $1999~\Omega$				*
Resolution	1 Ω				*
Tolerance	±(5 % rdg +10 digits) @ 20 °C				*
Temperature coefficient	±5 digits / 10 K				*
Test current	≤30 µA				*

Size(HxWxD): 240mm x 78mm x 30mm Accessories:

Weight: 237g Two "AAA" batteries, gift box with carrying case











Model 9232



CE

EN: 61326 EN: 61010-1

# **Electrical Testers**



Features	9330	9331	9332
Complies with EN 61243-3:2014	*	*	*
LED Indication Range: 12 V to 1000 V dc and ac	*	*	
Independent ELV indicator LED, indicates if $>$ 50 V ac/120 V dc is present even in the event of no battery power or main circuit failure	*	*	*
LCD Indication Range: 6 V to 1000 V dc and ac		*	*
Resistance Measurement: LCD $3\frac{1}{2}$ digit (0 to 1999 $\Omega/1\Omega$ resolution)		*	*
LCD Backlight Display HOLD: Freeze/unfreeze display with voltage or resistance measurement		*	*
Rugged, Double-Insulated Wire	*	*	*
Fixed Impedance ~300 kΩ (≤3.5 mA @ 1000 V)	*	*	*
Switchable Load by 2 pushbuttons (30 mA @ 230 V)	*	*	*
Single-Pole Phase Test (also operates with gloves)	*	*	*
Rotary Field Direction (also operates with gloves)	*	*	*
Continuity Test / Diode Test	*	*	*
Flashlight	*	*	*
Beeper for Continuity/Phase/ACV	*	*	*
19 mm Probe Tip distance when docked	*	*	*
CAT III 1000 V / CAT IV 600 V	*	*	*
IP64 rating	*	*	*

		9330	9331	933
LEDs				
Voltage range	12 V to 1000 V ac/dc	*	*	
Resolution	±12 V, 24 V, 50 V, 120 V,230 V, 400 V, 690 V, 1000 V	*	*	
Tolerance	Complies with EN 61243-3:2014	*	*	
Frequency range	0 / 40 Hz to 400 Hz	*	*	
Response time	≤0.5 second	*	*	
Auto power on	≥12 V ac/dc	*	*	
LCD				
Voltage range	6V to 1000V ac/dc		*	*
Resolution	±1V		*	*
Tolerance	±(3 % rdg + 5 digits)		*	*
Frequency range	0 / 40 Hz to 400 Hz		*	*
Response time	≤1 second		*	*
Auto power on	≥6 V ac/dc		*	*
Voltage detection	Automatic	*	*	*
Polarity detection	Full range	*	*	*
Range detection	Automatic	*	*	*
Internal basic load	Maximum 3.5 mA at 1000 V 300 kΩ / Is <3.5 mA	sk	*	*
impedance Peak current	(no RCD tripping)			
Operation time	Duration Time =30 seconds	*	*	*
Recovery time	Recovery Time =240 seconds	*	*	*
Switchable Load	~7 kΩ	*	*	*
Peak current	Is $(load) = 150 \text{ mA}$	*	*	*
RCD tripping	I=30 mA @ 230 V	*	*	*
Continuity Test	$0$ to $400~\text{k}\Omega$	*	*	*
Accuracy	nominal resistance +50 %	*	*	*
Test current	≤5 μA	*	*	*
Single-pole Phase Test	100 V ac to 1000 V ac	*	*	*
Frequency range	40 Hz to 60 Hz	*	*	*
Rotary Field Indication		*	*	*
Voltage range (LEDs)	100 V to 1000 V (phase to earth)	*	*	*
Frequency range	50 Hz to 60 Hz	*	*	*
Resistance Measurement	$0~\Omega$ to $1999~\Omega$		*	*
Resolution	1 Ω		*	*
Tolerance	±(5 % rdg +10 digits) @ 20 °C		*	*
Temperature coefficient	±5 digits / 10 K		*	*
Test current	≤30 µA		*	*

Size(HxWxD): 240mm x 73mm x 34mm Accessories:

Weight: 237g Two "AAA" batteries, gift box with carrying case











Model 9011

## DT-9011/9011B/9020/9021/9030/9120/9121/9130

Model 9030

Double molded plastic housing

Bright Flashlight

• CAT III 1000V

9902 & 9903 Electrical Testers provide voltage, continuity with one compact tool. They will be turned on automatically when you place the probe across a complete circuit. So you don't even have to turn them on or off.







**Satety Conformance** 

Complies with EN 61010-1 for use in CATIII 600V environments





Model 9902

Features		
	9902	9903
Automatically select VAC, VDC or Continuity test	*	*
1999 counts LCD display		*
Automatically power on and off	*	*
High input impedance	$1M\Omega$	$400 \mathrm{k}\Omega$
Non-contact voltage detection	9902N	9903N
Low battery indication		*

Specificat	ions		
Function	9902	9903	Accuracy
Voltage AC	690V	600V	±(3.0%±3d)
Voltage DC	220V	600V	±(1.5%±2d)
Continuity Test	*	*	

Size(HxWxD): 9902/9902N: 135mm x 51.5mm x 38.5mm 9903/9903N: 215mm x 72mm x 36.7mm

**Weight:** 9902/9902N :182g 9903/9903N : 235g

Accessories: Test leads, 2 x "AA" batteries and clamshell.

#### DT-9133 Lamp Tester

Lamp Tester tests HID and fluorescent lamps and has live conductor sensing. This electrical lamp tester has a compact, rugged housing with carrying case (included).

Specifications	
Live Conductor Indication	60-250VAC, 40-60Hz
Continuity Verification	$0\text{-}5M\Omega$ (test current: $<7\mu A$ )
Lamp Tester Voltage	3kV/160kHz (test current:<200μA)
Measurement Category	CAT II 250V

Size(HxWxD):189mm x 26.5mm x 2.6mm Weight: 60g



	9011/9011B	9020/9120	9021/9121	9030/9130
Clear LED indication	*	*	*	
1999 counts LCD display with analog bargraph				*
AC/DC Voltage detection	*	*	*	*
Polarity detection	*	*	*	*
Single-pole phase test			*	
Continuity test			*	*
Rotary field indication			*	*
Low impedance test	*	*	*	*
Flashlight		*	*	*
Voltage function operates without battery	*	*		
IP64	*	*	*	*
Overvoltage class CATIII 1000V/CATIV 600V		*	*	*
VAT self-test button		-/*	-/*	-/*



**Specifications** 9011/9011B 9020/9120 9021/9121 9030/9130 12,24,36,50,120,230, 12,24,36,50,120,230, 12,24,36,50, Voltage range 6,12,24,50,120,230,400V (AC/DC) 400V 400V 120,230,400V -30% to 0% of reading -30% to 0% of reading  $\pm 1.5\% \pm 3D$ Tolerance ACV Frequency range 0~60Hz 0~60Hz 0~60Hz 50/60Hz <200kΩ/-<200kΩ/- $\leq 1 M\Omega/$ -Internal impedance

Size(HxWxD): 240mm x 78mm x 40mm Weight: 237g

Accessories:

Two "AAA" batteries (9021/9030/9121), gift box with carrying case



#### Digital Circuit Breaker Finder with GFCI Outlet Tester





Model 9019

DT-9016/DT-9017/DT-9018/DT-9019 Electrical Testers provide voltage, continuity with one compact tool. They will be turned on automatically when you place the probe across a complete circuit.

- Fast test results the way you need them, with large, easy-to-use buttons, bright backlights, and clear audible and visible indicators designed for any work situation.
- Uses standard replaceable multi-meter test leads for versatility
- Features built-in test lead holders on the back of the meter

DT-9019H AFCI TEST is an electrical outlet tester that tests for wiring faults in electrical outlets, and also tests AFCI and GFCI Devices.

- Detects the most common wiring faults in standard, AFCI and GFCI electrical outlets
- Test AFCI devices by simulating arc fault conditions
- Test GFCI devices by simulating ground fault conditions
- Capable of detecting a dual-open wiring fault with simultaneous open neutral and open ground wires (patent pending technology)
- Tester delivers clear visual indication of the wiring condition at the electrical outlet

CE EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033



Features					
	DT-9016	DT-9017	DT-9018	DT-9019	DT-9019H
Clear LED indication	*	*	*		
1999 Counts LCD display				*	*
Polarity detection	*	*	*	*	
Test Lead Holders	*	*	*	*	
NCV			*	*	*
Low impedance	*	*	*		
Flashlight		*	*	*	*
Continuity test		*	*	*	
Phase Rotation Test			*	*	
GFCI Test >5mA					*
AFCI Test					*
Replaceable test leads	*	*	*	*	
Auto-Power Off		*	*	*	*
Overvoltage class CATIV 600V	*	*	*	*	CAIII 135V

Specifications					
	DT-9016	DT-9017	DT-9018	DT-9019	DT-9019H
Voltage range (AC/DC)	48,120,230,400V	12,24,48,120,208, 240,277,480,600V	12,24,48,120,208, 240,277,480,600V	6V to 690V	12V to 135V
Tolerance	-30% to 0% of reading	-30% to 0% of reading	-30% to 0% of reading	±(3%+5)	±(3%+5)
Frequency range	0/40Hz to 60Hz	0/40Hz to 400Hz	0/40Hz to 400Hz	0/40Hz to 400Hz	40Hz to 60Hz
Continuity test		<200kΩ	<200kΩ	<200kΩ	
<b>Phase Rotation Test</b>			*	*	
Voltage range				200 to 690V	
Frequency range				50 Hz to 60 Hz	
GFCI Test >5mA					*
AFCI Test					*
RCD 30mA					*
Battery		3x1.5V "AAA"	3x1.5V "AAA"	3x1.5V "AAA"	3x1.5V "AAA"

Size(HxWxD): 158mm x 56mm x 40mm

Weight: 237g

Accessories:

3x1.5V "AAA" batteries (9017/9018/9019/9019H), gift box with carrying case

CT-260(A/B) is a digital circuit breaker finder used to locate the correct circuit breaker in a panel to which an electrical outlet or fixture is connected. The Transmitter is connected to the electrical outlet or fixture in the circuit while the receiver is used to scan the breakers in the circuit panel. The Transmitter also features a GFCI outlet tester.

#### Features

Quickly and accurately locate the correct circuit breaker in a panel corresponding to the circuit to which an electrical outlet or fixture is connected

Receiver delivers clear visual and audible indications when the correct breaker has been located Operates on 90-240V AC circuits

Transmitter incorporates a GFCI outlet tester to inspect the wiring condition at the electrical outlet and test GFCI devices

Transmitter docks in the Receiver for convenient storage as a single item when tester is not is use

Transmitter incorporates a three-pin plug

The transmitter may be connected to other electrical fixtures using optional accessories which are sold separately (CT-260A)

Receiver powers off automatically after approximately three minutes of non-use to conserve battery life Transmitter is powered by the circuit when connected to the electrical outlet or fixture

Low battery indicator

Easily accessible battery compartment. Uses one 9V battery in receiver only; Transmitter does not require a battery

Built to withstand a 6.6-Foot (2 m) drop

CAT II 300V safety rating

Model ET-19L

Size(HxWxD): 51mm x 189mm x 34mm (CT-260B) 53mm x 103mm x 33mm (CT-260A)

ET-19L GFCI & Receptacle Tester with Voltage Display

Weight: 120g (CT-260B), 30g (CT-260A)



EN: 61010-1 EN: 61010-02-032 EN: 61010-02-033







Model CT-260B



ET-19L Receptacle Tester is designed to detect the most common wiring problems in standard and GFCI receptacles. Receptacle voltage reading LCD display . A convenient chart on the tester helps determine wiring condition in outlet, based on LED lights results. Conditions indicated: open ground, reverse polarity, open hot, open neutral, hot/ground reversed. Voltage: 90~240V AC at 50/60Hz in 3-Wire Outlet

Size(HxWxD): 53mm x 103mm x 33mm (ET-19L) 40mm x 85mm x 32mm (ET-1/18)

Weight: 30g



ET-17 Receptacle Tester detects the most common wiring problems in standard receptacles. Conditions indicated: wiring correct, open ground, reverse electrical outlet, open hot, open neutral, hot/ground reversed. Conditions not indicated: quality of ground, multiple hot wires, combinations of defects, reversal of grounded and grounding conductors. Voltage: 90~240V AC at 50/60Hz in 3-Wire Outlet



ET-18 Receptacle Tester is designed to detect the most common wiring problems in standard and GFCI receptacles. A convenient chart on the tester helps determine wiring condition in outlet, based on LED lights results. Conditions indicated: open ground, reverse polarity, open hot, open neutral, hot/ground reversed.

Voltage: 90~240V AC at 50/60Hz in 3-Wire Outlet

#### Features

Analog Circuit Breaker Finder

Voltage Range 120/240V

For Use On Energized Lines LED Display

Visual/Audible indicaton

Function identifies Specific Circuit Breakers or Fuses With A Flashing LED Light and audible tone

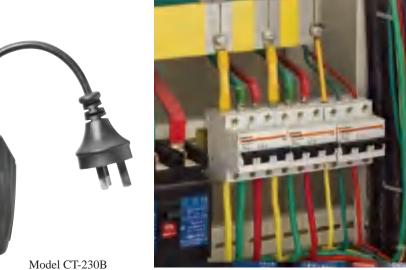
Plug-in transmitter allows one person test

Identify And Troubleshoot Energized Outlets Or in candescent light fixture

Includes Transmitter, Receiver, Battery, and Instructions.



Transmitter Model CT-230A



# Receiver

#### CT-240 Digital Circuit Breaker Finder

#### Features

Digital Circuit Breaker Finder

Voltage Range 120/240V

For Use on Energized Lines LED Display

Visual/Audible indicaton

Function identifies Specific Circuit Breakers or Fuses With A Flashing LED Light and audible tone

Identify and Troubleshoot Energized Outlets or in candescent light fixture

Includes Transmitter, Receiver, Battery, and Instructions.

Size(HxWxD): 192mm x 64mm x 42mm

Weight: 120g

Accessories: 9V batteries and clamshell



Transmitter



Model CT-240A Receiver

#### Features

Insulated inductive probe tip prevents shorting conductors

Tests include wire trace, continuity test, clear/busy/ringing

line test and tip/ring identification

Alligator clips for non-terminated cables and modular connectors for direct connections to telephone and internet wiring

Selectable continuous or variable tone generation

Built-in speaker on probe with sensitivity control

Specifications				
Function	Max Range	Basic Accuracy		
Voltage DC	600V	±0.5%		
Voltage AC	600V	±1.2%		
Current DC	200mA	±1.5%		
Current AC	200mA	±2.0%		
Resistance	20ΜΩ	±0.8%		
Continuity Test	Beep if less than $100\Omega$			

Complete with Amplifier probe and Tone Generator with alligator clips and modular RJ11 phone and RJ45 digital connector cables, 9V battery and case

Tone Generator and Amplifier Probe Kit

Heavy duty kit with audible tone easily identifies wires or cables

Size(HxWxD): 162mm x 74.5mm x 44mm

Weight: 308g Accessories:

Test leads, 9V batteries and gift box.



## LA-1013 Amplifier Probe



Insulated inductive probe tip prevents shorting conductors

Tests include wire trace, continuity test, clear/busy/ringing line test and tip/ring identification Alligator clips for non-terminated cables and modular connectors for direct connections to telephone and internet wiring

Selectable continuous or variable tone generation

Built-in speaker on probe with sensitivity control



Size(HxWxD): 231mm x 56mm x 27mm Weight: 270g Accessories:

9V battery and clamshell

ity & diode.

Function

Voltage DC

Voltage AC

Current DC

Current AC

Resistance Continuity Test

Weight: 308g Accessories:

with carrying case.

**Specifications** 

2 in 1 Satellite Finder & DMM

Max Range

600V

600V

200mA

20ΜΩ

**Size(HxWxD):** 162mm x 74.5mm x 44mm

Beep if less than  $100\Omega$ 

9V battery & Two "AAA" batteries, remote terminator and gift box

LA-1016 is a satellite finder with scale display and digital multimeter

(DMM). It is very good design. Connect a coaxial cable from the LNB/LNBF

to the "TOLNB" connection on Satellite Finder. Connect the cable from your

satallite receiver to the "TOREC" input on the Satellite Finder.DMM function

Basic Accuracy

±0.5%

±1.2%

±1.5%

±2.0%

±0.8%

Model 1011



EMC & LVD EN: 61326 EN: 61010-1 EN: 61010-02-032

EN: 61010-02-033





The tester is a designed and very practical tester that can easily read the correct pin configuration of 10 Base -T cable(Category 5), 10 Base-2 cable (coax), RJ45/RJ11 moduler cables, 356A, TIA-568A/568B and Token Ring cable by comparing one transmitting end to the corresponding receiving end. With the remote kit it can test cables installed far away either on wall plate or patch panel. It is easy to verify the cable continuity, open, short and crossconnect. It is affordable, so you can benefit the most.

- Test the correct pin configuration of 10 Base-T 10 Base-2 Thin Ethernet cable, RJ45/RJ11 modular cables 356A, TIA-568A/568B and Token Ring
- With remote kit it can remotely test cables up to 300 m away either on the wall plate or patch panel.
- Test the ground wire
- Measures DC/AC Voltage, DC/AC Current, Resistance, Continuity & diode

Specifications				
Function	Max Range	Basic Accuracy		
Voltage DC	600V	±0.5%		
Voltage AC	600V	±1.2%		
Current DC	200mA	±1.5%		
Current AC	200mA	±2.0%		
Resistance	$20 \mathrm{M}\Omega$	±0.8%		
Continuity Test	Beep if less than $100\Omega$			

**Size(HxWxD):** 162mm x 74.5mm x 44mm

Weight: 308g

Accessories: 9V battery and Two "AAA" batteries, remote terminator, holster, cables, test leads, gift box with carrying case.

#### LA-1015 2 in 1 Cable Indentifier & DMM



LA-1015 is a transmitter/receiver device which enbles one to instantly match up ends of individual cores at either end of a multi-core cable. With the remote kit it can test cables installed far away either on wall plate or patch panel. DMM function make it easy to measure DC/ AC voltage, DC/AC current, Resistance, continuity & diode.

Specifications			
Function	Max Range	Basic Accuracy	
Voltage DC	600V	±0.5%	
Voltage AC	600V	±1.2%	
Current DC	200mA	±1.5%	
Current AC	200mA	±2.0%	
Resistance	$20 \mathrm{M}\Omega$	±0.8%	
Continuity Test	Beep if less than $100\Omega$		
Transmitter			
Display	Two blue LED lamps		
Alligators	17 Croc Clips - Red x 16, Black x 1		
Cable resistance	10K Ohm max		
Receiver			
Display	Two digit Red LED Display		
Alligators	2 Croc Clips - Red x 1, Black x 1		

Size(HxWxD): 162mm x 74.5mm x 44mm Weight: 308g

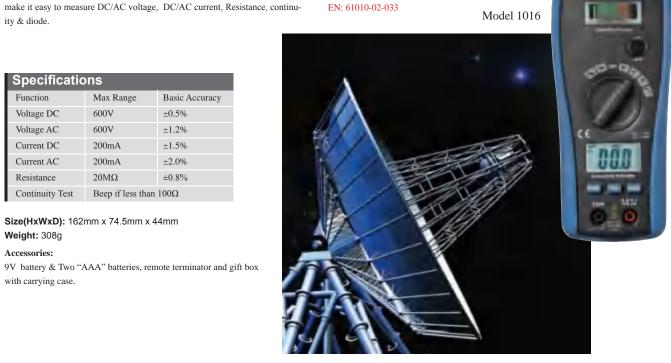
Accessories:

9V battery and Two "AAA" batteries, remote terminator, holster, cables, test leads, gift box with carrying case.

EMC & LVD EN: 61326 EN: 61010-1

EN: 61010-02-032 EN: 61010-02-033





#### LA-1017 Solar Power Meter & DMM

Sunlight measurem	ent up to 1999w/m <sup>2</sup> or 634BTU/(ft <sup>2</sup> *h)
High accuracy and	1 , ,
Data HOLD funtcti	on to hold measurement values
Unit and sign displ	ny for easy reading
Measuring unit sele	ction among w/m <sup>2</sup> and BTU/(ft <sup>2</sup> *h)
Manual scale selec	ion
Direct reading with	no adjustments needed
Maximum and min	mum values
Low battery indica	ion

Specificat	ions			
Function	Max Range	Basic Accuracy		
Voltage DC	600V	±0.5%		
Voltage AC	600V	±1.2%		
Current DC	200mA	±1.5%		
Current AC	200mA	±2.0%		
Resistance	$20M\Omega$	±0.8%		
Continuity Test	Beep if less than $100\Omega$			
Solar Power Meter				
Display	3-1/2 digits LCD with maxmum reading 1999.			
Range	1999W/m <sup>2</sup> ,634BTU/(ft <sup>2</sup> *h)			
Resolution	$1 \text{W/m}^2; 1 \text{BTU/(ft}^2 * \text{h}).$			
Accuracy	Typically within ±10W/m <sup>2</sup> [±3BTU/(ft <sup>2</sup> *h)]or ±5%			
Sampling time	Approx 0.25 second.			

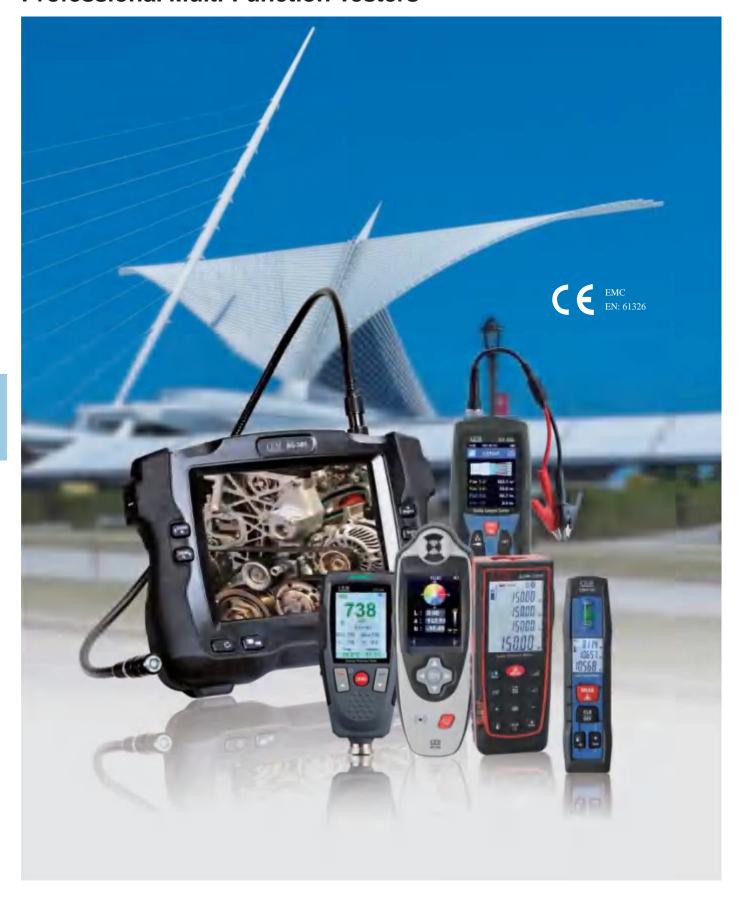
**Size(HxWxD):** 162mm x 74.5mm x 44mm

Accessories:

9V battery & Two "AAA" batteries, remote terminator and gift box with carrying case.



## **Professional Multi-Function Testers**







#### **Coating Thickness Tester**

**DT-159** is a 2.4" TFT color LCD display coating thickness tester with temperature and humidity measurement. Dual Technology Features Automatic Selection of Magnetic Induction or Eddy Current Measurement Techniques. The measuring data is easily transfered to PC for edit and storage. The LCD screen can auto-rotate with  $0^{\circ}$ ,  $90^{\circ}$ ,  $180^{\circ}$ ,  $270^{\circ}$ .



#### **Pen-type Laser Distance Meter**

**iLDM-30/50/LDM-30/50** Pen-type Laser Distance Meter is designed to use easily as a high-precision measurement tool. New compact design fits in every pocket and safely in places where access difficultly.



#### **High Definition Video Borescope**

**BS-380** High definition 8" Color TFT LCD, supporting 4MP photo/full HD video, time/date display and multi-languages. Video and images can also be transferred to your PC via the SD Card or USB cable(included). Modern design housing with waterproof (IP67) flexible gooseneck retains configured shape.



#### **Cable Length Tester**

**CLT-1000** cable length tester features high accuracy and fast reflection, which finds distance to use Time Domain Reflectometry.



## Colorimeter

**DT-265** Colorimeter is widely used in different industries such as electroplating oxide, plastic cement, printing, paint, weaving and dyeing. It measures the sample color data Lab, Lch, color difference  $\Delta E$  and  $\Delta L$ ab according to CIE color space.

# **Professional Coating Thickness Tester**



#### 159 is a 2.4" TFT color LCD display coating thickness tester with temperature and humidity measurement. Dual Technology Features Automatic Selection of Magnetic Induction or Eddy Current Measurement Techniques. The measuring data is easily transfered to PC for edit and storage. The LCD screen can auto-rotate with 0°, 90°, 180°, 270°.

Professional Coating Thickness Tester

**DT-159** 

Features	
Non-magnetic coatings(e.g. paint, zinc)on steel	
Insulating coatings(e.g. paint)on no-ferrous metals	
No-ferrous metals coatings on insulating substrates	
2.4 TFT color LCD display	
Temperature , humidity and Dew point temperature measurement	
Auto-rotatable screen: 0°, 90°, 180°, 270°	
Stability test	
Continuous test	
Set auto power off time.	
SSPC mode	
Limit warning with Beeper and Backlight Flash ,3-Color LED indiction	
Menu operation system	
Working modes: DIRECT, GROUP and SSPC mode	
AVG, MAX, MIN, Stand and Deviation(S.DEV) Display	
Basic, One point and SSPC mode calibration	
Error indication	
USB interface	
10 levels of LCD lighting adjustable	
Language selection: English ,German Italian,French,Chinese,Japanese	

Specifications			
Sensor probe	F	N	
Working principle	magnetic induction	Eddy current principle	
Measuring range	0~2000um	0~2000um	
Guaranteed tolerance (of reading)	(±2%+2)um	(±2%+2)um	
Repeatability	(±1%+1)um	$(\pm 1\% + 1)um$	
Low range Precision	0.1um	0.1um	
Minimum curvature radius	1.5mm	3mm	
Diameter of Minimum area	7mm	5mm	
Basic critical thickness	0.5mm	0.3mm	
Temperature range	0 to 50°C/ 32 to 122°F		
Basic accuracy	±1°C/ 1.8°F		
Humidity range	0 to 100%		
Basic accuracy	±3%		

Size(HxWxD): 120mm x 60mm x 40mm

Weight: 120g

Accessories: 2x1.5V "AA" batteries, CD, Calibration Iron, Calibration Aluminum, Precision Standard, gift box with carrying case.







Failed indication



Precision Standard



Calibration Iron



Calibration Aluminum







Auto-rotatable screen: 0°, 90°, 180°, 270°



EN: 61326



Model 159

Dual Technology Features Automatic Selection of Magnetic Induction or Eddy Current Measurement Techniques







Model 156

Features			
	150	156	156H
Non-magnetic coatings(e.g. paint, zinc)on steel	*	*	*
Insulating coatings(e.g. paint)on no-ferrous metals	*	*	*
No-ferrous metals coatings on insulating substrates	*	*	*
Menu operation system		*	*
Two measuring modes: CONTINUE and SINGLE mode		*	
Two working modes: DIRECT and GROUP mode		*	*
Statistic Display: AVG, MAX, MIN, NO., S.DEV		*	
One point calibration, two points calibration and basic calibration easily		*	*
Memory for 400 readings(80 DIRECT and 320 GROUP readings)		*	
Memory for 1500 readings( 30 GROUP readings)			*
Delete single readings and all group readings easily		*	*
High alarm and Low alarm for all working modes		*	
Low battery, error indication		*	*
USB interface for PC software		*	*
4 levels of battary indication			*
Error indication			*
Easily adapt to lighting conditions with 8 levels of backlight			*

Specifications					
	150	156		156H	
Sensor probe		F	N	F	N
Working principle		Magnetic induction	Eddy current principle	magnetic induction	Eddy current principle
Measuring range	0.0~2.0 mm/ 0~80 mil	0~1250um	0~1250um	0~1350um	0~1350um
Guaranteed tolerance (of reading)	± (2%+0.1)mm/ ± (2%+4)mil	± (3%+1)um	± (3%+1.5)um	± (2.5%+2)um	± (2.5%+2)um
Repeatability		± (1%+1)um	± (1%+1)um	± (1%+1)um	± (1%+1)um
Low range Precision		0.1um	0.1um	0.1um	0.1um
Minimum curvature radius		1.5mm	3mm	1.5mm	3mm
Diameter of Minimum area		7mm	5mm	7mm	5mm
Basic critical thickness		0.5mm	0.3mm	0.5mm	0.3mm
		_			



CE EMC EN: 61326

Model 156H



Precision Standard

Calibration Iron Calibration Aluminum

**Size(HxWxD):** 113.5mm x 54mm x 27mm Weight: 110g

#### Accessories:

Two "AAA" batteries, USB cable, CD, Calibration Iron, Calibration Aluminum, Precision Standard, gift box with carrying case.

Dual Technology Features Automatic Selection of Magnetic Induction or Eddy Current Measurement Techniques. The measuring data is easily transfered to PC for edit and storage.

157H provides flexible measurements with extention cable.

Features
Non-magnetic coatings(e.g. paint, zinc)on steel
Insulating coatings(e.g. paint)on no-ferrous metals
No-ferrous metals coatings on insulating substrates
Menu operation system
Two working modes: DIRECT and GROUP mode
Statistic Display: AVG, MAX, MIN, NO., S.DEV
One point calibration, two points calibration and basic calibration easily
Delete single readings and all group readings easily
Low battery, error indication
Memory for 2500 readings (50 GROUP readings)
4 levels of battary indication
Error indication
Bluetooth interface
Easily adapt to lighting conditions with 8 levels of backlight

Specifications		
Sensor probe	F	N
Working principle	magnetic induction	Eddy current principle
Measuring range	0~2000um	0~2000um
Guaranteed tolerance (of reading)	(+/- 2%+2)um	(+/- 2%+2)um
Repeatability	(+/- 1%+1)um	(+/- 1%+1)um
Low range Precision	0.1um	0.1um
Minimum curvature radius	1.5mm	3mm
Diameter of Minimum area	7mm	5mm
Basic critical thickness	0.5mm	0.3mm

Size(HxWxD): 120mm x 60mm x 40mm

Weight: 120g

Accessories: Two "AAA" batteries, CD, Calibration Iron, Calibration Aluminum, Precision Standard, gift box with carrying case.









iCTT software for Coating Thickness Tester

Meterbox iCTT - In the worldwide, Meterbox iCTT is the first issue for the coating thickness tester to communicate with the smartphone by bluetooth. Friendly user interface, multifunction scene mode, standard reference data bring a new user experience and make the works relaxed.

Meterbox iCTT allows to read the measured real time data by bluetooth, the displayed table and chart can be recorded and analysed. The user can check the history data anytime and manage the measured readings easily by Meterbox iCTT.

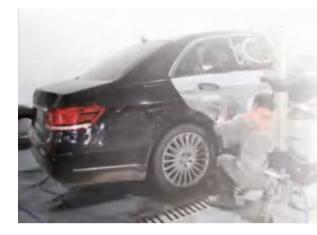
Model 150

Model 157H





Model 1580



The Professional Ultrasonic Thickness Gauge is an innovative instrument that signals a new era in ultrasonic thickness gaging. Ideally suited for almost every ultrasonic thickness application, this handheld thickness gage is fully compatible with a full line of dual and single element transducers. The versatile Professional Ultrasonic Thickness Gage can be used in applications ranging from wall thinning measurements of internally corroded pipes with dual element probes to very precise thickness measurements of thin or multilayer materials with single element transducers. The Professional Ultrasonic Thickness Gage comes standard with many powerful but easy-to-use measurement features and a host of application-specific software options. Its sealed case is designed to meet IP67 requirements to withstand the rigors of very wet or dusty environments. The color transflective VGA display provides superior readability from bright sunlight to complete darkness. It features a simple, ergonomic keypad that can be operated with the left or right hand for easy access to all functions.

Professional Ultrasonic Thickness Gauge

reatures
Dual and single element transducer compatibility
Wide thickness range: 0.08 mm (0.003 in.) to 635 mm (25 in.) depending on material and transducer
selection
Corrosion thickness gaging with dual element transducers
Internal Oxide/Scale software option
Standard resolution of 0.01 mm or 0.001 in. for all transducers
High Resolution software option of 0.001 mm or 0.0001 in. with single element transducers 2.25 MHz
to 30 MHz
Multilayer software option for measurements of up to 4 layers simultaneously
High Penetration software option for attenuating materials such as fiberglass, rubber and thick casting
Thickness, Velocity, and time-of-flight measurements
Differential mode and Reduction Rate mode
10,000 reviewable readings per scan

Specifica	tions	
	Dual element transduc- er measurement mode	Time interval from a precision delay after the excitation pulse to the first echo
	Through paint measurement mode	Measurement of true metal and coating thicknesses with a single back-wall echo
	Through paint echo to ech measurement mode	Time interval between two successive back-wall echoes to eliminate paint or coating thickness
Measurements	Single element trans- ducer measurement modes	Mode 1: Time interval between the excitation pulse and the first back-wall echo Mode 2: Time interval between the delay line echo and the first back-wall echo (with delay or immersion transducers) Mode 3: Time interval between successive back-wall echoes following the first interface echo after the excitation pulse (with delay line or immersion transducers) Oxide: optional Multilayer mode: optional
	Thickness range	$0.080~\rm mm$ to $635.00~\rm mm$ (0.003 in. to $25.000$ in.) depending on material, transducer surface conditions, temperature, and selected configuration
	Material velocity range	0.508 mm/µs to $13.998$ mm/µs (0.020 in./µs to 0.551 in./µs)
	Resolution (selectable)	Low: 0.1 mm (0.01 in.) Standard: 0.01 mm (0.001 in.) High Resolution (optional): 0.001 mm (0.0001 in.)
	Transducer frequency	Standard: 2.0 MHz to 30 MHz (-3 dB)
	range	High Penetration (optional): 0.50 MHz to 30 MHz (-3 dB)
Display	4" TFT LCD display	
Power supply	AC/DC adaptor, 24 V; li	thium-ion battery 23.760 Wh; or 4 AA auxiliary batteries

**Size(HxWxD):** 216mm x 100mm x 47mm

Weight: 706g

3.7V Li battery, USB cable, CD, gift box with carrying case.

CLT-1000 cable length tester features high accuracy and fast reflection, which finds distance to using Time Domain Reflectometry.

- eatures	
ligh accuracy and fast reflection.	
Jser friendly menu on screen	
Operation for easy-to use	
Automatic output impedance control	
Auto-Zero and Auto Range	
arge TFT Color LCD Display	
Auto-Sensitivity allows for closer matching to a wide range of cables under Only V.O.P. Settings required	test.
Measuring capability of the V.O.P. of a sample cable	
9 internal memory locations store up to 99 traces for future analysis	

Specification	s
Minimum Range	pair cable or coaxial cable >5m
	Depends upon the V.O.P of the cables under test.
Maximum Range	3.0km @V.O.P≤99.9%, 2.4km @V.O.P≤80.0%,
	2.0km @V.O.P≤66.0%, 1.5km @V.O.P≤50.0%
Range Selection	Automatic range control
A	± [2% of reading +10cm] < 100m,
Accuracy	± [2% of reading +20cm] ≥100m
Resolution	0.01m < 100m, 0.1m≥100m
Impedance Selection	Automatic output impedance control
Cable Library	20 standard cable types
Memory Location	99 for custom cable types
Connector Type	BNC, RJ45

Size(HxWxD): 152mm x 61mm x 34mm Weight: 230g Accessories: 2 x AA batteries, USB cable, CD, gift box with carrying case.



#### DT-265 Colorimeter

Colorimeter is widely used in different industries such as electroplating oxide, plastic cement, printing, paint, weaving and dyeing. It measures the sample color data Lab, Lch, color difference  $\Delta E$  and  $\Delta$ Lab according to CIE color space.

Free Color Management Software  Store 5 standard sample and 1000 reading records  Repeated Accuracy ΔΕ<0.1  Ergonomic Design
Repeated Accuracy ΔE<0.1
*
Ergonomic Design
TFT true color 2.0 inch 320x240 LCD display
USB2.0 Full Speed interface
Bluetooth interface BLE4.0
Language selection English/Chinese

Specifications	
Color Space	CIELAB CIELCH CIEXYZ RGB
Color Difference Formula	ΔE*Lab ΔE*Lch
Measurement Caliber	φ8mm
Illumination Condition	45°/diffused illumination
Light Source	D65/RGB LED
Sensor	RGB Silicon Photoelectric diode
Observer	CIE 10°Standard observer
Measurement Interval	1.5Sec
Battery	Li-ion battery, support USB charging, 1000 Measurements
Optional Accessories	Micro Bluetooth printer

Size(HxWxD): 150mm x 52mm x 30mm Accessories:

3.7V Li battery, USB cable, CD, gift box with carrying case. Weight: 300g

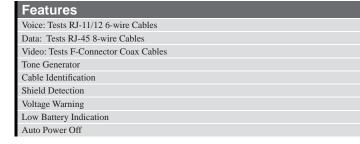


# <u>CEM</u>

EMC EN: 61326 EN: 60825-1

The VD-100 is a portable Voice-Data-Video wire tester. It tests and troubleshoots RJ11, RJ12, RJ45, and F-connector terminated cables. The built-in tone can be used to quickly locate cables in wiring closets and patch panels







Specifications	
Maximum Coax Cable Length	1000 feet (305m)
Minimum Cable Length for Split Pair Detection	1.6 feet (0.5m)
Maximum Coax Cable Resistance	100 ohms maximum DC
Maximum Voltage between any two pins without damage	60V DC or 55V AC
Humidity	10% to 90%, non-condensing
Operating Temperature	32°F to 122°F (0°C to 50°C)
Storage Temperature	-4°F to 140°F (-20°C to 60°C)

Dimensions: 152mm x 61mm x 34mm

Weight: 230g
Accessories:

Two "AA" batteries, gift box with carrying case.

#### **GPS-200 GPS Land Meter**

Model VD-100



The GPS Land Meter is developed by GPS positioning system, high-precision algorithm and other advanced technology. Any earth square and girth can be measured outdoor by GPS Land Meter

Features
Large TFT color LCD display
Any shape of earth square and girth can be measured (Included upland and slope).
The length or distance between any two points can be measured
Measuring Mode: Automatic and Manual
Measuring data, graphical traces, total amount of calculation can be showed on the screen.
Set up unit price according to the relative measuring units.
Keep and records 99 historical data and graphical traces. You can scan, find and delete
them
Integrated cash detector, flashlight and backlight

Specifications		
	Range	0-999999.99 m²
Square Measurement	Measurement Error	1% - 5%
	Display Unit	mu/ sq.m/ ha./ sq.km
	Range	0-999999.99 m
Length Measurement	Measurement Error	1-3m
	Units	meter/ kilometer
Power supply	9V battery	
Continuous working time	8-10 hours	

**Dimensions:** 160mm x 70mm x 38mm

Weight: 230g

www.cem-instruments.com

E-mail:cemyjm@cem-instruments.com

Accessories: 9V battery, gift box with carrying case.

CCTV Monitor Tester & Cable Tester & Digital Multimeter provides multifunctions as PTZ control, Pan/tilts the P/T unit, zooms in/out the lens, adjusts the focus, aperture and sets and calls the preset position. Check open, short, cross reverse wire map for RJ45 and BNC, trace and locate RJ45 BNC and other metal cables.



Features
Large TFT color LCD display
Video signal test, NTSC/PAL automatic adaptation
Video Generating, The PAL/NTSC multi-system color bar video generator
Audio input testing and PTZ continuing rotate test.
PTZ control, Pan/tilts the P/T unit, zooms in/out the lens, adjusts the focus, aperture and sets and calls the preset position.
High precision automatic range digital multimeter
Check open, short, cross reverse wire map for RJ45 and BNC
Trace and locate RJ45 BNC and other metal cables.
DC12V power output, it can supply maximum 1A output current for camera
Measure the network cable, coaxial cable length
RS485 protocol test, 2400, 4800, 9600 baud rate selectable
Self-test function can automatically compensate the variation of the battery power, effect of environmental temperature change
Storage, retrieval and memory function
Flashlight function
Low battery indication
Large capacity rechargeable lithium battery



Model LA-8000

Specifications	
	Signal Mode: PAL/NTSC automatically suitable
	Analog Video Input
Video Signal Tost	Video Signal Output
Video Signal Test	Through the analysis of synchronous level signal attenuation amplitude
	Independently output 1 channel analog video signal
	Communication: RS485
PTZ Control and Test	Support more than 20 kinds of Protocols
	Baud Rate: 2400 4800 9600
	DC Voltage: Max 1000V Accuracy 0.1V
	AC Voltage: Max 750V Accuracy 0.1V
	DC Current: Max 10A Accuracy 0.1mA
Digital Multimeter Test	AC Current: Max 10A Accuracy 0.1mA
	Resistance: Max 40MΩ Accuracy 0.1Ω
	Diode Polarity Test
	Continuity Test
	Check open, short, cross reverse wire map for RJ45 and BNC
	Trace and locate RJ45 BNC and other metal cables.
Cable Test	Measure the RJ45 and BNC Cable length up to 620 meter, with 98% accuracy
	Measurement of power and attenuation in optical fiber transmission
	Test the RS485 Data sent from controlling device
Other Function	1 channel audio signal input to test whether the sound is OK
Other Puliction	Adjust the screen brightness, contrast, color saturation to adapt different working environment

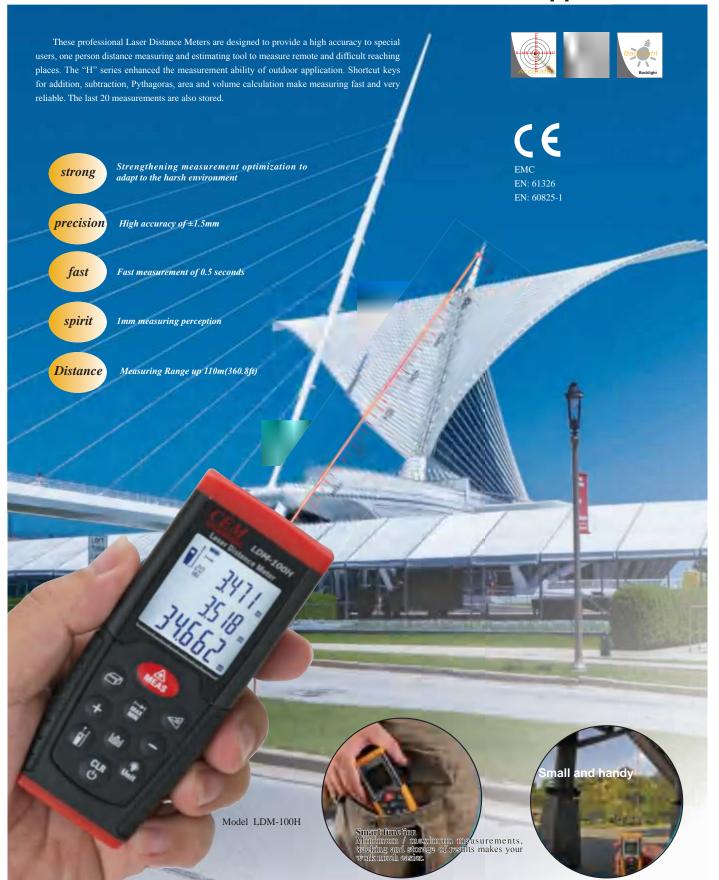
Dimensions: 190mm x 150mm x 48mm

Weight: 230g

Accessories: rechargeable lithium battery, gift box with carrying case.



# **Professional Laser Distance Meter of outdoor application**





Features									
	LDM-40H	LDM-50H/ LDM-100	LDM-60H	LDM-70H	LDM-80H	LDM-100H	LDM-110H	LDM-35	LDM-65
Measuring Range	40m(131.2ft)	50m(164.2ft)	60m(196.8ft)	70m(229.6ft)	80m(262.4ft)	100m(328.0ft)	110m(360.8ft)	35m(114ft)	65m(213.2ft)
Area, Volume Calculations	*	*	*	*	*	*	*	*	*
Indirect measurement using Pythagoras	*	*	*	*	*	*	*	*	*
Addition/Subtraction	*	*	*	*	*	*	*	*	*
Continuous Measurement	*	*	*	*	*	*	*	*	*
Min/Max Distance Tracking	*	*	*	*	*	*	*	*	*
Display illumination and multi-line display.	*	*	*	*	*	*	*	*	*
Buzzer indication	*	*	*	*	*	*	*	*	*
The LDM-H series enhanced the measurement ability of outdoor application	*	*	*	*	*	*	*		
±1.5mm High Accuracy	*	*	*	*	*	*	*		

Specifications									
	LDM-40H	LDM-50H/ LDM-100	LDM-60H	LDM-70H	LDM-80H	LDM-100H	LDM-110H	LDM-35	LDM-65
Measuring Range	0.05 to 40m/ 0.15ft to 131.2ft	0.05 to 50m/ 0.15ft to 164.2ft	$\begin{array}{c} 0.05 \text{ to } 60\text{m}/\\ 0.15\text{ft to } 196.8\text{ft} \end{array}$	0.05 to 70m/ 0.15ft to 229.6ft	0.05 to 80m/ 0.15ft to 262.4ft	0.05 to 100m/ 0.15ft to 328.0ft	$\begin{array}{c} 0.05 \text{ to } 110\text{m}/\\ 0.15\text{ft to } 360.8\text{ft} \end{array}$	0.05 to 35m/ 0.15ft to 114ft	0.05 to 65m/ 0.15ft to 213.2ft
Measuring accuracy(2σ)				Typical	ly: ±1.5mm(±0.00	5 in)			
Smallest unit displayed		1mm							
Measuring units		m,in,ft							
Laser Class		Class II 635 nm, < 1mW							
Dust Protect/Splash proof		IP 54							
History measurement records		20							
Keyboard Type		Super Soft-Touch (Long life)							
Operating Temperature				-10°C to	50°C(14°F to 12	2°F)			
Storage Temperature		-20°C to 60°C(-4°F to 140°F)							
Battery Life		Up to 4,000 measurements							
Batteries		Type AAA 2 x 1.5V							
Auto. laser switch-off		after 0.5 min							
Auto instrument switch-off					after 3 min				

Size(HxWxD): 115mm x 48mm x 28mm Accessories:

2 x 1.5V AAA batteries and gift box with carrying case. Weight: 135g

Mini Laser Distance Meter

places where access difficultly.









Model LDM-20S

**Touch screen** 

Made for iPod iPhone iPad



Model iLDM-20



Features
Unit selectable (m, ft, in)
Area, Volume Calculations
Continuous Measurement
Min/Max Distance Tracking
Bluetooth 4.0 with APP support (iLDM only)
Reference level selectable
Water and dust proof
Display illumination and 3-line display.
Buzzer indication
1.4" TFT with Touch screen (LDM-25 only)

	LDM-20	LDM-20S	LDM-25			
Housing	Plastic	Metal	Plastic			
Batteries	2 x 1.5V "AAA"	Li-ion battery	2 x 1.5V "AAA "			
Display	2 Lines VA LCD	3 Lines STN	1.4" TFT Touch screen			
Measuring Range	0.05 to 20m(0.15ft to	65ft)				
Measuring accuracy( $2\sigma$ )	Typically: ±1.5mm(±0.06in)					
Smallest unit displayed	1mm					
History measurement records	20					
Measuring units	m,in,ft					
Laser Class	Class II 650 nm, < 1mW					
Dust Protect/Splash proof	IP 54					
Operating Temperature	-10°C to 50°C(14°F to	o 122°F)				
Storage Temperature	-20°C to 70°C(-4°F to	158°F)				
Battery Life	Up to 5,000 measurements					
Auto. laser switch-off	after 0.5 min					
Auto instrument switch-off	after 3 min					

Size(HxWxD): 100mm x 30mm x 22mm	Weig
	_
80mm x 30mm x 22mm(LE	)IVI-20S
Accessories:	



Features								
	iLDM-30	iLDM-50	LDM-30	LDM-50				
Bluetooth 4.0 with APP support	*	*						
Built-in level vial		*		*				
Unit selectable (m, ft, in)	*	*	*	*				
Area, Volume Calculations	*	*	*	*				
Continuous Measurement	*	*	*	*				
Min/Max Distance Tracking	*	*	*	*				
Reference level selectable	*	*	*	*				
Water and dust proof	*	*	*	*				
Display illumination and 3-line display.	*	*	*	*				
Buzzer indication	*	*	*	*				
Specifications								
iLDM-30/LDM-30 Measuring R	ange	0.05 to 30m	(0.15ft to 9	8ft)				
HDM 504 DM 50 Maranina D		0.05 + 50 (0.156 + 1646)						

iLDM-30/50/LDM-30/50 Pen-type Laser Distance Meters are designed to use easily as a high-precision measurement tool. New compact design fits in every pocket and safely in

Specifications	
iLDM-30/LDM-30 Measuring Range	0.05 to 30m(0.15ft to 98ft)
iLDM-50/LDM-50 Measuring Range	0.05 to 50m(0.15ft to 164ft)
Measuring accuracy(2σ)	Typically: ±1.5mm(±0.06in)
Smallest unit displayed	1mm
History measurement records	20
Measuring units	m,in,ft
Laser Class	Class II 635 nm, < 1mW
Dust Protect/Splash proof	IP 54
Operating Temperature	-10°C to 50°C(14°F to 122°F)
Storage Temperature	-20°C to 70°C(-4°F to 158°F)
Battery Life	Up to 5,000 measurements
Batteries	Type AAA 2 x 1.5V
Auto. laser switch-off	after 0.5 min
Auto instrument switch-off	after 3 min

Size(HxWxD): 136mm x 33mm x 26mm Weight: 130g



# Meterbox pro Software for Laser Distance Meter

#### 4.8 Bluetooth

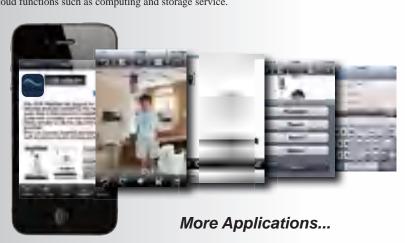
Model LDM-50

## Amazing features and built-in apps.

The Meterbox-iLDM software can support our Laser Distance Meter product transfering the measured data to the customer's smartphone. Customers can easily use the software to check, transfer or edit the data with table and chart. They also have powerful cloud functions such as computing and storage service.



Meterbox pro





B114

Model iLDM-30





# LDM-40B/60B/80B/100B/120B Professional Laser Distance Meter





Features									
	LDM-40B	LDM-60B	LDM-80B	LDM-100B	LDM-120B				
Measuring Range	40m(131.2ft)	60m(196.8ft)	80m(262.4ft)	100m(328.0ft)	120m(393.7ft)				
Area, Volume Calculations	*	*	*	*	*				
Indirect measurement using Pythagoras	*	*	*	*	*				
Addition/Subtraction	*	*	*	*	*				
Continuous Measurement	*	*	*	*	*				
Min/Max Distance Tracking	*	*	*	*	*				
Display illumination and multi-line display.	*	*	*	*	*				
Buzzer indication	*	*	*	*	*				
±1.5mm High Accuracy	*	*	*	*	*				
The LDM-B series enhanced the measurement ability of outdoor application( with 2x1.5V AA battery)									
The LDM-C series are with 3.7V Li battery, the LDM-I series are with Bluetooth.									

Specifications							
	LDM-40B	LDM-60B	LDM-80B	LDM-100B	LDM-120B		
Measuring Range	0.05 to 40m/ 0.15ft to 131.2ft	0.05 to 60m/ 0.15ft to 196.8ft	0.05 to 80m/ 0.15ft to 262.4ft	0.05 to 100m/ 0.15ft to 328.0ft	0.05 to 120m/ 0.15ft to 393.7ft		
Measuring accuracy(2σ)		T	ypically: ±1.5mm(±0.06 in)				
Smallest unit displayed			1mm				
Measuring units	m,in,ft						
Laser Class	Class II 635 nm, < 1mW						
Dust Protect/Splash proof	IP 54						
History measurement records	20						
Keyboard Type	Super Soft-Touch (Long life)						
Operating Temperature	-10°C to 50°C(14°F to 122°F)						
Storage Temperature	-20°C to 60°C(-4°F to 140°F)						
Battery Life	Up to 4,000 measurements						
Batteries	Type AAA 2 x 1.5V						
Auto. laser switch-off	after 0.5 min						
Auto instrument switch-off			after 3 min				

Size(HxWxD): 115mm x 48mm x 28mm Weight: 135g

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2 x 1.5V AAA batteries and gift box with carrying case.

## LDM-300/350/380

#### Professional Laser Distance Meter





Features			
	LDM-300	LDM-350	LDM-380
3.5" TFT Color LCD display	*	*	*
Built-in camera			*
Images(JPEG) & Video(3GP)			*
MicroSD memory card & datalogger function			*
Electrical compass		*	*
Angle measurement using tilt sensor(± 90°)		*	*
Area, Volume Calculations	*	*	*
Indirect measurement using Pythagoras	*	*	*
Addition/Subtraction	*	*	*
Continuous Measurement	*	*	*
Min/Max Distance Tracking	*	*	*
Timer (self-triggering)	*	*	*
Laser continuous	*	*	*
Stake out function	*	*	*
Display illumination and multi-line display.	*	*	*
Buzzer indication	*	*	*
Multifunctional end pieces	*	*	*
Bluetooth interface	*	*	*
Meterbox iLDM & cloud service	*	*	*





Meterbox pro



Meterbox ILDM & cloud service				
Specifications				
	LDM-300	LDM-350	LDM-380	
Measuring Range	0.05 to 100 m(0.15 ft to 328 ft)	0.05 to 150m(0.15ft to 492ft)	0.05 to 200m(0.15ft to 656ft)	
Measuring accuracy(2σ)	Typically: $\pm 1.5 \text{ mm}(\pm 0.06 \text{ in})$	Typically: ±1.5mm(±0.06in)	Typically: $\pm 1.5 \text{ mm} (\pm 0.06 \text{ in})$	
Smallest unit displayed	1mm	1mm	1mm	
Measuring units	m,in,ft	m,in,ft	m,in,ft	
Laser Class	Class II 635 nm, < 1mW	Class II 635 nm, < 1mW	Class II 635nm,<1mW	
Bluetooth distance	10m	10m	10m	
Camera pixels			5Mega	
Compass Measuring range		0-360°	0-360°	
Compass Measuring accuracy		± 2°	± 2°	
Tilt sensor Measuring range	± 90°	± 90°	± 90°	
Tilt sensor Measuring accuracy	± 0.5°	± 0.5°	± 0.5°	
Dust Protect/Splash proof	IP 54	IP 54	IP 54	
History measurement records	99	99	99	
Keyboard Type	Super Soft-Touch (Long life)	Super Soft-Touch (Long life)	Soft-Touch Keypad	
Operating Temperature	-10°C to 50°C(14°F to 122°F)	-10°C to 50°C(14°F to 122°F)	-10°C to 50°C(14°F to 122°F)	
Storage Temperature	-20°C to 70°C(-4°F to 158°F)	-20°C to 70°C(-4°F to 158°F)	-20°C to 70°C(-4°F to 158°F)	
Battery	3x 1.5V "AAA"	3x 1.5V "AAA"	Li-ion Battery	
Battery Life	Up to 8,000 measurements	Up to 5,000 measurements	Up to 5,000 measurements	
Auto laser switch-off	after 0.5 min	after 0.5 min	after 0.5 min	
Auto Power off	after 3 min	after 3 min	after 3 min	

www.cem-instruments.com

E-mail:cemyjm@cem-instruments.com



Size(HxWxD): 142mm x 62mm x 32mm

Weight: 191g



Model LDM-300



Model LDM-380

iLDM-150 with Meterbox-iLDM Pro Software

supports our laser distance meter transfering the

• Distance measuring data transferred to Cloud • Edit, analysis & Store the distance data Connecting with iPhone/iPod/iPad/Android

• Sharing the data with others by E-mail,

measured data to the customer's smartphone.

Four application mode:

Construction and acceptance

Normal distance measuring

family decorating

**Software Functions:** 

Phone/ Android Pad

facebook & twitter • Trend capture Cloud backup

• Traffic survey

Strengthening measurement optimization to adapt to the harsh environment

Fast measurement of 0.5

1mm measuring perception

— Measuring Range up to 160m(524.9ft)

Precision — High accuracy of ±1.5mm

**Professional Laser Distance Meter of outdoor application** 

Fast

## iLDM-150/100H/120H/150H/160H

LDM-H series Professional Laser Distance Meter of outdoor application









These professional Laser Distance Meters are designed to give special users a high accuracy, one person distance measuring and estimating tool to measure remote and difficult reaching places. The LDM-H series enhanced the measurement ability of outdoor application. Shortcut keys for addition, subtraction, Pythagoras, area and volume calculation make measuring fast and very reliable. The last 20 measurements are also stored.

Features
Area, Volume Calculations
Indirect measurement using Pythagoras
Indirect measurement using tilt sensor
Angle measurement using tilt sensor(± 90°)
Addition/Subtraction
Continuous Measurement & Timer (self-trigger
Min/Max Distance Tracking
Laser continuous
Stake out function
Display illumination and multi-line display
Multifunctional endpiece
Tripod thread
Bluetooth with APP support
Meterbox iLDM & cloud service







EN: 61326

EN: 60825-1









Model iLDM-150H

Specifications					
	iLDM-150	iLDM-100H	iLDM-120H	iLDM-150H	iLDM-160H
Measuring Range	0.05 to 70 m/	0.05 to 100m/	0.05 to 120m/	0.05 to 150m/	0.05 to 160m/
Wedsuring Range	$0.15 \; \mathrm{ft} \; \mathrm{to} \; 229 \; \mathrm{ft}$	0.15ft to 328.0ft	0.15ft to 393.7ft	0.15ft to 492.1ft	0.15ft to 524.9ft
Basic Specifications					
Measuring accuracy(2σ): Typically: ±1.5 mm(± 0.06 in); Smallest unit displayed: 1mm					
Measuring units: m,in,ft		Laser Class: Class	ass II 635 nm < 1	mW	
Tilt sensor Measuring range: ± 65°		Range of blueto	Range of bluetooth: 10m		
Dust Protect/Splash proof: IP 54		History measurement records: 99			
Keyboard Type: Super Soft-Touch (Long life)		Battery Life: Up to 8,000 measurements			
Auto laser switch-off: after 30 seconds		Auto instrument switch-off: after 3 min		· 3 min	

Size(HxWxD): 135mm x 58mm x 33mm Accessories:

Weight: 203g 2 x 1.5V AA batteries and gift box with carrying case.

## LDM-600/1000/1200/1500 Laser range telescope

Specifications				
	LDM-600	LDM-1000	LDM-1200	LDM-1500
Measuring Range	3 to 600 m	3 to 1000m	3 to 1200m	3 to 1500m
Measuring accuracy(2σ)	Typically: ±1m			
Measuring units	m,ft			
Laser Class	Class I			
Smallest unit displayed	1m			
Dust Protect/Splash proof	IP 54			
Operating Temperature	-10°C to 50°C(14°F to 122°F)			
Storage Temperature	-20°C to 60°C(-4°F to 140°F)			
Battery Life	Up to 3000 measurements			
Batteries	Li-on			
Auto laser switch-off	after 30 seconds			
Auto power off	after 3 min			

Size(HxWxD): 115mm x 75mm x 40mm Accessories: 2 x 1.5V AA batteries and gift box with carrying case.



Meterbox pro

www.cem-instruments.com E-mail:cemyjm@cem-instruments.com

www.cem-instruments.com E-mail:cemyjm@cem-instruments.com 16376

Model LDM-180

Professional Laser Distance Meter

LDM-65S/80S/280H/iLDM-65S/80S/280H



LDM-280H LDM-65S LDM-80S

\* \* \*

iLDM-280H iLDM-65S iLDM-80S







CE EN: 61326



LCD display, and the powerful embedded operating system, The series offer Bluetooth interface with computer or mobile phone connection, you can use meterbox software provided by CEM to interact with these range finders. The user can be back with measured data and and recorded images(JPEG) or video(3GP) in office to analyze the measured readings under the support of the software.

Meterbox iLDM software & cloud server support to transfer the measured data to the customer's smartphone for edit and storage.

LDM-180/200/220 professional Laser Distance Meters are integrated with 2.4" color TFT





Features			
	LDM-180	LDM-200	LDM-220
2.4" TFT 320x240 pixels color LCD display		*	*
Build-in Telescope			*
Electrical compass		*	*
Angle measurement using tilt sensor(± 65°)		*	*
Area, Volume Calculations	*	*	*
Indirect measurement using Pythagoras	*	*	*
Addition/Subtraction	*	*	*
Continuous Measurement	*	*	*
Min/Max Distance Tracking	*	*	*
Timer (self-triggering)	*	*	*
Laser continuous	*	*	*
Stake out function	*	*	*
Display illumination and multi-line display.	*	*	*
Buzzer indication	*	*	*
Multifunctional end pieces	*	*	*
Bluetooth interface	*	*	*
Meterbox iLDM & cloud service	*	*	*

Model LDM-200



for Laser Distance Meter Amazing features and built-in apps.

The Meterbox-iLDM software can support our Laser Distance Meter product transfering the measured data to the customer's smartphone. Customers can easily use the softwear to check, transfer or edit the data with table and chart.

They also have powerful cloud functions such as computing and storage service.

-	Specifications			
		LDM-180	LDM-200	LDM-220
	Measuring Range	0.05 to 80 m/ 0.15 ft to 229 ft	0.05 to 100m/ 0.15ft to 328ft	0.05 to 120m/ 0.15ft to 328ft
	Measuring accuracy(2σ)	Typically: ±1.5 mm(± 0.06 in)	Typically: ±1.5mm(±0.06in)	Typically: $\pm 1.5 \text{ mm} (\pm 0.06 \text{ in})$
100 100	Smallest unit displayed	1mm	1mm	1mm
	Measuring units	m,in,ft	m,in,ft	m,in,ft
-	Laser Class	Class II 635 nm, $< 1 \text{mW}$	Class II 635 nm, $< 1 \text{mW}$	Class II 635nm,<1mW
	Range of bluetooth	10m	10m	10m
_	Camera pixels			5Mega
	Compass Measuring range		0-360°	0-360°
	Compass Measuring accuracy		± 2°	± 2°
	Tilt sensor Measuring range	± 65°	± 65°	$\pm 65^{\circ}$
1	Tilt sensor Measuring accuracy		± 0.5°	± 0.5°
The same of the sa	Dust Protect/Splash proof	IP 54	IP 54	IP 54
The same of the sa	History measurement records	50	100	100
AND VIEW	Keyboard Type	Super Soft-Touch (Long life)	Super Soft-Touch (Long life)	Soft-Touch Keypad
	Operating Temperature	-10°C to 50°C/ 14°F to 122°F	-10°C to 50°C/ 14°F to 122°F	-10°C to 50°C/ 14°F to 122°F)
	Battery Life	Up to 8,000 measurements	Up to 5,000 measurements	Up to 5,000 measurements
	Auto laser switch-off	after 0.5 min	after 0.5 min	after 0.5 min
Mataria au Dan	Auto instrument switch-off	after 3 min	after 3 min	after 3 min
Meterbox Pro				

Size(HxWxD): 140mm x 55mm x 35mm Weight: 145g

Accessories:

2 x 1.5V AA batteries and gift box with carrying case.



These professional Laser Distance Meters are designed to provide special users a high accuracy, one person distance measuring and estimating tool to measure remote and difficult to reach. The compact and handheld design for indoor applications. Shortcut keys for addition, subtraction, Pythagoras, area and volume calculation make measuring fast and very reliable. The last 50 measurements are also stored.

The iLDM series offer Bluetooth interface with computer or mobile phone connection, you can use meterbox software provided by CEM to interact with these range finders.

Features

Area, Volume Calculations

Min/Max Distance Tracking Display illumination and 4-line display.

Addition/Subtraction Continuous Measurement

Buzzer indication Bluetooth interface

Indirect measurement using Pythagoras

Angle measurement using tilt sensor( $\pm 90^{\circ}$ )



EMC

EN: 61326

EN: 60825-1





Due to the shortcut keys addition and subtraction, as well as surface and volume calculations could be easier.



Model LDM-65S

Bluetooth

Model LDM-280H

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_			
Specifications			
	LDM-280H/ iLDM-280H	LDM-65S/iLDM-65S	LDM-80S/iLDM-80S
Measuring Range	0.05 to 80m(0.15ft to 262ft)	0.05 to 65m(0.15ft to 213ft)	0.05 to 80m(0.15ft to 262ft)
Measuring accuracy(2σ)	Typically: ±1.5mm(±0.06in)	Typically: $\pm 1.5 \text{ mm} (\pm 0.06 \text{ in})$	Typically: $\pm 1.5 \text{ mm} (\pm 0.06 \text{ in})$
Smallest unit displayed	1mm	1mm	1mm
Measuring units	m,in,ft	m,in,ft	m,in,ft
Laser Class	Class II 635 nm, < 1mW	Class II 635nm,<1mW	Class II 635nm,<1mW
Dust Protect/Splash proof	IP 54	IP 54	IP 54
History measurement records	99	99	99
Tilt sensor Measuring range		± 65°	± 65°
Tilt sensor Measuring accuracy		$\pm~0.5^{\circ}$	$\pm~0.5^{\circ}$
Keyboard Type	Soft-Touch Keypad	Soft-Touch Keypad	Soft-Touch Keypad
Operating Temperature	-10°C to 50°C(14°F to 122°F)	-10°C to 50°C(14°F to 122°F)	-10°C to 50°C(14°F to 122°F)
Storage Temperature	-20°C to 70°C(-4°F to 158°F)	-20°C to 70°C(-4°F to 158°F)	-20°C to 70°C(-4°F to 158°F)
Battery Life	Up to 4,000 measurements	Up to 4,000 measurements	Up to 4,000 measurements
Batteries	Type AAA 2 x 1.5V	Type AAA 2 x 1.5V	Type AAA 2 x 1.5V
Auto. laser switch-off	after 0.5 min	after 0.5 min	after 0.5 min
Auto power off	after 3 min	after 3 min	after 3 min

Size(HxWxD): 115mm x 54mm x 32mm Weight: 145g Accessories:

2 x 1.5V AAA batteries and gift box with carrying case.



EN: 61326

Model LA-101

LA-101 uses electronic signals to locate the edges of studs, joists or live AC wires through drywall or other common building materials. Depth detection selected by activation button for 1/2 inch, 1 inch and 1½ inch. Once LA-101 displays red LED and sounds an audible tone.

Specifications		
	Range	
Wood or Metal Studs	0∼ 1½ " (38mm)	
Live AC Wires	0∼ 2 " (50mm)	
Wood	±1/8 " (3mm)	
Metal	±1/4 " (6mm)	
Operating Temp	0°C∼40°C	
Surface Temp	-20℃~60℃	
Power Source	9V	

Size(HxWxD): 145mm x 60mm x 28mm

Weight: 150g

Accessories: 9V battery, gift box with carrying case.

#### LA-1010 3 in 1 Stud/Metal/AC Voltage Finder

#### Features and Benefits

Laser leveling, layout and stud locating on vertical and horizontal surfaces

wood, metal and live wire detection-detects wood up to 3/4" depth

180 degree pivoting laser plane with level and plumb vials

20' laser line projection onto work surface with 90 degree squaring

Two self contained hang pins to mount unit to work surface (vertical or horizontal)

LCD sensing and mode display with new target graphics

LED display with continuous live wire detection

Thumb dial adjustable feet for leveling the laser

Easy keypad operation

Ergonomically designed for comfort and grip

Requires 9V battery

Size(HxWxD): 180mm x 67mm x 38mm

Weight: 180g

Accessories: 9V battery, gift box with carrying case.





DM-01 Ultrasonic Distance Meter with Laser Target Pointer. The device has 5

#### **DM-01 Ultrasonic Distance Meter**



Model DM-01



memory units. Those data will be still stored even if power off.

• Measures in imperial/metric

Start point selection

Data store/recall

Conputes areas and volumes

• 5 groups of value in memory

Sum of lengths

Auto/manual shut-off

LCD backlight

 Beeps for wrong reading finding and reading confirmation

Laser pointer

Specifications Measuring range 0.5 ~ 16m (1.64 ~ 52.48 feet) +/-0.4 within 6m (20 feet) and +/-0.8 above 6m Accuracy Conditions 0 ~ 40°C, 45% ~ 90%RH Power supply 9V battery Current consumption Stand-by current:<=2 Ua; Operating current:20~50mA Auto shut-off 120 seconds

Size(HxWxD): 154mm x 61mm x 46mm

Weight: 190g

Accessories: 9V battery, gift box with carrying case.



1500 Concrete Scanner Provides a real-time view of the inside of concrete structures and generates true images automatically for direct on-site evaluation of scan data by the user - no expert skills required. There are three scan modes for specific applications: Quickscan detection, Quickscan recording and Imagescan . It is also suited for determining where to place measuring spots or drill holes in ceiling with wooden beams, light-construction walls, underfloor heating systems etc.

#### **Features**

DT-1500

**Concrete Scanner** 

A real-time view of the inside of concrete structures and generates true images automatically for direct on-site evaluation of scan data by the user - no expert skills required Three scan modes for specific applications: Quickscan detection, Quickscan recording and Imagescan (2-D and 3-D data visualization with top view and cross sectional views) Compact all-in-one hand-held design offers easy, user-friendly operation, quick start-up for speed of use plus unmatched data visualization

Displays a top view of the scan for easy object mapping plus cross sections in both directions for easy identification of multiple layers in concrete structures

Powerful monitor unit for in-depth, on-site scan analysis plus PC software for subsequent data evaluation and documentation

#### Specifications

Detection depth: <150 mm

Accuracy of depth indication: <100 mm:  $\pm 10$  mm;>100 mm:  $\pm 15$  %

Localisation accuracy: ±10 mm

Minimum distance between two neighbouring objects: 40 mm

#### Applications

- Locating rebars, tendons, metal and plastic conducts, glass-fibre cables, voids and wood in dry concrete structures at depths of up to
- Minimizes the risk of hitting concealed objects when drilling anchor holes or through holes, breaking out openings and in diamond coring and sawing work
- Rebar extension (post-installed rebar connections) in structural applications
- Inspection of floors, decks, slabs, balconies, etc. in structures such as tunnels, bridges and buildings
- Detection of voids and cavities





CEM



**Size(HxWxD):** 280mm x 130mm x180mm

Weight: 2.3kg

Accessories: 3.7V Li battery, power adaptor, gift box with carrying case.



www.cem-instruments.com

E-mail:cemyjm@cem-instruments.com

The EVSE-200 is an extender for interfacing Electric Vehicle Supply Equipment (EVSE) to test socket of installation tester for verification of electrical safety and functional testing. It is intended for testing Mode 3 EV supply equipment with type 2 connector.

The ESVE-200 adapter allows you to conduct tests in combination with appropriate test instruments like an installation tester (for example DT-6650 Series).

#### **Functions**

- PE Pre-Test: With this safety feature the PE conductor can be tested for possible presence of dangerous voltage against earth.
- Proximity Pilot (PP) state "Cable Simulation": With PP State rotary switch the adapter can simulate various current capabilities of charging cables.
- Control Pilot (CP) state "Vehicle Simulation": With CP State rotary switch selector various charging states can be simulated.
- Simulation of CP error "E"

**EVSE-200** 

EVSE Adapter

- Simulation of PE error (Earth fault)
- Simulation of PE error (Earth fault)

#### **Product information**

- Suitable to vehicle charging stations with charging mode 3
- EV-connectors for type 2 and type 1
- Measuring terminals L1, L2, L3, N and PE to connect test device like installation tester to perform safety and functional tests.
- Terminals for CP signal output to check communication between adapter (=simulated electrical vehicle) and charging station.

Product highlights

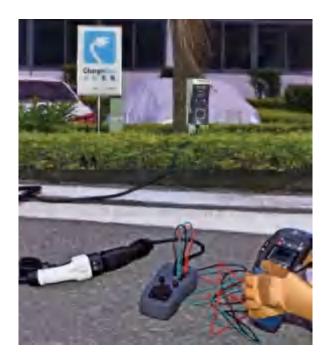
- Separate phase indication by three LED lamps for easy check if voltage is present.
- Mains socket offering the possibility to connect an external load to check if the electric power meter works and counts in the right manner.
- IP 54 rating Dust and splashing water protected

Input	Max.250V (single -phase system)/max.430V (three -phase system).50 /60HZ,MAX 10		
EVC -200 -Connector	AC charging mode 3. Suitable for type 2 wall top contact or fixed cable with vehicle connection (type 2. 7P operational phase)		
EVC -100 -Connector	AC charging mode 3. Suitable for type 1 with vehicle connection (Type 1,5P single -phase)		
Dimensions(B*H*L)	235*60*60mm(length without connecting cable)		
Weight	832g(Weight without connecting cable)		
IP protection	IP54		
Safety	IEC/EN 61010-1 IEC61010-2		
Overvoltage category	CAT II 300V		
Pollution degree	2		
Protection classification	double insulation		
Altitude	up to 2000 meters above sea level		
Working temperature range	0°C40°C		
Maximum relative humidity	95 %RH (0°C40°C), non-condensing		
Storage temperature range	-10°C50°C		
Maximum relative humidity	90 %RH ( -10°C40°C) 80 %RH (40°C60°C)		
PE pre-test	yes		
	open(Error condition or disconnection of plug)		
	13A Coding for maximum current of the EV		
PP simulation	20A cable.		
	32A EVSE is connected and can operate in		
	any of these coding position.		
CP simulation	states A (EV disconnected)		
	states B (EV connected)		
	states C (EV charged without ventilation)		
	states D (EV charged with ventilation)		
CP error"E"	on(CP short to PE via diode)/off		
PE error	on (PE error)/off		

Size(HxWxD): 208mm x 105mm x50mm



Model EVSE-200



### High Definition Video Borescope



High definition 8" Color TFT LCD, supporting 4MP photo/full HD video, time/date display and multi-languages. Video and images can also be transferred to your PC via the SD Card or USB cable(included). Modern design housing with waterproof (IP67) flexible gooseneck retains configured











# **High Definition Video Borescope**



**BS-380** 

- 8" color LCD TFT with high definition 800x600 resolution
- Compact, high-resolution water-proof camera probe
  Camera head with four built-in bright LED lamps with dimmer to illuminate viewed object
- Camera head with four built-in origin LED ramps with diffine Glare-free close-up field of view
   SD memory card is included to store more than 14,600 images
   Video recording (up to 2 hours) with voice annotation
- · AV output for viewing images and video directly on a monitor
- Video and images can be transferred to PC via the SD card or USB output

System Specifi	cations
LCD screen type	8" 800x600 TFT LCD + TP
Wi-Fi Protocol/Standard	IEEE 802.11b/g/n
Digital zoom	5.0x
Image resolution	2592x1944 (Postposition) / 1280x720
Video Resolution	1920x1080(Postposition) / 1280x720
Function	Photo, Video, Brightness Adjustment, Menu, Image Zoom, Image rotation
Interface	SD, mini USB, HDMI, Charging interface
Battery	Li-lon 3.7V 2200mAh
Camera Specifications	
Camera diameter	Ø5.5mm
Binocular insertion tube	Direct and lateral vision
Pixel	1 Megapixels
Viewing direction	5mm~180mm
Viewing angle	68°
Lighting type	6 LED with adjustable brightness
Gooseneck length	1m/1.5m

Specifications (BS-183W)		
Camera diameter	6mm(0.217")	
Camera Pixels	1280x720	
Max number of frames(FPS)	30fps/s	
Gooseneck length	1m(39")	
Viewing distance	5cm	
Fov	55°	
Operator's lever control	360° manual shake of head	
Shaking head locking	Locking, Slow Speed	
Wi-Fi Protocol/Standard	IEEE 802.11b/g/n	
Wi-Fi Support system	iOS , Android	
Lighting type	6 LED with adjustable brightness	
Working voltage	Li Battery 3.7V/1400mA	
Wired connections	Yes	



Weight: 584g

Accessories: 3.7V Li battery, power adaptor, mirror, hook, USB cable, AV cable, SD memory card, magnet, gift box with carrying case.





Features a 7" (177.8mm) high definition color LCD monitor







Camera Tip features built-in LED lights

Inspection Camera with Wireless Handset & 6mm

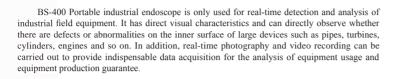
Semi-Rigid Cable, Articulating (360°) Probe (1m)











#### Features:

- Stereoscopic measurement
- 5" color LCD TFT with high definition 640x480 resolution
- Compact, high-resolution water-proof camera probe
- Camera head with four built-in bright LED lamps with dimmer to illuminate viewed object
- Glare-free close-up field of view
- SD memory card included to store more than 14,600 images
- Video recording (up to 5 hours) with voice annotation
- HDMI output for viewing images and video directly on a monitor
- · Video and images can be transferred to PC via the SD card or USB output
- Includes SD card, 12V rechargable Li-Polymer battery, patch cable, AC adaptor, USB cables, camera probe, and hard carrying case

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Model BS-400



Features a 4" high definition color LCD monitor

System Specifications			
	BS-400	BS-400A	BS-400B
LCD screen type	5" 640x480 TFT LCD		
Wi-Fi Protocol/Standard	IEEE 802.11b/g/n		
Wi-Fi Support system	iOS, Android		
Operator's lever control	none	360° electric rocker	360° electric rocker
Digital zoom	5.0x		
Image rotation	90°	360°	360°
Image resolution	2592x1944	1280x720	1280x720(Binocular)
Video Resolution	1920x1080	1280x720	1280x720 (Binocular)
Function	Photo, Video, B Wi-Fi Transmissio		Menu, Image Zoom,
Interface	SD、mini USB、	HDMI、Headset	
Battery	Li-lon 12V 2.5A		
Stereoscopic measurem	ent specifications		
Distance	none		Distance between two points
Point to line	none		Vertical distance between pointand and custom
Depth	none		Point direct lying depth/ height to custom plane
Area / line	none		Perimeter and area of multiple points
Effective measurement range	none		8mm~80mm
Measurement accuracy	none		0.1~0.2mm
Camera Specifications			
Camera diameter	Ø5.5mm/ Ø6mm/8	3mm/17mm	
Pixel	5 Megapixels(17mm)/1 Megapixels		
Viewing direction	5mm~180mm/5cm	5mm~180mm/5cm~15cm	
Viewing angle	90°/ 68°		
Lighting type	6 LED with adjust	able brightness	
Gooseneck length	1m/1.5m		

Size(HxWxD): 240mm x 160mm x 100mm Weight: 584g

Accessories: 3.7V Li battery, power adaptor, mirror, hook, USB cable, AV cable, magnet, gift box with carrying case.

## BS-280/280W/288

#### Video Borescope



Φ17mm 5Mega Pixels Camera Probe











High definition 3.5" Color TFT LCD, supporting photo/video, time/date display and multi-languages. Video and images can also be transferred to your PC via the SD Card or USB cable(included). Modern design housing with waterproof(IP67) flexible gooseneck retains configured shape.

3.5" Color TFT LCD Flexible gooseneck imager head with

Specifications

inspections in hard to reach areas Camera and Video function

waterproof and Easily perform visual

Compatible with TV(TV-OUT)

Allows user to view image on LCD monitor

High visibility and 10 degree adjustable LED lighting

Rechargeable battery with USB cable Support SD memory card extention

Menu with multinational language

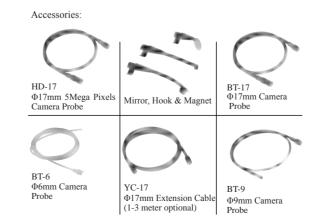


BS-280 BS-280W BS-288 3.5"TFT LCD screen type LCD Pixels 320×240 The max number 30FPS 30Hz of frames(FPS) Picture format JPG(640x480) JPG(640x480/2592x1944) 120 x 90 (InfrarRed resolution) from the camera MP4/AVI (640x480) MP4/AVI(640x480/720p) 120 x 90 (InfrarRed resolution) Camera video format Thermal sensitivity <60 mk Temperature range -20°C to 120°C Area 3 boxes with max. /min. /average Color palettes GRAY/IRON Auto focus 5 Megapixel Gooseneck length 1m(39") 1m(39") Camera diameter 17mm(0.66") 19.5mm(0.77") 5cm to 15cm 10cm to ∞ Viewing distance 68° Viewing angle 3xZoom, 5°/15°/30°/90° Zoom and Rotation 2xZoom, 90° rotation 2xZoom, 90° rotation rotation Wi-Fi Support system iOS, Android iOS. Android 2GB/Max 32GB SD card 2GB/Max 32GB Working voltage Li Battery 3.7V/1800mA Li Battery 3.7V/1800mA Support English, French, Support English, French, German, Spanish Language

**Size(HxWxD):** 240mm x 160mm x 100mm Weight: 584g

#### Accessories:

3.7V Li battery, power adaptor, mirror, hook, magnet, gift box with carrying case.



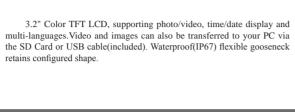












Specifications					
	BS-150	BS-150B	BS-151		
LCD screen type	3.2"TFT	3.2"TFT	3.5"TFT		
LCD Pixels	320×240				
The max number of frames(FPS)	30FPS/S	30FPS/S			
Picture format from the camera	JPG(640x480	0)			
Camera video format	3GP	AVI(720x240)	MP4(640x480)		
Gooseneck length	1m(39")				
Camera diameter	17mm(0.66")				
Viewing distance	5cm to 15cm				
Viewing angle	68°				
Zoom	2.0X				
Rotation		Mirror 180°	90°		
SD card	Max 8GB 2GB/Max 8GB				
Working voltage	Li Battery 3.7V/1800mA				
TV-OUT	PAL/ NTSC NTSC PAL/ NTSC				
Language	Support English,French,German,Spanish				

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Model BS-151

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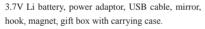
EN: 61326

Model BS-150

Specifications				
	BS-150	BS-150B	BS-151	
LCD screen type	3.2"TFT 3.2"TFT 3.5"TFT			
LCD Pixels	320×240			
The max number of frames(FPS)	30FPS/S			
Picture format from the camera	JPG(640x480	0)		
Camera video format	3GP	AVI(720x240)	MP4(640x480)	
Gooseneck length	1m(39")			
Camera diameter	17mm(0.66")			
Viewing distance	5cm to 15cm			
Viewing angle	68°			
Zoom			2.0X	
Rotation		Mirror 180°	90°	
SD card	Max 8GB 2GB/Max 8GB			
Working voltage	Li Battery 3.7V/1800mA			
TV-OUT	PAL/ NTSC	NTSC	PAL/ NTSC	
Language	Support English, French, German, Spanish			

**Size(HxWxD):** 240mm x 160mm x 100mm Weight: 584g

#### Accessories:







2.4" Color TFT LCD, supporting real-time live view. Waterproof(IP67) flexible gooseneck retains configured shape.

Features	
Support real-time live view	
Highlighted with LED to supp	oort the operation in the dark
4 x AA battery	
Standby function to support the	ne charge
Support rotating the image 18	0° from top to bottom
Flexible gooseneck imager he	ad with waterproof
2.4" Color TFT LCD	
Specifications	

Specifications	
LCD screen type	2.4"TFT
LCD Pixels	480x234
The max number of frames(FPS)	30FPS/S
Gooseneck length	1m(39")
Camera diameter	17mm(0.66")
Viewing distance	5cm to 15cm
Viewing angle	68°
Working voltage	4 x AA

Size(HxWxD): 240mm x 160mm x 100mm

#### Weight: 584g Accessories:

4 x AA battery, mirror, hook, magnet, gift box with carrying case.

#### Features Support real-time live view TV peripherals to support operations in other devices Highlighted with LED to support the operation in the dark Built-in 1800mAh lithium battery, support USB charging Standby function to support the charge Support rotating the image 180° from top to bottom Flexible gooseneck imager head with waterproof 3.5" Color TFT LCD Camera and Video function

Specifications	
LCD screen type	3.5"TFT
LCD Pixels	320x240
The max number of frames(FPS)	30FPS/S
Gooseneck length	1m(39")
Camera diameter	17mm(0.66")
Viewing distance	5cm to 15cm
Viewing angle	68°
Zoom	2.0X
Working voltage	Li Battery 3.7V/1800mA
TV-OUT	PAL/NTSC system







Size(HxWxD): 240mm x 160mm x 100mm Weight: 584g Accessories: 3.7V Li battery, power adaptor, mirror, hook, magnet, gift box with carrying case.

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EN: 61326

Wi Fi







Model BS-220W Specifications				
Gooseneck length	1.5m			
Camera diameter	5.5mm(0.216")			
Pixels	1280x720			
Optimum focal length	4cm~10cm			
Binocular insertion tube	Direct and lateral vision			
FOV	70°			
Wi-Fi Protocol/Standard	IEEE 802.11b/g/n			
Wi-Fi Support system	Android, iOS			
Wi-Fi transmission distance	≥10m			
Battery	Li-lon 3.7V 2600mAh			
DC Charge	DC 5V 2A			

Size(HxWxD): 30mm x 122mm x 18mm Weight: 78g

**Accessories:** 3.7V Li battery, power adaptor, mirror, hook, USB cable, AV cable, magnet, gift box with carrying case.

#### BS-060 Video Borescope

2.4" Color TFT LCD, supporting real-time live view. Waterproof(IP67) flexible gooseneck retains configured shape.

Features
Support real-time live view
Built-in 2000mAh lithium battery, support USB charging
Standby function to support the charge
Flexible gooseneck imager head with waterproof
Camera function

Specifications	
Color TFT LCD screen type	2.4"TFT (480x234 Pixels)
The max number of frames(FPS)	30FPS/S
Gooseneck length	1m(39")
Camera diameter	17mm(0.66")
Viewing distance	5cm to 15cm
Viewing angle	68°
Working voltage	Li Battery 3 7V/2000mA

Size(HxWxD): 135mm x 68mm x 30mm

Weight: 180g Accessories:

3.7V 1400mAH Li battery, gift box with carrying case.

# EMC EN: 61326 Model BS-050 Size(HxWxD): 135mm x 68mm x 30mm Weight: 173g

Model BS-060

# Accessories: Model CT-050 3.7V 1400mAH Li battery, gift box with carrying case.

# BS-050 Borescope / CT-050 Camera Tester

Features (CT-050 Camera Tester )
Install 1400mAh Li battery
High definition 2.4" TFT LCD resolution 480x234
NTSC/PAL switch automatic
No video signal input, then will switch to standby model automatic. If video signal detected will arouse automatic and enter work state.
Easy to use and carry

Specifications				
		BS-050	CT-050	
LCD screen type	2.4"TFT	*	*	
LCD Pixels	480x234	*	*	
The max number of frames(FPS)	30FPS/S	*		
Gooseneck length	1m(39")	*		
Camera diameter	17mm(0.66")	*		
Viewing distance	5cm to 15cm	*		
Viewing angle	68°	*		

Perfect tool for HVAC inspection, vent pipe, machine equipment, engine, automotive, parts assembly, construction sites, wind turbines inspection. It will play an important role in seeing the digestion or other glitches when the place is hard to reach. It can be easily connected with your phone, computer and other terminals via wifi.

Model BS-100W Specifications		
Gooseneck length	1m/1.5m/2m Optional	
Camera diameter	9mm(0.354")	
Pixels	1280x720/640x480	
Optimum focal length	4cm~10cm	
FOV	70°	
Wi-Fi Protocol/Standard	IEEE 802.11b/g/n	
Wi-Fi Support system	Android ,iOS	
Wi-Fi transmission distance	≥10m	
Battery	lithium battery 4.2V 1800mA	
DC Charge	DC 5V / 2A	

Size(HxWxD): 30mm x 122mm x 18mm Weight: 78g

Accessories: 3.7V Li battery, power adaptor, mirror, hook, USB cable, AV cable, magnet, gift box with carrying case.

#### BS-182W Video Borescope

182W/183W is a Wi-Fi borescope that can wirelessly stream high-quality video from a camera at the tip of a long probe to the screen of a nearby iPhone or iPad or Android smartphone or tablet computer. Typical applications include inspections of hard-to-reach or hard-to-see areas like crowded engine compartments, equipment enclosures or HVAC ductwork.

Specifications				
	182W	183W		
Max number of frames(FPS)	30fps/s	30fps/s		
Wi-Fi Protocol/Standard	IEEE 802.11b/g/n	IEEE 802.11b/g/n		
Wi-Fi Frequency range	2.400 ~ 2.4835GHz	2.400 ~ 2.4835GHz		
Wi-Fi Modulation mode	802.11b/g/n	802.11b/g/n		
Wi-Fi Support system	iOS, Android	iOS, Android		
Wi-Fi Distance	10m(Indoor)	10m(Indoor)		
Gooseneck length	1m(39")	1m(39")		
Camera diameter	17mm(0.66")	5.5mm(0.217")		
Rotation		360°		
Viewing distance	5cm ~ 15cm	5cm		
Viewing angle	68°	55°		
Working voltage	Li Battery 3.7V/1400mA	Li Battery 3.7V/1400mA		

# Meterbox iScope

Meterbox iScope

#### BS-10 OTG & Micro USB Inspection Borescope Camera

This endoscope can be used everywhere and everytime you want only by your phone. Small size, light weight, front end module shell diameter 8mm, the middle part of the installation of a control box, can adjust the brightness of six LED lights, capture the image after the photo directly take photos stored within the Android mobile phone, video can record the whole process of examination convenient for observation and analysis of follow-up.

Camera Specifications		
Camera diameter	Ø5.5mm	Ø8mm
Resolution	640x480	1280x1080
Viewing direction	2cm~8cm	2cm~10cm
Viewing angle	70°	
Lighting type	6 LED with adjustable brightness	
Cable length	1m/1.5m/2m/3.5m/5m	
Power supply	5V DC Via OTG USB Port	
Computer operating system	XP/Win7/Win8/Vista	
Photo format	JPEG	
Video format	AVI	
Waterproof level	IP67	



Model BS-182W

Model BS-10 Mirror, Hook & Magnet

# **Alcohol Tester**



800A/800B are simple to use, rapid response tester that are used to determine whether or not a person has any alcohol in their breath. They use the fuel cell sensor, so the reading is impossible to be affected by anything in the subject's breath other than alco-

800A is with red and blue backlit alarm for drunkenness. 800B is with red LED alarm for drunkenness.

Features			
	800A	800B	
Fuel cell sensor is high accuracy and reliability	*	*	
Short warm up time, fast response and recovery time	*	*	
Magnificent man-machine interaction interface	*	*	
Real time reading display	*	*	
Two stages acousto-optic alarm for drink and drunkenness	*	*	
Auto power off under lack of pressure	*	*	
Refuse test and interruption indication	*	*	
Five detection unit selectable (mg/L,mg/100ml,g/L,%BAC,%BAC), Alarm level ad-	*	*	
justable	*	*	
Disposable backflow blowing nozzle design, safety and health	*	*	
High capacity rechargeable battery power	*	*	
Multinational drunk driving alarm threshold selection	*	*	
Red and blue backlit alarm	*		
Red LED alarm		*	
Datalogger and storage function		*	
Detection data centralized management and USB interface to PC		*	
Built-in Bluetooth, the detection data can be transferred and shared with cloud storage and cloud computing of the meter's cloud service by a smart mobile.		*	
The historical record of the inquiry function		*	



Model 800A

Specifications	
Detection range	0.000mg/L ~1.500mg/L
Resolution	0.001mg/L
Accuracy	C<0.400: ±0.020mg/L
	0.400\(\leq C < 1.000 : \pm 5\%
	C≥1.000: ±20%
Repeatability	C<0.400 : 0.007mg/L
	0.400\(\leq C < 1.000 : 1.75\%
	C≥1.000 : 6%
Calibration cycle	6 months
Operation temperature range	0 ~ 50°C
Storage temperature range	-10 ∼ 60°C
Breath flow continuity	3s (flow: >20L/min)
Working voltage	7.4V (Rechargeable battery)

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Model 800B

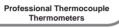
**Size(HxWxD):** 240mm x 160mm x 100mm Weight: 584g

Accessories: 7.4V Li battery, power adaptor, pipe, gift box with carrying case.

## **Professional Multifunction Environment Meters**







CO-110

Gas Detector

DT-321/321S

**Humidity & Temperature Meters** 

DT-171/172

perature and Humidity Dataloggers





DT-8851/8852

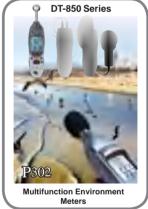


Sound Level Meters









DT-8890/8890A



DT-179

**Carbon Monoxide** 

Datalogger (P288)

DT-185

DT-171T

Type-K temperature

Datalogger (P285)

Light Datalogger (P287)

DT-186

Sound Level Datalogger (P287)

DT-172

Temperature & Humidity

Datalogger (P286)

Anemometer Datalogger (P287)

DT-171

DT-174B

Humidity/Temperature & Air Pressure Datalogger (P288)

> 308 OB.

DT-193H1

Temperature & Humidity

Datalogger (P283)

Humidity & Temperature Datalogger (P285)

DC Voltage Datalogger (P286)

DT-171V

DT-178A

3-Axis Vibration Datalogger (P289)

DT-194T Temperature

Datalogger (P284)

EMC

EN: 61326

#### Laboratory Temperature & Humidity / Sound Level / CO Datalogger





















EN: 61326

Features  Humidity & temperature readings, plus Time and Date  Sound Level , humidity & temperature readings, plus Time and Date  Carbon monoxide , humidity & temperature readings, plus Time and Date  Measures Humidity & Temperature plus included software calculates and graphs Dew Point, Wet Bulb, and GPP (grains per pound)  Large dual graphical LCD displays with adjustable vertical and horizontal TAC resolution  Internal memory records up to 80 Million data points  7" TFT color LCD indicates percentage of memory remaining  Replaceable probe does not require recalibration		1701	170
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7" TFT color LCD indicates percentage of memory remaining	d *	*	*
	*	*	*
Replaceable probe does not require recalibration	*	*	*
	*	*	*
Detachable probe extends up to 1 meter for measurements in close environments	d *	*	*
Audible and visual alarm with Hi/Low setpoints	*	*	*
Output socket used with optional external alarm module	*	*	*
Scroll the cursor to display selected data recorded	*	*	*
Desk or wall mount	*	*	*
Bluetooth interface to smartphone/PC	*	*	*
Smart touchscreen	*	*	*
Sample rate 1 second	*	*	*

Specification							
		1700	1701	1702			
Relative Humidity Range	0 ~ 100.0%	*	*	*			
Temperature Range	-28.0 ~ 60.0°C (-20.0 ~ 140.0°F)	*	*	*			
Accuracy	±3% Relative Humidity; ±1.8°F/±1°C		*	*			
Sound level meter			*				
Sound level Range	Auto: 30dB~130dB (31.5HZ ~ 8kHZ)		*				
Accuracy	±1.4dB (IEC61672 -1 CLASS2)		*				
Carbon monoxide meter				*			
Carbon monoxide Range	0 ~ 1000PPM			*			
Accuracy	±5% or ±10 PPM			*			

Size(HxWxD):180mm x 115mm x 18mm Accessories:

Weight: 450g 3.7V Lithium battery, software and clamshell.

#### DT-1703 Desktop Indoor Air Quality CO<sub>2</sub> Monitor

#### **Features**

- Checks for Carbon Dioxide (CO<sub>2</sub>) concentrations (0 to 9,999ppm) and displays Temperature (14 to 140°F/-10 to 60°C) and Relative Humidity (0.1 to 99.9%) readings
- NDIR (non-dispersive infrared) CO<sub>2</sub> sensor
- Indoor Air Quality displayed in ppm with Good, Normal, Poor indication
- Displays Year, Month, Date, and Time
- Max/Min CO<sub>2</sub> value recall function

Specific	ations		
Function	Range	Resolution	Accuracy
CO <sub>2</sub>	0-9999ppm	1ppm	±5%±75ppm
Temperature	-10 to $60^{\circ}\text{C}/14$ to $140^{\circ}\text{F}$	0.1°C/°F	±1°C/1.8°F
Humidity	0.1 to 100.0%RH	0.1%RH	±3%RH(25°C/30 to 99%RH) ±4%RH(25°C/0 to 30%RH)

Size(HxWxD): 205mm x 110mm x 35mm

Weight: 350g

Accessories: NiMH battery, gift box with carrying case.

# • 7" Color TFT LCD Display



Specific	ations		
Function	Range	Resolution	Accuracy
CO <sub>2</sub>	0-9999ppm	1ppm	±5%±75ppm
Temperature	-10 to 60°C/14 to 140°F	0.1°C/°F	$\pm 1^{\circ}C/1.8^{\circ}F$
Humidity	0.1 to 100.0%RH	0.1%RH	±3%RH(25°C/30 to 99%RH) ±4%RH(25°C/0 to 30%RH)



Model 1703

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DT-175CV1

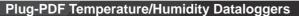
AC Current & Voltage Datalogger (P220)

DT-100B

**Bluetooth Transmitter** 



#### DT-191/191A/191B



















191 series Plug-PDF Temperature/Humidity datalogger can monitor temperature and humidity values efficiently and conveniently for long time by using the Datalogger.

The readings are saved in the logger and simply read out by your PC with USB interface.

Features			
	191	191A	191B
Temperature datalogger	*		
Temperature and humidity datalogger		*	
Temperature and air pressure datalogger			*
Immediately USB flash disk PDF report	*	*	*
Freely selectable sample rate 1 min to 24h	*	*	*
LCD Max/ Min display	*	*	*
Download collected data through USB interface	*	*	*
Battery life :up to 1 year (1 minute sample rate)	*	*	*
Alarm display if user-defined maximum/minimum value is exceed	*	*	*
Analysis software used to view graph for logging data	*	*	*

Specifications						
	191	191A	191B			
Temp. range	-30 to 70°C/ -22 to 158°F	-30 to 70°C/ -22 to 158°F	-30 to 70°C/ -22 to 158°F			
Temp. accuracy	±1°C/1.8°F	±1°C/1.8°F	±1°C/1.8°F			
Temp. resolution	0.1°C/0.1°F	0.1℃/0.1°F	0.1°C/0.1°F			
Humidity range		0 to 100%RH	0 to 100%RH			
Humidity accuracy		±3.5%RH	±3.5%RH			
Humidity resolution		0.1%RH	0.1%RH			
Air pressure range			300 to 1200hpa			
Air pressure accuracy			±3hpa			
Air pressure resolution			1hpa			
Memory	40020	40020(20010 / channel)	40020(13340 / channel)			
Sample rate	1min-24 hours					
Battery life	1year (Sample rate 1r	minute)				
PDF report	Immediately USB flas	h disk PDF report				
Analysis software	Windows XP/Vista/Wi	Windows XP/Vista/Win7/Win8/Win10				

Accessories: 3V Lithium battery, software and clamshell. Size(HxWxD): 75mm x 35mm x 16mm



#### DT-192A/192B

ing are down via two function keys.

#### Temperature & Humidity Datalogger

A compact data logger is capable of recording data for months, even

long-term shipping and storage. All data viewing, data export, and print-









Features		
	192A	192B
Temperature and humidity datalogger	Temperature	Temperatur & humidity
Freely selectable sample rate 1 sec to 24h	*	*
LCD Max Min display	*	*
Download collected data through USB interface	*	*
Battery life :up to 2 years (1 minute sample rate)	*	*
Alarm display if user-defined maximum/minimum value is exceed	*	*
Analysis software used to view graph for logging data	*	*

Specifications			
	192A	192B	
Internal Temperature sensor range	-40 to 80°C (-40 to176°F)	-40 to 80°C (-40 to176°F)	
Probe Temperature sensor range	-50 to 110°C(-58 to 230°F)	-50 to 110°C (-58 to 230°F)	
Temperature resolution	0.1°C/ 0.18°F	0.1°C/0.18°F	
Temperature best accuracy	±0.3°C/±0.54°F	$\pm 0.3$ °C / $\pm 0.54$ °F	
Humidity sensor range		5% to 95%RH	
Humidity resolution		0.05%RH	
Humidity best accuracy		±2%RH	
Memory capacity	52,000 Samples (over 2 channels)	52,000 Samples (over 3 channels)	
Sampling rate	Minimum: Once every second Minimum: Once every s Maximum:Once every 24 hours Maximum:Once every 2		
Dew Point		LCD and Software indication	
Alarm	BEEP alarm	BEEP alarm	
PC Connection	Micro USB	Micro USB	
Battery life	2 years depending on sampling rate	e and operating conditions	
External Temperature sensor type	NTC Temperature sensor 2.5m cab	le length	
Connection	Mini USB		

Accessories: 3.6V Lithium battery, software and clamshell.

Size(HxWxD): 75mm x 62mm x 32mm

Weight: 150g







Connect to PC via USB cable





# 193T1/193H1/193G/193TB1/193HB1/193TN1/193HN1 Plug-PDF Temperature/Humidity/Vibration Dataloggers



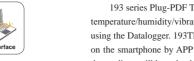


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193 series Plug-PDF Temperature/Humidity/vibration dataloggers can monitor temperature/humidity/vibration values efficiently and conveniently for long time by using the Datalogger. 193TB1/193HB1 are with bluetooth, the readings can be read on the smartphone by APP software. 193TN1/193HN1 are with NB-IOT function, the readings will be uploaded to cloud server and can be read on the smart phone.

The readings are saved in the logger and simply read out by your PC with USB interface.

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Features							
	193T1	193H1	193G	193TB1	193HB1	193TN1	193HN1
Temperature datalogger	*			*		*	
Temperature and humidity datalogger		*			*		*
Temperature ,humidity and vibration datalogger			*				
Immediately create PDF report in USB flash disk	*	*	*				
Freely selectable sample rate 1 min to 24h	*	*	*				
LCD Max/ Min display	*	*	*				
Download collected data through USB interface	*	*	*	Blue	etooth	NB-	TOI
Battery life: up to 1 year (1 minute sample rate)	*	*	*				
Alarm LED indication	*	*	*				
Analysis software	*	*	*				

Specifications			
	193T1/193TB1/193TN1	193H1/193HB1/193HN1	193G
Temp. range	-30 to 70°C/ -22 to 158°F	-30 to 70°C/ -22 to 158°F	-30 to 70°C/ -22 to 158°F
Temp. accuracy	±1°C/1.8°F	±1°C/1.8°F	±1°C/1.8°F
Temp. resolution	0.1°C/0.1°F	0.1°C/0.1°F	0.1°C/0.1°F
Humidity range		0 to 100%RH	0 to 100%RH
Humidity accuracy		±3.5%RH	±3.5%RH
Humidity resolution		0.1%RH	0.1%RH
vibration range			0 to 16g
vibration accuracy			±0.5g
vibration resolution			0.1g
Memory	32000	32000(16000 /channel)	30000(T+RH) 1000(vibration)
Sample rate	1min-24 hours		
Battery life	1year (Sample rate 1minute)	)	
PDF report	Immediately create PDF repo	rt in USB flash disk	
Analysis software	Windows XP/Vista/win7/win	8/win10	

Accessories: 3V Lithium battery, software and clamshell.

Size(HxWxD): 95mm x 39mm x 13mm Weight: 50g



#### DT-194T/194TH/194TK

#### Plug-PDF Temperature/Humidity/Vibration Dataloggers



194T series Plug-PDF Temperature/Humidity & Vibration dataloggers can monitor temperature/humidity/Vibration values efficiently and conveniently for long time by using the Datalogger. 194TK is thermocouple datalogger.

The readings are saved in the logger and simply read out by your PC with USB interface.









Features				
	194T	194TH	194TK	194G
Temperature datalogger	*			
Temperature and humidity datalogger		*		
Temperature type K range datalogger			*	
Temperature, humidity and vibration datalogger				*
Immediately create PDF report in USB flash disk	*	*	*	*
Freely selectable sample rate 1 min to 24h	*	*	*	*
Max/ Min LCD display	*	*	*	*
Download collected data through USB interface	*	*	*	*
Battery life: up to 1 year (1 minute sample rate )	*	*	*	*
Alarm display if user-defined maximum/minimum value is exceed	*	*	*	*
Analysis software used to view graph for logging data	*	*	*	*

Specifictions					
	194T	194TH	194TK	194G	
Temp. range	-40 to 70°C/	-40 to 70°C/	-200 to 1370°C	-30 to 70°C/	
remp. range	-40 to 158°F	-40 to 158°F	(-328 to 2498°F)	-22 to 158°F	
Temp. accuracy	±1°C/1.8°F	±1°C/1.8°F	$\pm[0.15\% \text{rdg}+1^{\circ}\text{C}(1.8^{\circ}\text{F})]$	±1°C/1.8°F	
Temp. resolution	0.1℃/0.1°F	0.1℃/0.1℉	0.1°C/0.1°F	0.1℃/0.1℉	
Humidity range		0 to 100%RH		0 to 100%RH	
Humidity accuracy		±3.5%RH		±3.5%RH	
Humidity resolution		0.1%RH		0.1%RH	
vibration range				0 to 16g	
vibration accuracy				±0.5g	
Memory	40020	40020(20010/channel)	40020	30000(T+RH)	
ivicinory	40020	40020(20010/chamici)	40020	1000(vibration)	
Sample rate	2sec~24 hours				
Battery life	1year (Sample rate 1minute)				
PDF report	Immediately create PDF report in USB flash disk				
Analysis software	Windows XP/Vista/win7/win8/win10				

Accessories: 3.6V Lithium battery, software and clamshell.

Size(HxWxD): 122mm x 11mm x 26mm

Weight: 60g









#### DT-170/171/171T/171C/171E/171F

DATA (DOGGE

Temperature and Humidity Dataloggers

#### DT-171V/171VD/171A/171AD DC Voltage / DC Current Dataloggers













Model 171

You can monitor temperature and humidity values efficiently and conveniently for long time periods by using the Datalogger.

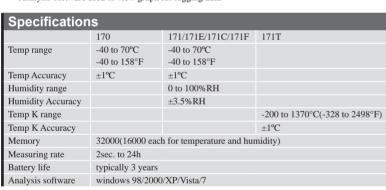
The readings are saved in the logger and simply read out by your PC with USB interface.



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- Temperature datalogger (170)
- 2000 Counts digital LCD display (171E)
- PDF report (171F)
- Freely selectable measurement cycle from 2sec. to 24h
- Battery life: more than 3 years
- Display all status information through two LEDs
- Download collected data through USB interface
- Alarm display if user-defined maximum/minimum values is exceed
- Analysis software used to view graph for logging data

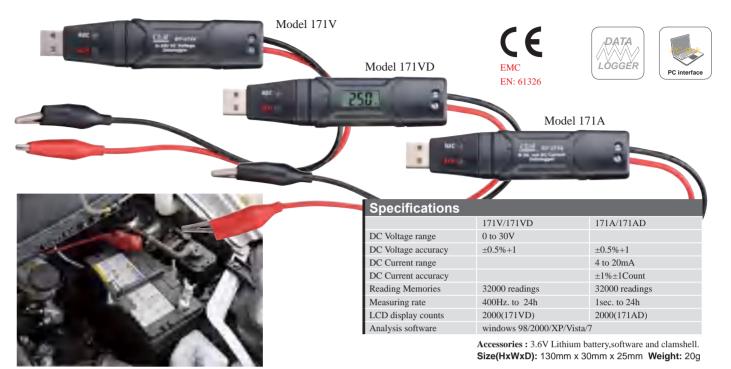




Model 171C







#### DT-172/172TK Temperature and Humidity Datalogger DT-174 Temperature/Humidity & Pressure Datalogger











174

40 to 70°C

-40 to 158°F ±1°C/1.8°F 0 to 100%RH

-40 to 70°C (-40 to 158°F); Accuracy ±2°C/4°F 0-30PSI/0-2000hPa; Accuracy 0.01PSI/1hPa



174 provides much faster, more accurate and stable readings with temperature, humidity & air pressure which is in better precision. The windtight design protects the meter against dust and water.

The datalogger provides accurate readings with temperature, humidity & air pressure

For the three group data of Temperature, Humidity and Air Pressure, about 10900 readings of each can be recorded. For one group, about 32,700 data can be recorded.

0~100% RH

Freely selectable measurement cycle from 1 sec. to 24h.

Sound & light alarm indication if user-defined maximum/minimum values is exceed.

Larger LCD display date, time, temperature, humidity, air pressure and upper/lower limit value.

Specification	ns	
	172	172TK
Temp range	-40 to 70°C	-40 to 70°C
	-40 to 158°F	-40 to 158°
Temp Accuracy	±1°C	±0.5°C
Humidity range	0 to 100%RH	0 to 100% F
Hunidity Accuracy	±3.5%RH	±3.5%RH
Temp K range		-200 to 137
Temp K Accuracy		Above -100
		Blow -100°
Dew Point		
Temperature		
Air Pressure		
Memory	32000(16000 eac	ch for temper
Measuring rate	1sec. to 24h	
D - 44 1'.C.	t:	

Humidity range	0 to 100%RH	0 to 100%RH
Hunidity Accuracy	±3.5%RH	±3.5%RH
Temp K range		-200 to 1370°C(-328 to 2498°F)
Temp K Accuracy		Above -100°C (-148°F): $0.15\%$ rgd+ $1.0$ °C( $1.8$ °F)
		Blow -100°C (-148°F): 0.5%rgd+2.0°C(3.6°F)
Dew Point		
Temperature		
Air Pressure		
Memory	32000(16000 eac	ch for temperature and humidity)
Measuring rate	1sec. to 24h	
Battery life	typically 3 years	
Analysis software	windows 98/2000	0/XP/Vista/7

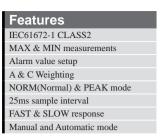
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3.6V Lithium battery, K-Temp probe(172TK), software and clamshell. (DT-172/172TK) Size(HxWxD):94mm x 50mm x 32mm Weight: 91g (DT-172/172TK) 3.6V Lithium battery, software and clamshell.(DT-174)

Model 174

**Size(HxWxD):**132mm x 66mm x 37mm **Weight:** 180g (DT-174)









**Specifications** Standard applied IEC61672 -1 CLASS2 Accuracy ±1.4dB Frequency range 31.5HZ ~ 8kHZ Dynamic range 50dB Level range Auto: 30dB~130dB Frequency weighting A/C Time weighting FAST ( 125ms ), SLOW ( 1s ) 129920 points for dBA or dBC Memory Reading Sample rate 1 Sec. to 24h 1/2 inch electret condenser microphone Microphone USB data traffic Data output

Size(HxWxD): 106mm x 56mm x 33.5mm Weight: 34g

Accessories : 3.6V Lithium battery, stand, software and clamshell.

#### DT-186/187 Anemometer Datalogger



Features
Alarm setup and indication  Recording and low battery indication  Manual and automatic start mode
Recording and low battery indication
Manual and automatic start mode
USB port for data traffic and power supply
USB port for data traffic and power supply Status indication via Red/Yellow LED and Green LED
Analysis software windows 98/2000/XP/Vista/7

Specifications	
Memory	32000 readings
Measuring rate	2sec. to 24h
Measurement Range	0.40 to 30.0m/s
Measurement Resolution	0.1m/s
Accuracy	±3.5% ± 0.2m/s
Warm up period	Less than 2 seconds

Size(HxWxD): 145mm x 35mm x 30mm Weight: 49g Accessories: 3.6V Lithium battery, software and clamshell.

#### DT-185 USB Light Datalogger

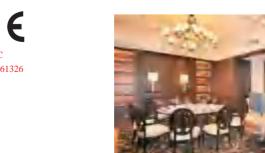
Features
Alarm setup and indication
Recording and low battery indication
Manual and automatic start mode
USB port for data transmission and power supply
Status indication via Red/Yellow LED and Green LED
Analysis software windows XP/Vista/Win7/8/10

51840 readings

0 to 1999W/m<sup>2</sup>

1sec. to 1h

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EMC	
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±5% or ±10W/m2 Size(HxWxD): 145mm x 35mm x 30mm Weight: 49g Accessories : 3.6V Lithium battery, software and clamshell.





Features Alarm setup and indication Recording and low battery indication Manual and automatic start mode USB port for data traffic and power supply Status indication via Red/Yellow LED and Green LED

Specifications	10000		
Data Memory	10000		
Sampling rate	1 min to 18 hours		
Data output	USB		
Temperature			
Range	-40~70°C/-40~158°F		
Resolution	0.1°C/0.1°F		
Accuracy	40 to 70°C/104 to 158°F	±2°C/3.6°F	
	0 to 40°C/32 to 104°F	±1°C/1.8°F	
	-40 to 0°C/-40 to 32°F	±2°C/3.6°F	
Humidity			
Range	0~100%RH		
Resolution	0.1%RH		
Accuracy	0 to 20 and 80 to 100%	±5%	
	20 to 40 and 60 to 80%	±3.5%	
	40 to 60%	±3.5%	
Air Pressure			
Range	950~1050hPa		
Resolution	0.1hPa		
Accuracy	±0.25%FSO(25 °C)		
Repeatability	±0.2%(Max ±0.3%FSO)		
Linearity/Hysteresis	±0.24%FSO		
Temperature coefficient	±0.1%FSO		

Size(HxWxD): 145mm x 35mm x 30mm Weight: 49g Accessories: 3.6V Lithium battery, software and clamshell.

#### DT-179 Carbon Monoxide Datalogger

Featu	ires				
Alarm se	tup and indicat	ion			
Recordin	g and low batte	ery indication	n		
Manual	and automatic s	tart mode			
USB por	t for data traffic	and power	supply		
Status in	dication via Re	d/Yellow LE	D and Green	LED	
Analysis	software winde	ows 98/2000	/XP/Vista/7		

Specifications	
Memory	32000 readings
Measuring rate	2sec. to 24h
Measurement Range	0 to 1000PPM
Measurement Resolution	1PPM
Accuracy	±5% or ±10PPM
Warm up period	Less than 2 seconds
Sensor type	Stabilized electrochemical Gas-specific (CO)
Typical sensor life	3 years

Size(HxWxD): 145mm x 35mm x 30mm Weight: 49g Accessories: 3.6V Lithium battery, software and clamshell.



Measuring rate

Measurement Range

Measurement Max. Resolution 1W/m<sup>2</sup>



# Appropriate Parties and Control of the Control of t

Model 178A

178A is engineered to record acceleration data of vibration, it will record and time 3-axis vibrations and peaks to provide a history of shock/vibration conditions. and it will record the time when freefall happens.

It measures and computes real-time spectral data using an FFT(Fast Fourier Transform) from 0 to 60 Hertz.

178B is vibration, humidity and temperature Datalogger

Features		
	178A	178B
Records 3-axis shock	*	*
Build-in accelerometers	*	*
Measures dynamic and static acceleration	*	*
Real-time operation	*	*
Freefall detection mode	*	*
User settable trigger levels	*	*
Real-Time FFT	*	*
High speed download(USB2.0)	*	*
Vibration, humidity and temperature Datalogger		*



Specifications		
	178A	178B
Acceleration Sensor:MEMS Semiconductor	*	*
Acceleration Sensor sampling Rate:256Hz	*	*
Acceleration Range:±18g	*	*
Acceleration Resolution:0.00625g	*	*
Acceleration Accuracy:±0.5g	*	*
Non-Linearity:±1%	*	*
Bandwidth:Approx. 0 ~ 60Hz	*	*
Trigger Range: 0 to 18g (XYZ magnitude)	*	*
Temp & Humidity Range:-40 to 70°C/-40 to 158°F 0 to 100%RH		*
Temp & Humidity Resolution:0.1%RH/0.1°C/°F		*
Temp & Humidity Accuracy: ±2%RH/1°C/°F		*
Sampling Rate:1sec. to 24hours	*	*
Memory:8Mbit FLASH (Memory for 504126 samples, about 168042 samples/.axis for x, y and z axis seperately)	*	*

#### Accessories

3.6V Lithium battery, software and clamshell.

# DT-3898 Vibration Meter Model 3898

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guide vibrat





Applications for all industrial machinery vibration monitoring. The level of vibration is a useful guide to machine condition. Poor balance, misalignment & looseness of the structure will increase the vibration level, it is a sure sign that the maintenance is needed.

Features	
Frequency range	e

Frequency range 10 Hz - 1 kHz, sensitivity relative meet ISO 2954.

Professional vibration meter supply with vibration sensor & magnetic base, full set.

Velocity measuring range 200 mm/s. Acceleration measuring range 200 m/s<sup>2</sup>.

RMS & Peak measurement.

Wide frequency range.

Data hold button to freeze the desired reading.

Memory function to record maximum and minimum reading with recall.

Super large LCD display.

Microcomputer circuit, high performance.

Auto shut off saves battery life & built-in low battery indicator.

Specificatio	ons
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Range	Velocity :200 mm/s : 0.5 to 199.9 mm/s		
	Acceleration :200 m/s <sup>2</sup> : 0.5 to 199.9 m/s <sup>2</sup>		
Frequency range	10 Hz to 1 KHz		
Accuracy	± ( 5 % + 2 d ) reading @80 Hz, 160 Hz.		

Size(HxWxD): 160mm x 62mm x 21mm

Weight: 200g

Accessories: 9V battery.

# Wireless vibration & temperature MEMS sensor for remote condition monitoring with Wi-Fi /NB-iOT

The 188V Vibration & Temperature Sensor has the building blocks that allow maintenance and reliability teams to add remote vibration monitoring to assets and minimize unnecessary routes, maximize uptime and save time. With a frequency range of 10 to 1,000 hertz (Hz), the vibration sensor screens assets and notifies users of abnormalities caused by critical faults such as imbalance, misalignment, looseness and bearing wear to provide a warning for potential equipment failure. Using APP software, receive alarms on your smart device or computer within seconds of an abnormality and prevent downtime.

#### 188V Features

Wireless vibration & temperature MEMS sensor for remote condition monitoring Frequency response range:  $10\ to\ 1,000\ Hz$ 

Temperature response range ( PT100 Type thermocouple sensor): -20  $\sim$  200°C (-4  $\sim$ 392°F )

Data visualization: Vibration trend for all three axes and temperature trending Alarms: Auto-generated using Vibration Severity scale to keep you updated on machine abnormalities

Remote monitoring: View continuous stream of real-time and historical vibration data from remote assets

Data capture rate: 1 data point every 90 seconds

Bluetooth type: Low Energy 4.1 IP Rating: IP 67

#### Specifications

Opcomodion	opeomedions				
Vibration Range	Sensitivity range	±32 g			
	Frequency range	10 Hz to 1000 Hz			
	Sampling rate	25600 Hz			
Temperature Range	-20°C ~ 200°C (-4 °F~392°F)				

The 188GW Gateway aggregates 188V Vibration Sensor data and streams it to the cloud for continuous condition monitoring.

#### 188GW Features

Aggregates data via Bluetooth of up to 20 the 188V Vibration Sensors Streams the sensor data to the APP software via a Wi-Fi connection

Remote monitoring: View continuous stream of real-time and historical vibration data from remote assets

Bluetooth type: Low Energy 4.1

IP Rating: IP 67

Wi-Fi / NB-ioT connection required (Optional)

110V/220V AC power required

#### Size(HxWxD): 61mm x 20mm x 19mm

Weight: 50g











Model 188GW

# Wi-Fi / NB-ioT connection required (Optional)







# DT-72T1/72DP/72A/72H/72TH/72S/72I/72MC/72MR/72L Environment Meter Probes with Bluetooth

# DT-72T1/72DP/72A/72H/72TH/72S/72I/72MC/72MR/72L Environment Meter Probes with Bluetooth





DT-72T1 Thermometer Specifications		
Temperature Range	-50 to 150°C/-58 to 302°F	
Accuracy	$\pm 1.0^{\circ} C/1.8^{\circ} F$	
Resolution	0.1°C/°F	

<b>DT-72DP Differential Pres</b>	sure Meter Specifications
Measurng Range	-150 to 150hPa
Accuracy	±0.3%FSO (25°C)
Resolution	0.01hPa

	E
EMC	2
FN.	61326

DT-72MC Pinless Moisture Meter Specifications		
Measuring Range	0.0 to 100.0	
Penetration Depth	20 to 40mm	
Resolution	0.1	

DT-72MR Contact Hygrometer Specifications		
Wood moisture (cor	ntact and probe)	
Range	6 to 99.9	
Accuracy	±2 (6% to 60%), ±4 (60% to 99.9%)	
Resolution	0.1	

DT-72A Vane Anemometer Specifications			
Function	Range	Resolution	Accuracy
m/s(meter per second)	0.4 to 25.0m/s	0.1m/s	±3.5%±0.2m/s
Air Temperature	-20 to 60°C	0.1°C/°F	$\pm 0.8^{\circ}$ C, (-20 ~ 0°C)
Air reinperature	-4 to 140°F	0.1 C/ F	±0.5°C, (0 ~ 60°C)
Dalatina Hamidita	0 to 100%RH	0.1%RH	±3.5%RH @20~80%RH
Relative Humidity	0 to 100%KH		±5%RH @0~20%RH&80~100%RH

DT-72H Hot Wire Anemometer Specifications			
Function	Range	Resolution	Accuracy
m/s(meter per second)	0.00 to 30.00m/s	0.01m/s	±5%±0.1m/s, (0~5m/s)
Air Temperature	-20 to 60°C -4 to 140°F	0.1°C/°F	$\pm 0.8^{\circ}\text{C}$ , $(-20 \sim 0^{\circ}\text{C})$ $\pm 0.5^{\circ}\text{C}$ , $(0 \sim 60^{\circ}\text{C})$
Relative Humidity	0 to100%RH	0.1RH	±3.5%RH @20~80%RH ±5%RH @0~20%RH&80~100%RH

DT-72TH Temperature & Humidity Meter Specifications			
Function	Range	Resolution	Accuracy
Air Temperature	-20 to 60°C -4 to 140°F	0.1°C/ °F	$\pm 1^{\circ} \text{C}/2^{\circ} \text{F}$
Relative Humidity	0 to100%RH	0.1RH	±3.5%RH @20~80%RH ±5%RH @0~20%RH&80~100%RH

DT-72I Infrared Thermometer Specifications			
Function	Range	Resolution	Accuracy
IR Temp. Range	-30 to 250°C -22 to 482°F	0.1°C/ °F	±1.5°C ±1.5 %
D:S	10:1		

DT-72S Sound Level Meter Specifications			
Function	Range	Resolution	Accuracy
Frequency	31.5Hz~8kHz	0.1Hz	
Level	30dB~130dB	0.1dB	±1.5db(ref94dB@1kHz)

DT-72L Light Meter Specifications				
Function	Range	Resolution	Accuracy	
Light	40,000Lux /Fc	0.1Lux/0.1Fc	±4%±10d(<10,000Lux)	
Measuring Rate	1 times/second			

Size(HxWxD): 110mm x 30mm x 20mm Weight: 180g Accessories: 3x1.5V "AAA" batteries.



Model 72T1 Model 72L Model 72A







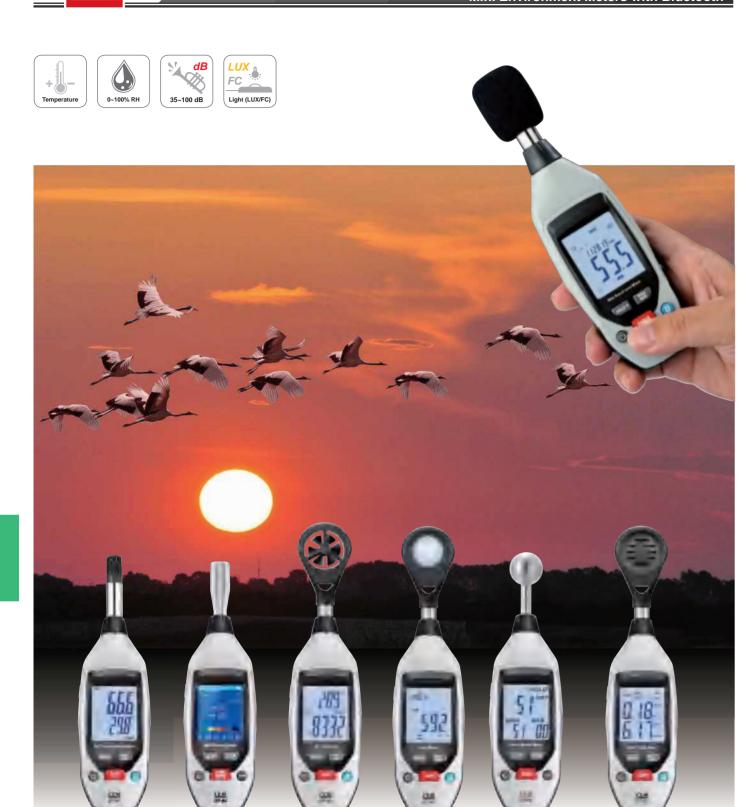
Model 72I Model 72TH

292

Model 72H



Made for □ iPod □ iPhone □ iPad



DT-90/91/92/93/95/96/98 series Mini Environment Meters are professionally designed with completely modern new outlooking. The whole series are equiped with Bluetooth, easy to transfer the measuring data to user's smart phone. Fulfill requirements of fast, easy and accurate measurement and data analysis.

www.cem-instruments.com

E-mail:cemyjm@cem-instruments.com

#### **DT-90 Mini Anemometer**

Specifications			
Function	Range	Accuracy	
m/s(meter per second)	0.40~25.00	±3.5% ±0.20m/s	
ft/min(feet per minute)	80~2980	±3.5% ±40ft/min	
km/h(kilometers per hour)	1.4~54.0	±3.5% ±0.8km/h	
MPH(miles per hour)	0.9~33.0	±3.5% ±0.4MPH	
Knots(nautical miles per hour)	0.8~29.0	±3.5% ±0.4knots	
Air Temperature	-10 to 60°C(14 to 140°F)	± 2.0°C(4.0°F)	
Bluetooth interface for easy data transfer			

#### DT-91 Mini Temperature & Humidity Meter

Specifications				
Function	Range	Resolution	Accuracy	
Temperature	-20 to 60°C/-4 to 140°F	0.1°C/°F	±0.5°C/0.9°F	
Humidity	0 to 100%RH	0.1%RH	±3%RH	
Bluetooth inter	face for easy data transfer			

#### DT-92 Mini Light Meter

Specifications				
Function	Range	Resolution	Accuracy	
Light		0.1Lux/0.01Fc	±5%±10d(<10,000Lux)	
Measuring Rate 1.5 times/second				
Bluetooth interface for easy data transfer				

#### DT-93 2 in 1 HCHO & TVOC Meter

Specifications			
Function	Range	Resolution	Accuracy
НСНО	0.00 to 5.00mg/m <sup>3</sup>	$0.01 \text{mg/m}^3$	±5%F.S
TVOC	0.00 to 9.99mg/m <sup>3</sup>	$0.01 \text{mg/m}^3$	±5% F.S
Bluetooth interface	for easy data transfer		

#### **DT-95 Mini Sound Level Meter**

95 Mini Sound level meter have a wide dynamic range from 35 to 130dB. It has different frequency weighting A and C to respond to human sense or machine monitoring purposes.

Specifications			
Range	Accuracy		
35 ~ 130dB	±3.0dB(ref 94dB@1kHz)		
31.5 ~8kHz			
A, C			
Bluetooth interface for easy data transfer			
	Range 35 ~ 130dB 31.5 ~8kHz A, C		

#### **DT-98 Mini Pinless Moisture Meter**

Specifications		
Measuring Range	0.0~100.0 %	
Penetration Depth	20~40mm	
Resolution	1	

Features
Quickly indicate the moisture content of materials
CM % measured function
Depth of penetration about 20-40mm with alarms.
Measure and HOLD Function
MAX/MIN display Function
Programmable moisture alarms
Auto Power Off & low battery indication
White Backlit LCD Display

Size(HxWxD): 185mm x 55mm x 38mm Weight: 139g

Accessories: 9V battery, Clamshell. 3.7V Li-battery (DT-96)





Model 90

Model 92



Meterbox Pro

Model 95



Model 93



Model 98

#### **Multifunction EMF Meter**

EMF-90 is a three-axis high-frequency electromagnetic wave tester. It adopts advanced high-frequency sensor technology and can be applied to high-frequency electromagnetic field test base, mobile phone, wireless network and other electronic wireless products.



DT-93U can measure the concentration of HCHO & TVOC & temperature & humidity accurately. The device has data recording function, it can automatically record the measurement data and generate readable files according to the sampling time and interval set by users. Users can directly view the data in the device or export the data to the computer through USB. A high-capacity lithium battery inside is to ensure long time measurement, it also has sleep mode function and automatic shutdown function.

#### Features

- Detecting HCHO & TVOC
- Data-logger function
- Chart function
- Screen brightness settings
- Sleep mode • Auto power off

• Quick Response

Max/Min/AVG mode

• Data transfer to PC via USB (CSV or EXCEL files)

Specifications			
	Range	Accuracy	Resolution
HCHO detection	0.00~5.00ppm	±5% F.S	0.01ppm
TVOC detection	0.00~9.99ppm	±5% F.S	0.01ppm
Temperature	-10 to 60°C /14 to 140°F	±0.5°C (±1°F)	0.1°C /°F
Humidity	0 to 100%RH	±3%RH	0.1%RH

DT-97U meter is a sort of exquisite concise and efficient detector launched by CEM recently, which is integrated with CO2 、CO、 temperature and humidity detection function. This meter has adopted high-precision CO2 and CO Sensor which can detect the CO2 and CO accurately and sensitively. The device is equipped with an accurate sensor that can detect the temperature and humidity at current environment. The operation is very simple. it is very convenient to carry, so that we can check air quality from time to time.

#### Features

- High precision CO2 and CO sensors
- Quick Response
- Data-logger function
- Max/Min/AVG mode • Auto Power Off
- Data transfer to PC via USB(CSV or EXCEL files)

Specifications				
	Range	Accuracy	Resolution	
CO <sub>2</sub> Measurement	0 to 9999ppm	±75 ppm ±3% of reading	1ppm	
CO Measurement	0 to 1000ppm	±5% F.S	1ppm	
Temperature	-10 to $60^{\circ}\text{C}$ /14 to $140^{\circ}\text{F}$	±0.5°C (±1°F)	0.1°C /°F	
Humidity	0 to 100%RH	±3%RH	0.1%RH	

DT-93HW is a Mini Hot Wire anemometer, which can measure air velocity, volume flow ,temperature and humidity .With the combination of hot wire and precise digital sensor, it can be measured quickly and accurately even at low wind speed.

#### Features

- Quick response
- Auto power off
- Max/Min/AVG mode
   Data-logger function
- Data transfer to PC via USB(CSV or EXCEL files) • Telescopic probe facilitates user measurement

Specifications					
	Range	Accuracy	Resolution		
A: 371 : M	0.00 to 30.00m/s	±0.10±5% m/s(0 to 5m/s)	+0.01m/s		
Air Velocity Measurement	0.00 to 50.0011/8	±0.30±5% m/s(5 to 30m/s)	±0.01111/8		
Temperature Measurement	0 to 50°C /32 to 122°F	±1°C (±2°F)	0.1°C/°F		
Humidity	0 to 100%RH	±4%RH	0.1%RH		

#### **DT-96 Mini Particle Counter**

Specification	S			
Function	Channel / Range	Accuracy		
Particle Counter	2.5μm, 10μm	±30%		
Air Temp Range	0 to 50°C/32 to 122°F	±1°C/2°F		
Humidity Range	0 to 100%RH	±5%RH@0~20%RH & 80~100%RH		
numuny Kange	0 to 100%Kn	±3.5%RH@20~80%RH		
Bluetooth interface for	ooth interface for easy data transfer			

Size(HxWxD): 185mm x 55mm x 38mm

Weight: 139g

Accessories: 3.7V Li-battery







Model 93U

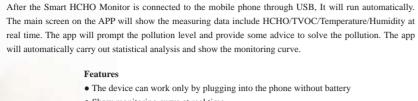
Model 96

85A 85C

A C

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- Show monitoring curve at real time
- Analyze the data and prompt pollution level automatically
- Continuously recording and single recording
- History data checking, statistical analysis and data export
- Provide reasonable suggestions for removing the HCHO

Specification				
Function	Range	Resolution	Accuracy	
НСНО	0.00~5.00ppm	±5% F.S	0.01ppm	

Specification

Frequency Weighting

Frequency 31.5 ~8kHz

Size(HxWxD): 64mm x 33mm x 14mm

Weight: 100g

#### DT-82/83/85A/85C/86/86B Mini Environment Meters



#### DT-82 Mini Anemometer

Specification				
Function	Range	Accuracy		
m/s(meter per second)	0.40~25.00	±3.5% ±0.20m/s		
ft/min(feet per minute)	80~2980	±3.5% ±40ft/min		
km/h(kilometers per hour)	1.4~54.0	±3.5% ±0.8km/h		
MPH(miles per hour)	0.9~33.0	±3.5% ±0.4MPH		
Knots(nautical miles per hour)	0.8~29.0	±3.5% ±0.4knots		



Model HC-01

EN: 61326

#### DT-86/86B Mini Light Meter

Specification

DT-85A/85C Mini Sound Level Meter

Sound Level 35 ~ 130dB  $\pm 3.0$ dB (ref 94dB@1kHz)

Specification					
Function	Range	Resolution	Accuracy		
Temperature	-20 to 60°C/ -4 to 140°F	0.1°C/°F	±0.5°C/0.9°F		
Humidity	0 to 100% RH	0.1%RH	±3%RH		

DT-83 Mini Temperature & Humidity Meter







146mm x 54mm x 34mm(83) 128mm x 54mm x 34mm(85A/85C) 157mm x 54mm x 34mm(86) Weight: 139g(82), 138g (83), 131g (85A/85C), 138g (86),

Accessories: 9V battery, Clamshell.

Range Resolution Accuracy 40,000Lux /Fc 0.1Lux/0.01Fc ±5%±10d (<10,000Lux)









3851/3852 Sound Level Meters are designed for noise project, quality control, illness prevention & cure and all kinds of environmental sounds measurements. It is applied to the sounds measurement at factory, school, office, traffic access and

Features		
	3851	3852
This unit confirms to the IEC61672-1 class 2 for Sound Level Meters	*	*
MAX & MIN measurements	*	*
Overrange display	*	*
Underrange display	*	*
A & C Weighting	*	*
FAST & SLOW response	*	*
Analog AC/DC outputs for connection to frequency analyzer or X-Y shaft recorder	*	*
Memory for 32700 readings		*
Datalogger function		*
Adjustable Alarm-Levels		*

Specifications	
Standard applied	IEC61672-1 Type 2, ANSI S1.4 Type2
Accuracy	±1.4dB
Frequency range	31.5Hz ~ 8kHz
Dynamic range	50dB
Y 1	LO:30dB~80dB Med:50dB~100dB
Level ranges	Hi:80dB~130dB Auto:30dB~130dB
Time weighting	FAST ( 125mS ), SLOW ( 1s )
Microphone	1/2 inch electret condenser microphone
Resolution	0.1dB
Display Update	2 times/sec
Analog output	AC/DC outputs, AC=1Vrms, DC=10mV/dB









Time weighting & Frequency weighting, Current reading



Analog AC/DC outputs





CEM

#### Size(HxWxD): 230mm x 60mm x 30mm (3851/3852) Weight: 310g (3851/3852)

Battery, screwdriver, audio plug, windscreen, software, USB cable, tripod and power supply and gift box with carrying case.



**Size(HxWxD):** 165mm x 54mm x 34mm(82)

555

Model 73A

638

-

Model 73S

#### DT-73A Mini anemometer, which can measure air ve-

#### **Features**

Quick response

Wind power classification

Auto power off

Max/Avg mode

Low power display

locity and temperature

Specifications					
	Range	Accuracy	Resolution		
Air Velocity Measurement	0.6 to 25m/s	±5% ±0.5m/s	0.1m/s		
Temperature Measurement	-10 to 50°C/14 to 122°F	$\pm 2^{\circ}C(\pm 4^{\circ}F)$	0.1 °C/°F		

#### DT-73L Light meter is a precision instrument that used to measure illuminance(Lux,footcandle) in the field

592

Model 73L

-

Model 73TH

Model 73C

• Silicon Photo Diode Sensor with a Spectral Response Filter Fully Cosine Corrected.

4 Measuring Ranges

High accuracy and rapid response

ì	Specifications				
		Range	Accuracy	Resolution	
	Illumination Measurement	0-200kLux/	±4% ±10d (<10,000Lux)	0.1Lux/0.01FC	
	mummation Weastrement	0-20kFC	±8% ±10d (>10,000Lux)	0.1Lux/0.01FC	

#### DT-73S is a mini noise sound level meter

#### Feature

- Auto Power Off
- Low power consumption
- MAX/MIN mode
- FAST/SLOW mode Backlight Display
- A Frequency Weighting

Specifications				
	Function	Range	Resolution	Accuary
	Frequency	31.5Hz~8kHz		
	Level	30 ~ 130dB	0.1dB	±1.5dB(@1kHz, Standard Sound Source)

#### DT-73TH is a device measures Humidity & Air Temperature

	Specifications				
		Range	Accuracy	Resolution	
ı	Temperature Measurement	-20-60°C/-4°F-140°F	$\pm 1^{\circ}\text{C}/\pm 1^{\circ}\text{F}$	0.1°C/0.1°F	
	Humidity Measurement	0-100%RH	±4%RH	0.1%RH	

#### DT-73G is a real-time measurement of HCHO and TVOC

Specifications				
	Range	Accuracy	Resolution	
НСНО	0.00 to 5.00mg/m <sup>3</sup> (or PPM)	±5%F.S	0.01ma/m³(or DDM)	
TVOC	0.00 to 9.99mg/m <sup>3</sup> (or PPM)	±5%F.S	0.01mg/m³(or PPM)	

#### DT-73C Carbon Monoxide Meter detects the presence of carbon monoxide (CO)

Specifications				
	Range	Accuracy	Resolution	
CO	0 to 1000PPM	±5% ±10PPM	1PPM	

Size(HxWxD): 103mm x 54mm x 28mm Weight: 139g Accessories: 3x1.5V AAA battery, Clamshell

www.cem-instruments.com

E-mail:cemyjm@cem-instruments.com

DT-73T Specifications	
TDS measuring Range	0~ 9990PPM
Basic accuracy	±2%F.S
Resolution	1PPM

## MiNi Environment Meter

73T is a simple measuring TDS tester. 73MC Non-contact Moisture Meter with pinless depth up to 0.75".

<b>DT-73MC Specifications</b>	
Measuring Range	0 ~ 99.9
Accuracy	± 5
Pinless Depth	up to 0.75"(19mm)
Resolution	0.1

DT-73T/73MC/73AL/73E/73P/73MR/73I

73E is a high-frequency electromagnetic wave tester. It adopts advanced high-frequency sensor technology and can be applied to high-frequency electromagnetic field test base, mobile phone, wireless network and other electronic wireless products.

#### Features

- Test high frequency range Auto Power Off
- Adjustable alarm threshold and memory function

Specifications	
Measurement Range	20mV/m to 200V/m
Absolute Tolerance (@1V/m 10MHz)	±1.0dB
Frequency Response	± 1.0dB (10MHz to 1.9 GHz)
	± 2.4dB (1.9GHz to 8GHz)
Isometric Deviation	±1.0dB @ f>10 MHz
Resolution	0.1mV/m

73AL is simple to use, rapid response tester that are used to determine whether or not a person has any alcohol in their breath.

#### **Features**

- Red LED alarm
- Fuel cell sensor is high accuracy and reliability
- Five detection unit selectable (mg/L,mg/100ml,g/L,%BAC,%BAC), Alarm level adjustable

Auto power off

	Specifications			
	Detection Range	Accuracy	Resolution	Repeatability
ı		C<0.400: ±0.020mg/L	0.001mg/L	C<0.400: 0.007mg/L
	0.000mg/L ~1.500mg/L	0.400\(\leq C < 1.000 : \pm 5\%		0.400\(\leq C < 1.000 : 1.75\%
		C≥1.000 : ±20%		C≥1.000 : 6%

73MR is a conductivity moisture instrument designed for use in wood, used to measure the moisture level in sawn timber (also cardboard, paper) and hardened materials (plaster, concrete and mortar).

- Large LCD display
- Readings with Moisture Probe or Hammer Electrode

. MAX MIN and AVG measurement.

• Readings with Integral electrod Pins

Specifications	
Measuring principle	Electrical resistance
Electrode length	8mm
Electrodes	Integrated, replaceable
Measuring range	Wood: 6-99.9%
Display Accuracy	Wood: ±2% (6%~60%), ±4% (60%~99%),
Temperature measuring	0-60°C

73P is a Pressure meter simultaneously with an easy-to-read, large, backlit LCD display.

Specifications	
Pressure Range	±5000Pa
Accuracy	±0.3%FSO (25°C)
Resolution	1Pa
Response Time	0.5 Seconds typical
Units	PSI /mbar/ inH2O/ mmH2O/ Pa

The 73I InfraRed Thermometer is a new models designed with lower cost. Check all types of A/C and heating systems.

• 500ms quickest sampling time with 2% accuracy

Pressure measurement provides Zero Adjust.

• Large LCD screen shows readings in Fahrenheit or Celsius

<b>Specifications</b>	
Range	-35°C~250°C/ -31°F~482°F
Accuracy	±2% ±2°C/±3.6°F
Resolution	0.1°C/°F
Response Time	Less than 500ms
D:S	8:1





Model 73P Model 73MR



Model 73I

Model 73T

Model 73P

Model 73G









The 852A (single input), 852B (dual inputs) and 852C (four inputs) contact thermometers offer fast response and laboratory accuracy. The 852B (dual inputs) is a microprocessor-based digital thermometer designed to use external type K/J/T thermocouples (temperature probes) as temperature sensors. These thermometers work with type K/J/T thermocouples and offer 0.1°C/0.1°F resolution over the entire measurement range. A rugged holster protects three models.

High Accuracy to 0.25%

Dual Temperature inputs (852B)





Features			
	852A/852A-T/852A-P	852B/852B-T/852B-P	852C/852C-T/852C-P
External temp probe	J,K,T/Thermistor/ RTD	J,K,T/Thermistor/ RTD	J,K,T/Thermistor/ RTI
User Selectable °C, °F or K	*	*	*
0.1 °C/0.1 °F/0.1K resolution.	*	*	*
Type K/Type J input	Single	Dual	Dual
Max/Min/Avg and Data Hold	*	*	*
Differential Temperature	*	*	*
Hi/Lo Alarm(sound and audio)		*	*
Scan Function(T1,T2,T1-T2)	*	*	*
LCD display with backlight	*	*	*
Wide variety of interchangeable Thermocouple Probes	*	*	*
Auto Power Off	*	*	*
Low Battery	*	*	*
Adjustable sampling rate		- / 1 sec to 60 min	- / 1 sec to 60 min
USB interface		*	*
Memory reading		16,000	16,000
Bluetooth interface			*

tures			
	852A/852A-T/852A-P	852B/852B-T/852B-P	852C/852C-T/852C-P
al temp probe	J,K,T/Thermistor/ RTD	J,K,T/Thermistor/ RTD	J,K,T/Thermistor/ RTD
electable °C, °F or K	*	*	*
/0.1 °F/0.1K resolution.	*	*	*
C/Type J input	Single	Dual	Dual
/Iin/Avg and Data Hold	*	*	*
ential Temperature	*	*	*
Alarm(sound and audio)		*	*
Function(T1,T2,T1-T2)	*	*	*
lisplay with backlight	*	*	*
variety of interchangeable occuple Probes	*	*	*
Power Off	*	*	*
attery	*	*	*
able sampling rate		- / 1 sec to 60 min	- / 1 sec to 60 min
nterface		*	*
ry reading		16,000	16,000
oth interface			*

Specifications					
	852A/ 852B/852C	852A-P/ 852B-P/852C-P	852A-T/ 852B-T/852C-T		
Temperature range	Type J:-328°F to 1832°F(-200°C to 1000°C)		-72°Fto 257°F (-40°C to 125°C)		
	Type K:-418°F to 2501°F(-250°C to 1372°C)	-320°F to 1562°F (-200°C to 850°C)			
	Type T:-418°F to 752°F (-200°C to 400°C)	(======================================	( 15 5 15 125 0)		
Accuracy	$\begin{array}{l} \pm 0.25\% \ of \ reading + 2^{\circ}F(1^{\circ}C) \ (<99.9^{\circ}C/^{\circ}F) \\ \pm 0.25\% \ of \ reading + 0.9^{\circ}F(0.5^{\circ}C) \ (>99.9^{\circ}C/^{\circ}F) \end{array}$	$\pm 1^{\circ}\text{C}/1.8^{\circ}\text{F}(-99.9^{\circ}\text{C to }199.9^{\circ}\text{C})$ $\pm 2^{\circ}\text{C}/4^{\circ}\text{F}$ beyond above range	±0.9°F(±0.5°C)		
Respond time	Less than 300ms	Less than 300ms	Less than 300ms		
Resolution	0.1°up 1000°, 1°over 1000°	0.1°up 1000°, 1°over 1000°			
User Calibration	0.10°C~5.0°C(0.10°F~9.0°F)	0.10°C~5.0°C(0.10°F~9.0°F)	0.10°C~5.0°C (0.10°F~9.0°F)		

Size(HxWxD): 185mm x 65mm x 45mm

Weight: 248g

Accessories :

9V battery, Type-K Temperature probe and gift box with carrying case.



Model 852C-P

EN: 61326

**DT-853** 







Model 855









855/855S Sound Level Meters are designed for noise project, quality control, illness prevention & cure and all kinds of environmental sounds measurements. It is applied to the sounds measurement at factory, school, office, traffic access and household etc.

Features		
	855	855S
This unit confirms to the IEC61672-1 class 2 for Sound Level Meters	*	*
MAX & MIN measurements	*	*
Overrange & Underrange display	*	*
A & C Weighting	*	*
FAST & SLOW response	*	*
Analog AC/DC outputs for connection to frequency analyzer or X-Y shaft recorder	*	*
Datalogger function	*	*
Adjustable Alarm-Levels	*	*
Memory for 32700 readings	*	*
Bluetooth interface to smartphone/PC.		*

Specifications	
Standard applied	IEC61672-1 Type 2, ANSI S1.4 Type2
Accuracy	±1.4dB (@ 1kHz, standard sound source)
Frequency range	31.5Hz ~ 8kHz
Dynamic range	50dB
Level ranges	LO:30dB~80dB Med:50dB~100dB
	Hi:80dB~130dB Auto:30dB~130dB
Time weighting	FAST ( 125mS ), SLOW ( 1s )
Microphone	1/2 inch electret condenser microphone
Resolution	0.1dB
Display Update	2 times/sec
Analog output	AC/DC outputs, AC=1Vrms, DC=10mV/dB

Size(HxWxD): 248mm x 65mm x 45mm Weight: 248g

Accessories :

9V battery, gift box and carrying case.



Features
Quickly indicate the moisture content of materials
CM % measure function
Depth of penetration about 20-40mm with alarms.
Measure and HOLD Function
MAX/MIN display Function
Programmable moisture and humidity alarms
Auto Power Off & low battery indication
White Backlit LCD Display

Specifications	
Measuring Range	0.0~100.0 %
Penetration Depth	20~40mm
Resolution	0.1

Moisture Table of Comparison			
Construction material	Display	Moisture status	
	<30 digits	dry	
Gypsum	30 – 60 digits	at risk	
	>60 digits	wet	
	<25 digits	dry	
Cement	25 – 50 digits	at risk	
Cement	50 – 75 digits	wet	
	>75 digits	all wet	

Size(HxWxD): 248mm x 65mm x 45mm

Weight: 248g Accessories:

Features

9V battery, gift box and carrying case.











EN: 61326



#### DT-851/851A/851G Dew Point/Wet Bulb/Psychrometer

851/851A is a complete digital psychrometer and a very valuable HVAC diagnostic tool. As a psychrometer, it measures wet bulb(WB), dry bulb(DB), percent relative humidity(RH%), and dew point(DP).

Temperature/Humidity & Air Pressure(851A). Psychrometer with Mixing ratio (851G)

Barometer, altitude, relative height measurement

Psychrometer with Mixing ratio

Range

Dew Point Temp -26~50°C/-14.8~122°F

Wet Buld Temp -20~50°C/-4~122°F

Mixing ratio 0-999GPP (0-160g/kg)

0~100 % RH

-20~60°C/-4~140°F

Size(HxWxD): 248mm x 65mm x 45mm Accessories:

Dew Point Temperature measure Wet Bulb Temperature measure Dry Bulb Temperature measure

User selectable °C & °F MAX, MIN, HOLD modes Dual display with backlight Automatic Power Off

Low battery display

Smart phone APP

Bluetooth interface

Humidity

Temperature

Weight: 248g

Specifications



851 851A 851G

Resolution Basic Accuracy 851 851A 851G

0.1°C/°F ±1°C/1.8°F \* \* \*

0.1°C/°F ±1°C/1.8°F \* \* \*

0.1 % RH ±3 % RH

0.1°C/°F ±0.5°C/0.9°F

9V battery, gift box and carrying case.

700~1100 hPar(-20°C~70°C) 0.01hpa ±3hPa \* \*

1GPP









**Bluetooth** 

High Accuracy





Model 851G





DT-857/857A







856 light meter provides accurate display light level in terms of Foot Candles FC or LUX over wide range. Just turning the Function Switch to select the "lux" scale and setting the range to desired range, then removing the photo detector to light source in a horizontal position and reading the illuminance norminal from the LCD display. When the measurement is completed, replace the photo detector from the light source.

856A LED light meter, measures light from visible luminaries equipped with white light LED, fluorescent, meatal halide, high-pressure sodium and incandescent sources.

Features		
4000 Counts LCD dual display with timer function		
Auto Ranging		
Max./Min. and Data Hold		
Auto Power Off		
Low battery indication		
User selectable FC/Lux		
Capacity for data logging (99 readings)		
Total accuracy: for C.I.E standard illuminate A(2856K)		

Specifications				
	856	856A		
Measuring range	400,000Lux	40, 400, 4000, 40000, 400000 Lux 40, 400, 4,000, 40,000, FC		
Accuracy	±5%±10d(<10,000Lux) ±10%±10d(>10,000Lux)	±3% (Calibrated to standard incandescent lamp 2856°K and corrected LED day while-light spectrum) . +/-6% other visible light source.		
Max Resolution	0.1Lux/0.01Fc	0.01Lux/0.01Fc		
Light Source Selecting	\	LED white day light:L1=0.99 Default standard light source A:L=1.00		
USB interface	*	*		

Size(HxWxD): 185mm x 65mm x 45mm Accessories:

9V battery, Photo Detector and USB cable, software, Weight: 248g

Carrying case and Gift box.

#### DT-850 CFM/CMM Thermo-Anemometer











850 CFM/CMM Thermo-Anemometer remote sensor is the most popular model for HVAC applications.

Features
Display Air Flow (CFM/CMM), or Air Velocity plus Temperature & Max/Min/Avg value
Easy to set Area dimensions (cm <sup>2</sup> ) stored in the meter's internal memory for the next power on
Resolution of 0.01m/sec
20 points average for Air Flow
Super large LCD Backlit Display
3% velocity accuracy via low friction 2.83"D (72mm) ball bearing vane wheel on 3.9ft
(120cm) cable
Low battery indication and Auto Power Off

Specifications			
Air Velocity	Range	Accuracy	
m/s(meter per second)	0.40~30.00	±3% ±0.20m/s	
ft/min(feet per minute)	80~5900	±3% ±40ft/min	
km/h(kilometers per hour)	1.4~108.0	±3% ±0.8km/h	
MPH(miles per hour)	0.9~67.0	±3% ±0.4MPH	
Knots(nautical miles per hour)	0.8~58.0	±3% ±0.4knots	
Air Temperature	-10 to 60°C(14 to140°F)	± 2.0°C(±4.0°F)	
Air Flow	Range	Area	
CFM	0-999900	0-999.9 ft <sup>2</sup>	
CMM	0-999900	0-999.9 m <sup>2</sup>	
Humidity	0~100%RH	±3.5%RH	

Size(HxWxD): 185mm x 65mm x 45mm

Weight: 248g Accessories :

9V battery and Anemo probe, Gift box with carrying case.

857/857A Hot Wire Anemometer makes a step forward for you into the field of precision measurement. Telescoping probe is ideal for measuring in HVAC ducts and other small vents; extends up to 20m/s.

Features			
	857	857A	
Single-point and continuous data log options	*	*	
Velocity alarm	*	*	
LED backlight	*	*	
Auto power off	*	*	
Low-battery indication	*	*	
Data hold	*	*	
Probe sensor cover	*	*	
Replaceable probe sensor		*	













Specifications			
Air Velocity	Range	Resolution	Accuracy
m/s(meter per second )	0.1~20m/s	0.01m/s	±5%+0.03 m/s
ft/min(feet per minute)	20~3937ft/min	1ft/min	±5%+6ft/min
km/h(kilometers per hour)	0.3~72km/h	0.1km/h	±5%+0.1 km/h
MPH(miles per hour)	0.2~44.7MPH	0.1MPH	±5%+0.1 MPH
Air Temperature	-20~60°C (-4~140°F)	0.1℃/0.1°F	$0.5^{\circ}$ C(0 $\sim$ 45°C), $1.0^{\circ}$ C (rest of range)

Size(HxWxD): 185mm x 65mm x 45mm

Weight: 248g

Accessories: 3.7 Li battery, USB cable, software, Carrying case and Gift box.





Model 857

#### DT-858 Professional RTD Thermometer

A digital substitute for your mercury-in-glass thermometers. Accurate and repeatable to  $\pm 0.05$  °C over its full range of industrial temperature calibration. Whether working outdoors in environments where potentially explosive gases may be present or on the floor of a processing plant, the intrinsically-safe, battery operated, portable reference thermometer is designed to go where you work.

Features
Accuracy of ± 0.05 °C (± 0.09 °F) over full range
Two models to choose from (-50 °C to 160 °C)
User-configurable temperature Trend/Stability indicator
Display temperature in °C or °F
Optional data logging to internal memory
Percent battery-life and low-battery indicator
Bluetooth interface

Specifications			
Function	Range:	Resolution	Accuracy
Temperature	-50 °C to 160 °C (-58 °F to 320 °F)	0.01 °	± 0.05 °C (± 0.09 °F)
Sensor type	$100~\Omega$ thin-film RTD		
Display units	°C, °F		

Size(HxWxD): 190mm x 75mm x 38mm Weight: 320g

Accessories:

3.7V Li-ion battery and Sensor probe,

Gift box with carrying case.





#### **Professional Multifunction Environment Meters**





The digital Multifunction Environment Meter has been designed to combine the functions of Sound Level Meter, Light Meter, Humidity Meter Temperature Meter and CFM/CMM Thermo-Anemometer (859B 5in1). It is an ideal Multifunction Environment Meter Instrument with scores of practical applications for professional and home use.

- The Sound level function can be used to measure noise in factories, schools, offices, home, etc, checking acoustics of studios, auditoriums and hi-fi installations.
- The Light function is used to measure luminance in the field. It is fully
  cosine corrected for the angularincidence of light. The light sensitive
  component used in the meter is a very stable, long, life silicon diode.
- The Humidity/Temperature uses a humidity/semiconductor sensor and K type thermocouple.

   CFN(CDA) T.

   CFN(CDA) T.

   The Humidity/Temperature uses a humidity/semiconductor sensor and K type thermocouple.
- CFM/CMM Thermo-Anemometer is suitable for use in a wide variety of applications, including plant maintenance operations, environmental analysis, fume hood testing, and HVAC system assessment

Features
Larger LCD display with backlight.
Relative time clock on MAX MIN and AVG provides a time reference for measurement.
Display Sound, Light, Type K Temperature plus Humidity & Temperature simultaneously.
USB interface, USB to UART Bridge Controller
Low battery indication, and Auto Power Off mode (Sleep mode) increases.

Size(HxWxD): 248mm x 65mm x 45mm Weight: 365g

#### Accessories :

9V battery, K-type temperature probe, %RH probe, dB probe, Anemo probe, photo detector and gift box with carrying case.

Specifica	itions				
Function	Range:	Resolution	Accuracy	859A	859B
Туре К Тетр	-200°C to 1372°C (-328°F to 2501°F)	0.1°	Above -100°C (-148°F) ±[0.15%rgd+1°C(1.8°F)] Blow -100°C (-148°F) ±[0.5%rgd+2°C(3.6°F)]	*	*
Air Temp	-30°C~100°C (-22°F~199°F)	0.1°	±1°C/1.8°F	*	*
Humidity	0~100%RH	0.1%RH	±3.5%RH	*	*
Sound Level	30dB~130dB	0.1dB	±3.5dB	*	*
Light	20,200,2000, 20000Lux	0.01,0.1,1,10Lux	±5% ±10d	*	*
	0.40-30.00 m/s	0.01 m/s	±3% ±0.20 m/s		
	80-5900 ft/min	1 ft/min	±3% ±40 ft/min		
Anemo	1.4-108.0 km/h	0.1 km/h	±3% ±0.8 km/h		*
	0.9-67.0 MPH	0.1 MPH	±3% ±0.4 MPH		
	0.8-58.0 Knots	0.1 knots	±3% ±0.4 knots		
Air Flow	0-999,900 CFM	0.001 to 100 CFM	Accuracy is function of		*
All FlOW	0-999,900 CMM	0.001 to 100 CMM	velocity and area		"

DT-9895



**Bluetooth** 

High Accuracy

tings and data recording and other functions. It is a powerful and versatile instrument for measuring and diagnosing moisture of building and building materials. With 8 buttons, the operation is simple, the interface is bright and beautiful, and the function is



Model 269

Built-in Thermal Imager design quickly identifies hot spots without contact (279)

Quickly indicates the moisture content of materials with Pinless technology without damaging the surface; Optional remote Pin-type probe allows for moisture readings at different Penetration levels (3ft/0.9m cable

This is a multi-function meter, with temperature and humidity detection, infrared temperature

measurement, laser distance, wood moisture measurement (pin and pinless), flashlights, time set-

Designed with patented IR design to measure non-contact surface temperature; 8:1 distance to spot ratio with

Built-in Humidity/Temperature sensor measures Relative Humidity,

Air Temperature plus grains per pound (GPP) and dew point (DP)

Automatic calculation of differential Temperature (IR - DP)

Auto power off and low battery indication

Keep data convenient and easy to access each record with single deletion and total deletion

Laser distance measurement is fast response and high accuracy. It can measure length, area and volume

Color, graphical interface, simple operation, easy to understand icons, beautiful interface





Model 279

Specifications					
Thermal Imager				269	279
IR resolution	80x80 pixels				*
Field of View (FOV)	21 x 21°				*
Thermal sensitivity/NETD	< 0.08°C /80m	K			*
Image frequency	50Hz				*
Object temperature range	range: -20 to 2	200°C (-4 to 3	392°F)		*
Spectral range	8–14 μm	8–14 μm			*
Color palettes	IRON/Rainbow/Grey/Grey Inverted				*
Accuracy	±2°C (±3.6°F) or ±2% of reading				*
Functions					
Function	Range	Resolution	Accuracy	*	*
Wood moisture	0~99.9	0.1	±5	*	*
laser distance range	0.11m - 50m	0.001m	±1.5mm	*	*
Temperature	-20°C to 70°C (-4 to 158°F)	0.1°C	±2℃	*	*
Humidity	0~100%RH	0.1%RH	$^{\pm 3.5\% RH (20 \sim 80\% RH)}_{\pm 5\% RH (0 \sim 20\% RH/80 \sim 100\% RH)}$	*	*

Size(HxWxD): 118mm x 80mm x 48mm Weight: 320g

Accessories: 4 x "AAA" battery and Sensor probe,

Gift box with carrying case.





This instrument is a high-quality measuring instrument that can be used for environmental measurement, such as: CO, CO2, O2, combustible gas monitoring and other gas analysis, built-in high-precision gas sensor can accurately measure the current environment. Its wide range of applications, can be used as a heating system troubleshooting, statutory limit monitoring or routine maintenance work of reliable partners, The device supports excessive alarm function. When the detection result exceeds the preset alarm value, the buzzer and LED will be generated to alert user. At the same time the device supports data logging, users can save and view historical data at any time. Features Large-screen color display Flue Gas:CO,CO2,O2,CO/CO2 Ratio, Excess Air Temp, Efficiency Pressure measurement Gas Leak Detection

Specification	ns		
Function	Range	Resolution	Accuracy
Oxygen	0~25% VOL	0.1%	±0.3%
Carbon dioxide	0~200ppm 200~2000ppm 2000~9999ppm	1ppm	±10ppm ±20ppm ±100ppm
Carbon monoxide (calculated)	0~21%	0.1%	±0.3%
CO/CO2 ratio	0 to 0.9999	0.0001	
Flue Temperature measurement	-200 to -100°C -100 to 1370°C	0.1°C	0.15%rgd + 1.0°C 0.5%rgd+2.0°C
XS Air	0-100%		4
Efficiency	0-100%		
Pressure Measurements	Differential Range 0~ 400 mbar	0.01 mbar	+/-0.5 mbar or 1% of reading

Weight: 706g



#### CEM

#### **Hand-Held Dewpoint Meter for Spot-Checking Applications**



#### Professional Hand-Held Temperature / Humidity & Dewpoint Meter

The Handheld Dewpoint Meter measures dew point temperature accurately over a wide measurement range. The probe may be inserted directly into pressurized processes, and it responds rapidly from ambient to process conditions. The sensor withstands condensation and fully recovers from getting wet. The meter is suitable for direct process dew point measurement in a wide temperature and pressure range.

# Peatures Designed for industrial spot-checking and field calibration Accurate measurement ranges from -50 to +30 °C (-58 to +86 °F) The high quality sensor, optimal for low humidity measurement Low maintenance need due to superior long-term stability Sensor withstands condensation Fast response, enhanced by Sensor Purge option Data can be logged and CSV file transferred to a PC via USB Compact, small and light CSV file Data logger

**DT-8321** 

Rechargeable lithium battery

DP-50 p	robe Spe	cificatio	ns
Function	Range	Resolution	Accuracy
Relative Humidity	0 to 100%	0.01	RH<5%±(0.025%RH+17.5%rdg) RH>5% ±(1%RH+5%rdg) RH>15% ±(2%RH+3%rdg)
Dew point	-50~30 °C (-58~86 °F)	0.01	-40+20°C ±2°C (±3.6°F)
Temperature	-10~ 60 °C (14~140 °F)	0.01	-10 +50 °C (+14 +122 °F) ±0.3°C(±0.54 °F) rest of range ±0.4°C(±0.72 °F)

Dew point response time : flow rate 0.2 m/s, 1 bar pressure, +20 °C (+68 °F) 63% [90%] 0-> -40 °C Td (32 -> -40 °F Td) 20 s [120 s] -40 -> 0 °C Td (-40 -> 32 °F Td) 10 s [20 s]

DP-60 p	robe Spec	cificatio	ns
Function	Range	Resolution	Accuracy
Dew point	-70 ~ 30 °C (-94 ~ 86 °F)	0.01	-60 ~ +20 °C ±2 °C (±3.6 °F)
Relative Humidity	0 ~ 100%	0.01	RH<5% ±(0.025%RH+17.5%rdg) RH>5% ±(0.8%RH+2%rdg)
Temperature	-10 ~ 60 °C (14 ~ 140 °F)	0.01	±0.2°C (±0.36 °F)
	onse time: flow rate (32 -> -76 °F Td) 5		pressure, +20 °C (+68 °F) 63% [90%]

#### DT-8320 Professional RTD Thermometer

-60 -> 0 °C Td (-76 -> 32 °F Td) 10 s [20 s]

A digital substitute for your mercury-in-glass thermometers. Accurate and repeatable to  $\pm~0.05~^{\circ}\text{C}$  over its full range of industrial temperature calibration. Whether working outdoors in environments where potentially explosive gases may be present or on the floor of a processing plant, the intrinsically-safe, battery operated, portable reference thermometer is designed to go where you work.

Featur	es
Accuracy of	of $\pm$ 0.05 °C ( $\pm$ 0.09 °F) over full range
Two mode	ls to choose from (-50 °C to 160 °C)
User-confi	gurable temperature Trend/Stability indicator
Display ter	mperature in °C or °F
Optional d	ata logging to internal memory
Percent ba	ttery-life and low-battery indicator

Specifica	itions		
Function	Range:	Resolution	Accuracy
Temperature	-50 °C to 160 °C (-58 °F to 320 °F)	0.01 °C/°F	± 0.05 °C (± 0.09 °F)
Sensor type	$100~\Omega$ thin-film RTI	)	
Display units	°C, °F		

Size(HxWxD): 190mm x 75mm x 38mm Weight: 320g

Accessories :

3.7V Li-ion battery and Sensor probe, Gift box with carrying case.

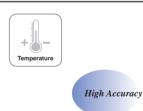


Size(HxWxD): 190mm x 75mm x 38mm

Weight: 320g

Accessories: 3.7V Li-ion battery and Sensor probe,

Gift box with carrying case.





EMC EN: 61326





EN: 61326

#### Professional Smart Light Meter

Light (LUX/FC)

A digital substitute for your mercury-in-glass thermometers! Accurate and repeatable to  $\pm~0.05$  °C over its full range of industrial temperature calibration. Whether working outdoors in environments where potentially explosive gases may be present or on the floor of a processing plant, the intrinsically-safe, battery operated, portable reference thermometer is

10 10 10 10
Features
Accuracy of $\pm$ 0.05 °C ( $\pm$ 0.09 °F) over full range
Two models to choose from (-50 °C to 160 °C)
User-configurable temperature Trend/Stability indicator

Display temperature in °C or °F Optional data logging to internal memory

designed to go where you work.

Percent battery-life and low-battery indicator

Specifica	tions (1616)		
Function	Range:	Resolution	Accuracy
Temperature	-50 °C to 160 °C (-58 °F to 320 °F)	0.01 °	$\pm0.05$ °C (± 0.09 °F)
Sensor type	$100~\Omega$ thin-film RTI	)	
Display units	°C, °F		

Specifica	itions (1616B	)	
Function	Range:	Resolution	Accuracy
Temperature	-50 °C to 160 °C (-58 °F to 320 °F)	0.01 °	± 0.1 °C (± 0.18 °F)
Sensor type	$100~\Omega$ thin-film RTD		
Display units	°C, °F		

Size(HxWxD): 54mm x 31mm x 480mm

Weight: 220g Accessories :

www.cem-instruments.com

E-mail:cemyjm@cem-instruments.com

2 x 1.5V "AA" batteries and Sensor probe, Gift box with carrying case.

8516 light meter provides accurate display light level in terms of Foot Candles FC or LUX over wide range. Just turning the Function Switch to select the "lux" scale and setting the range to desired range, then removing the photo detector to light source in a horizontal position and reading the illuminance norminal from the LCD display. When the measurement is completed, replace the photo detector from the light source.

Features
2.4" TFT color display
Auto Ranging
Max./Min/AVG function
Auto Power Off
Low battery indication
User selectable FC/Lux
Capacity for data logging (99 readings)
Total accuracy: for C.I.E standard illuminate A(2856K)
Bluetooth interface with Smart phone APP

Specifications	
Measuring range	400,000Lux
A	±5%±10d(<10,000Lux)
Accuracy	±10%±10d(>10,000Lux)
Max Resolution	0.1Lux/0.01Fc
Bluetooth interface	*

Size(HxWxD): 185mm x 68mm x 45mm Weight: 248g

#### Accessories:

Features

Velocity alarm

Data hold

2.4" TFT color display

Type K/Type J input Auto power off Low-battery indication

Probe sensor cover

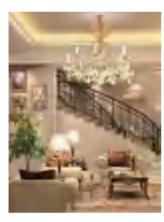
A bluetooth telescopic probe

3.7V Li-battery, USB cable, software, Carrying case and Gift box.

Single-point and continuous data log options

Bluetooth interface with Smart phone APP







Model 8516

#### DT-8517 Professional Smart Hot Wire Anemometer Meter with Thermocouple Thermometer

8517 Hot Wire Anemometer makes a step forward for you into the field of precision measurement. Telescoping probe is ideal for measuring in HVAC ducts and other small vents; extends up to 20m/s.













Specifications			
Air Velocity	Range	Resolution	Accuracy
m/s(meter per second )	0.1~30m/s	0.01m/s	±5%+0.03 m/s
ft/min(feet per minute)	20~3937ft/min	1ft/min	±5%+6ft/min
km/h(kilometers per hour)	0.3~72km/h	0.1km/h	±5%+0.1 km/h
MPH(miles per hour)	0.2~44.7MPH	0.1MPH	±5%+0.1 MPH
Air Temperature	-20∼60°C (-4∼140°F)	0.1℃/0.1°F	$0.5$ °C (0 $\sim$ 45°C), $1.0$ °C (rest of range) $1.0$ °F (32 $\sim$ 113°F), $2.0$ °F (rest of range)
T V/T I	-200°C to 1372°C (-328°F to 2501°F)	0.1℃/0.1°F	
Type K/ Type J	Above-100°C (-148°F)	0.1℃/0.1℉	±[0.15%rdg+1°C(1.8°F)]
	Below -100°C (-148°F)	1℃/1°F	$\pm[0.5\%\text{rdg}+2^{\circ}\text{C}(3.6^{\circ}\text{F})]$

Size(HxWxD): 185mm x 68mm x 45mm Accessories :

3.7V Li-battery, USB cable, software, Carrying case Weight: 248g

and Gift box.



Model 8517

EN: 61326

9822

Model 1616

313

High Accuracy

Fast Response

**Professional Thermocouple Thermometers** 

# DT-8891/8891A/8891B/8891C/8891D/8891E

#### Professional Thermocouple Thermometers



#### **Professional Thermocouple Thermometers**











8891/8891A/8891B/8891C/8891D/8891E contact thermometers offer fast response and laboratory accuracy. These thermometers work with K-type thermocouples and one IR temperature probe as temperature sensors, and offer 0.1 °C/0.1 °F

- Large backlit display shows any combination of T1, T2, T3, T1-T2, T1-T3, T2-T3 plus MAX, MIN, AVG
- Relative time clock on MAX, MIN and AVG provides a time reference for major
- Electronic Offset function allows compensation of thermocouple errors to maxi-
- Readout in °C, °F, or Kelvin (K)

User Selectable °C, °F or K 0.1 °C/0.1 °F/0.1K resolution. Type K Single input Type K Dual inputs Type K four inputs IR temperature input

Max/Min/Avg Hold and Data Hold

Differential Temperature Scan Function(T1,T2,T3,T-T2.....) LCD display with backlight Wide variety of interchangeable Thermocouple Probes Auto Power Off

USB interface

Type K

temperature

Data logging function

Specifications

Range

-200°C to 1372°C

(-328°F to 2501°F)

Above-10°C(14°F)

IR temperature Blow-10°C(14°F)

Above-100°C (-148°F) ±[0.15%rdg+1°C(1.8°F)]

Features

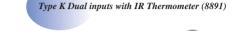
- USB interface, USB to UART Bridge Controller(8891C/8891D/8891E)
- 18,000 records data logger per channel(8891C/8891E)
- Auto Power Off mode (Sleep mode) energy saver

Туре	K Dual	inputs	(8891A)













Temperature probe (Optional)



8891 8891A 8891B 8891C 8891D 8891E T1,T2 T1,T2 T1 T1,T2 T1,T2, T1,T2,

Thermistor clamp



Model 8891

(Optional)

T3,T4 T3,T4

IR-T3. IR-T3.

IR-T4 IR-T4



Model 8891E

Blow -100°C (-148°F)  $\pm [0.5\% \text{ rdg} + 2^{\circ}\text{C}(3.6^{\circ}\text{F})]$ -30°C to 550°C IR temperature (-22°F to1022°F) Above-10°C(14°F) ±[2.0%rdg+2°C(3.6°F)] Blow -10°C(14°F) ±5°C( 9.0°F) Type K- Type K  $\pm [0.5\% \text{rdg} + 1^{\circ}\text{C}(1.8^{\circ}\text{F})]$  T1-T2 T1-T2 T1-T2 T1-T2, T1-T2, T3-T4 T3-T4 temperature Type K-IR IR temperature T1-T2 T1-T3, T1-IR, T1-IR, temperature Above-10°C(14°F)  $\pm [2.0\% \text{rdg} + 3^{\circ}\text{C}(5.4^{\circ}\text{F})]$  T1-T3, IR temperature T2-T3 T2-IR T2-IR Blow -10°C(14°F) ± 6°C(10.8°F) IR-Type K

±[2.0%rdg+3°C(5.4°F)]

± 6°C(10.8°F)

Basic Accuracy

8891 8891A 8891B 8891C 8891D 8891E

Size(HxWxD): 203mm x 75mm x 50mm

Accessories: 9V battery, Type K temp probe, IR temp probe(8891/8891B/8891C/8891D/88 91E), USB cable(8891C/8891D/8891E), software(8891C/8891D/8891E), Carrying case and Gift box.

Weight: 280g

#### **Psychrometer with InfraRed Thermometer**

























The Psychrometer with InfraRed Thermometer has been designed to combine the functions of Humidity meter, Type K Thermometer and Infrared Thermometer.

#### Features

Infrared to measure surface temperature with laser indication

Triple digital LCD display & Backlight

Slim design with rubberized sides for better grip and for one hand operation

Auto Power off & low battery indication

Accurate reading & Fast response time

Simultaneous display of: Humidity/Temperature; Humidity/Dew Point; Humidity/Wet Bulb

Highest 30 to 1 distance to target ratio measures smaller surface areas at greater distances.

Specifications						
Function	Range	Resolution	Accuracy			
Type K Temperature	-100~1372°C(-148~2501°F)	0.01°C/°F	±3% ±0.20m/s			
InfraRed Temperature	-50 to -20°C(-58 to -4°F)	0.1°C/°F	$\pm 5.0$ °C(9.0°F)			
	-20 to 500°C(-4 to 932°F)	0.1°C/°F	±2% reading or ±2°C(3.6°F)			
Air Temperature	-10-60°C(14-140°F)	0.1°C/°F	± 2.0°C(3.6°F)			
Humidity	0%~99.9%RH	0.1%RH	±2%RH			
Dew Point Temp.	-30°C~100°C(-22°F~199°F)	0.1°C/°F	±0.5°C/0.9°F			
Wet Bulb Temp.	0°C~80°C(32°F~176°F)	0.1°C/°F	±0.5°C/0.9°F			

Size(HxWxD): 255mm x 75mm x 50mm Accessories : 9V battery, type K temperature probe Weight: 350g and gift box with carrying case.

#### DT-8892 Professional Hygro-Thermometer Psychrometer















#### **Features** Highest 2% RH accuracy with fast response time Large LCD display of: Humidity/Temperature; Humidity/Dew Point; Humidity/Wet Bulb Auto power off and low battery indication High Performance Max Hold and Data Hold Function Dual Display & Backlight

Specifications						
Function	Range	Basic Accuracy(%rdg+digits				
Mumidity	0°C~10%RH, 90°C~100%RH	±3%RH				
Humidity	10°C~90%RH	±2%RH				
T	-30°C~100°C/-22~199°F	±0.5°C/0.9°F				
Temperature	-20°C~60°C/-4~140°F	±2°C/3.6°F				
Dew point Temp	-30°C~100°C/-22~199°F	±0.5°C/0.9°F				
Wet Bulb Temp	0°C~80°C/32~176°F	+0.5°C/0.9°F				

Size(HxWxD): 255mm x 45mm x 34mm Accessories:

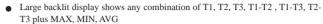
Weight: 200g



#### DT-3610B/3630/3891F/3891G

#### K-type/J-type Thermocouple Thermometers

3610B/3630/3891F/3891G contact thermometers offer fast response and laboratory accuracy. These thermometers work with K-type/J-type thermocouples and offer 0.1 °C/0.1 °F resolution.



- Relative time clock on MAX, MIN and AVG provides a time reference for major
- Electronic Offset function allows compensation of thermocouple errors to maximize overall accuracy
- Readout in °C, °F, or Kelvin (K/J)
- USB interface, USB to UART Bridge Controller(3891F/3891G)
- 18,000 records data logger per channel(3891F/3891G)
- Auto Power Off mode (Sleep mode) energy saver

Features				
	3610B	3630	3891F	3891G
User Selectable °C, °F or K	*	*	*	*
0.1 °C/0.1 °F/0.1K resolution.	*	*	*	*
Type K/Type J Single input	*			
Type K/Type J Dual inputs		*	*	
Type K/Type J four inputs				*
Max/Min/Avg Hold and Data Hold	*	*	*	*
Differential Temperature		*	*	*
Scan Function(T1,T2,T3,T-T2)	*	*	*	*
LCD display with backlight	*	*	*	*
Wide variety of interchangeable	*	*	*	*
Thermocouple Probes	*	*	*	*
Auto Power Off	*	*	*	*
USB interface			*	*
Memory Readings			18,000	18,000



3610B 3630 3891F 3891G







Type K -200°C to 1372°C  $\pm [0.15\% \text{rdg} + 1^{\circ}\text{C}(1.8^{\circ}\text{F})]$ T1,T2 T1,T2 T1,T2,T3,T4 (-328°F to 2501°F) Type J -210°C to 1100°C ±[0.15%rdg+1°C(1.8°F)] T1,T2 T1,T2 T1,T2,T3,T4 (-346°F to 2012°F) Type K- Type K/ T1-T2, Type J- Type J  $\pm[0.5\%rdg+1^{\circ}C(1.8^{\circ}F)]$ T1-T2 T1-T2 temperature

Basic Accuracy

Size(HxWxD): 160mm x 58mm x 27mm

Range

Weight: 350g Accessories:

Specifications

9V battery, type K temperature probe and gift box with carrying case.









- Type K thermometer with single or dual input direct or differential measurements to 0.1°
- Accuracy to 0.15% °C or °F readout (630)
- Electronic Offset function allows compensation of thermocouple errors to maximize overall accuracy
- Readout in °C, °F, or Kelvin(K)
- Auto Power Off (Sleep mode) prolongs battery life

Features				
	9610B	9612	629	630
User Selectable °C or °F	*	*	*	*
User Selectable 0.1°C or 1°C(0.1°F or 1°F) Resolution	*	*	*	*
Type K Thermocouples	*	*	*	*
Single Thermocouple Input	*		*	
Dual Thermocouple Input		*		*
Wide variety of interchangeable Thermocouple Probes	*	*	*	*
Max Hold and Data Hold	*	*	*	*
Differential Temperature (T1-T2)		*	*	*
SCAN Function (T1, T2, T1-T2, MAX, HOLD)		*	*	*
LCD display with backlight			*	*

Specifications									
Function	Range	Basic Ad	ccuracy 9610B / 629 9612		9612	630			
Temperature	-50~1300°C	±(0.5%±1°C)		Single Input	Dual Input	Dual Input			
	-58~2000°F ±(0.5%±2°F)								
Resolution	0.1° or 1°			*	*	*			
Specification	Specifications (630)								
Range: -200°C to 1	Range: -200°C to 1372°C (-328°F to 2501°F)				Basic Accuracy				
T1, T2 Above -100°C (-148°F)			$\pm [0.15\% rdg + 1^{\circ}C(1.8^{\circ}F)]$						
T1, T2 Blow -100°C (-148°F)			$\pm [0.5\% rdg + 2^{\circ}C(3.6^{\circ}F)]$						
T1-T2				±[0.5%rdg+1°C(1	1.8°F)]				
Type K Temperatur	re Resolution			0.1°C/°F/K<1000	0°;1°C/°F/K>1000	o			

Size(HxWxD): 188mm x 64.5mm x 24.5mm (9610B/9612) Weight: 160g (9610B/9612)

Size(HxWxD): 220mm x 63mm x 28mm (629/630)

Weight: 200g (629/630)

Accessories :

9V battery, Holster with stand and Temperature probe.

#### DT-1370 Thermometer



Model 9612

Single or Dual Thermocouple Input

0.1°C/0.1°F resolution over the entire measurement ranges.

- Selectable °C or °F
- Data Hold
- Auto power off
- Overrange indication

Specifications						
Range	-50°C to 200°C(-58°F to 392°F)					
Resolution	0.1°C /°F					
Basic Accuracy	$\pm 2\% \pm 1$ °C/ $\pm 1.8$ °F					

#### DT-610B/612/613

#### Thermocouple Thermometers







The 610B (single input) and 612(dual inputs) contact thermometers offer fast response and laboratory accuracy. The DT-613 (dual inputs) is a microprocessorbased digital thermometer designed to use external type K thermocouples (temperature probes) as temperature sensors. These thermometers work with type K thermocouples and offer 0.1°C/0.1°F resolution over the entire measurement range. A rugged holster protects three models.

- Type K thermometer with single or dual inputs direct or differential measurements to 0.1°
- Accuracy to 0.15% °C or °F readout (613)
- Electronic Offset function allows compensation of thermocouple errors to maximize overall accuracy
- Readout in °C, °F, or Kelvin(K)
- Auto Power Off (Sleep mode) prolongs battery life



EN: 61326



Specifications

Specifications (613)

T1, T2 Above -100°C (-148°F)

T1, T2 Below -100°C (-148°F)

Type K Temperature Resolution

Size(HxWxD): 165mm x 76mm x 43mm

Range

-50~1300°C

-58~2000°F

Range: -200°C to 1372°C (-328°F to 2501°F) Basic Accuracy

0.1° or 1°

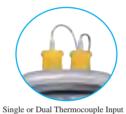
Function

Temperature

Resolution

T1-T2

Weight: 403g





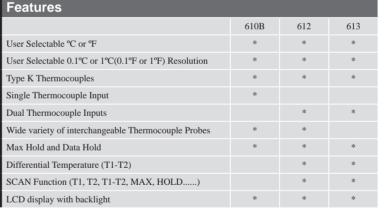
Large, easy-to-read LCD

display with backlit

Dual Temperature inputs (612/613)

Model 613

High Accuracy to 0.15% (613)



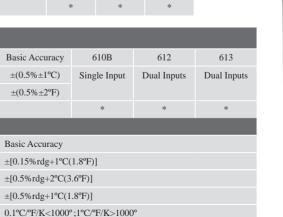
Basic Accuracy

±(0.5%±1°C)

±(0.5%±2°F)

Accessories :

and gift box with carrying case.



9V battery, Holster with stand, Type-K Temperature probe

www.cem-instruments.com





The 1370 contact thermometer offer fast response, offer

Specificatio	ns
Range	-50°C to 200°C(-58°F to 392°F)
Resolution	0.1°C /°F
Basic Accuracy	±2%±1°C/±1.8°F

Size(HxWxD): 113mm x 61mm x 13mm

Weight: 90g

Accessories: Clamshell

Model 610B

**EMC** EN: 61326

Model 1370



## Model 615











EN: 61326

High Performance and

quality sensor







625 is digital Humidity & Temperature Meter with Wet Bulb Temperature & Dew Point temperature, which has been designed to combine the functions of Humidity Meter, Temperature Meter, Wet Bulb Temperature and Dew point temperature.

It is an ideal Humidity & Temperature Meter with scores of practical applications for laboratorial, industrial, Engineer and professional use.

615 is Humidity meter with Air and type K thermocouple thermometer.

- Large, easy-to-read backlit LCD with dual display
- Fast Response Time: 10s (90% at 25°C still air)
- 2% High Accuracy (625)
- Dew Point Temperature (-30°C~100°C/-22°F~199°F) (625)
- Wet Bulb Temperature ( 0°C~80°C/32°F~176°F) (625)
- Resolution 0.1%RH, 0.1°C/0.1°F
- Max/Min Hold and Data Hold Function (625)
- Microprocessor-based Design (625)
- Dual Display Temperature & Humidity

Features				
	615	625	635	616CT
Large dual digital LCD display with backlight	*	*	*	*
Response Time: 10s (90% at +25°C still air)		*	*	*
Sampling Rate: 2.5 samples per second	*	*	*	*
Dew Point Temperature & Wet Bulb Temperature		*	*	
2% High Accuracy		*	*	*
Dual Display Temperature & Humidity	*	*	*	*
Type K temperature	*		*	
Non-contact IR temperature				*

Specifications								
Function	Range	Resolution	Basic Accuracy	615	625	635	616CT	
Humidity	0°C~100%RH	0.1%RH	±2%RH		*	*		
Humaity	0 C~100%K⊓	U.1%KII	±3.5%RH	*			*	
Temperature	-30°C~100°C/-30°F~199°F	0.1°C/°F	±0.5°C/0.9°F		*	*	*	
Type K Temp.	-20°C~1000°C/ -4°F~1832°F	0.1° up to 200°, 1° over 200°	±3%	*		*		
Dew Point Temp.	-30°C~100°C/-22°F~199°F	0.1°C/°F	±1.0°C/1.8°F		*	*		
Wet Bulb Temp.	0°C~80°C/32°F~176°F	0.1°C/°F	±1.0°C/1.8°F		*	*		
IR temp.	-50°C~500°C/-58°F~932°F	0.1° up to 200°, 1° over 200°	±2.0%±2°C/4°F				*	

Size(HxWxD): 225mm x 45mm x 34mm

Weight: 200g Accessories:

Carrying case, type K temperature probe (615/635) and 9V battery.



Features		
	321	321S/321F
Mini size	*	*
Fast Response Time	*	*
High Accuracy		*
High Performance	*	*
Max Hold and Data Hold Function	*	*
Dual Display & Backlight	*	*
Dew Point & Wet Bulb Temperature		*

Specifications				
Function	Range	Basic Accuracy	321	321S/321F
Humidity	0~100%RH	±2%RH		*
		±3.5%RH	*	
Temperature	-30~100°C/ -22~199°F	±0.5°C/0.9°F		*
	-20~60°C/ -4~140°F	±2°C/3.6°F	*	
Dew Point Temp.	-30~100°C/ -22~199°F	±0.5°C/0.9°F		*
Wet Bulb Temp.	0~80°C/32~176°F	±0.5°C/0.9°F		*

Size(HxWxD): 255mm x 45mm x 34mm Accessories:

Weight: 200g 9V battery and gift box with carrying case.









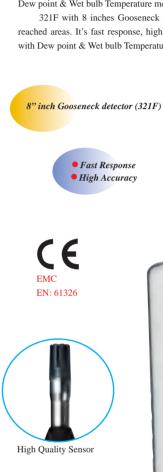
321 is compact probe size digital Hygro-Thermometer, ideal for field use with high performance.

321S is fast response, high accuracy digital Hygro-Thermometer with Dew point & Wet bulb Temperature measurement.

321F with 8 inches Gooseneck detector is easy to measure the hardreached areas. It's fast response, high accuracy digital Hygro-Thermometer with Dew point & Wet bulb Temperature measurement.

TEMPERATURE & HUMIDITY METER & WIST-DEW POINT

CEM DT-3215







Big Digit Hygro-Thermometers

#### DT-3321/3322

Function

Humidity

Temperature

Type K Temp.

NTC. Temp.

**EMC** EN: 61326

Weight: 200g (3321)

Weight: 176g (3322)

Accessories :















Specifications								
Model	DT-325A	DT-325B	DT-325C	DT-325D	DT-325E	DT-325F	DT-325G	
	Bi	g Digit Hygro-Ther	mometers			Big Digit Thermome	ters	
	Indoor Thermometer	Indoor/ Outdoor Hygro- Thermometer	Dual input Indoor/ Outdoor Hygro- Thermometer	Dual input Indoor/ Outdoor Hygro- Thermometer with Alarm & Time	Dual input Indoor/Outdoor Thermometer	Indoor/Outdoor Type-T probe input & longer cable lenthThermometer	Indoor/Outdoor high accuracy refridge bottle probe only Thermometer	
Temperature Range	-10°C to 60°C (14 to 140°F)	-10°C to 60°C (14°F to 140°F)	(-10°C to 60°C) 14°F to 140°F	-10°C to 60°C (14°F to 140°F)	-10 to 60°C (14 to 140°F)	-50°C to 70°C (-58°F to 158°F)		
Temperature Accuracy	±1.8F	±1.8F	±1.8F	±1.8F	±1.8F	±1.0F		
Temperature Resolution	0.1°	0.1°	0.1°	0.1°	0.1°	(	0.1°	
Humidity Range	10 to 99%	10 to 99%	10 to 99%	10 to 99%	No		No	
Humidity Accuracy	±4%	±4%	±4%	±4%	No		No	
Humidity Resolution	1%	1%	1%	1%	No	No		
Dew point temperature	NO	No	No	Yes	No	No		
MAX/MIN	No	No	Yes	Yes	No	7	YES	
Alarm (sound & display)	No	No	No	Yes	No	`	YES	
Date, time	No	No	No	(Yes)	No		Yes	
Cabel Length	No	5ft(1.5m)	5ft(1.5m)	5ft(1.5m)	10t(3m)	10:	10ft(3m)	
Remote Probe type		Hard wired	Hard wired	Hard wired	Hard wired	Hard wired	plug-probe	
Power				2 x1.5V AA Batt	eries			
Low battery indication				Yes				
°F/°C				Yes				

Size(HxWxD): 108mm x 103mm x 25mm

Weight: 201g

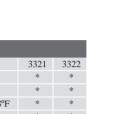
Accessories:

battery, gift box and carrying case.

Features		
	3321	3322
User selectable NTC or Type K measure		*
Dew Point Temperature measure	*	*
Wet Bulb Temperature measure	*	*
Dry Bulb Temperature measure	*	*
Calculate the Target Superheat		*
Calculate the Target Evaporator Exit Temperture		*
User selectable °C & °F	*	*
MAX,MIN ,HOLD modes	*	*
Dual display with backlight	*	*
Automatic Power Off	*	*
Low battery display	*	*

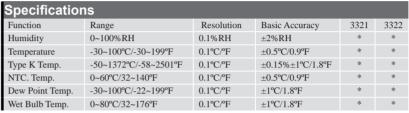
3321 is a complete digital psychrometer and a very valuable HVAC diagnostic tool. As a psychrometer, it measures wet bulb(WB), dry bulb(DB), percent relative humidity(RH%), and dew point(DP).

3322 is a diagnostic tool, it helps the HVAC technician easily diagnose problems with air flow across the evaporator. It can also calculate the target superheat of a fixed restrictor air conditioning system.





Fast Response









Model 3322













Button on both sides of the rugged housing, easy to use



DT-322/323 Interior Temperature Hygrometer

Type K temperature probe (3322) and 9V battery, gift box and carrying case.

High Performance and quality sensor

Size(HxWxD): 220mm x 63mm x 28mm (3321)

Size(HxWxD): 187mm x 63mm x 28mm (3322)

Featur	es	
Environme	nt Comfort Display: COMFORT, WET, DRY	
Time/Tem	erature/Humidity display	
°C/°F Tem	erature units the way self-locking switch show	
Highest/Lo	west Temperature and Humidity memory function	
Calendar s clock	ows the whole point timekeeping, daily alarm functions, 12/24	hour
0	ti	

Specifications	
Temperature Range	0 ~ 50°C/32 ~ 120°F
Temperature Accuracy	± 1.0°C/1.8°F
Temperature Resolution	0.1°C/0.1°F
Humidity Range	10% RH ~ 90% RH
Humidity Accuracy	$\pm$ 5% (40% RH ~ 80% RH) other $\pm$ 8%

Size(HxWxD): 108mm x 60mm x 15mm

Weight: 74g Accessories :

battery, gift box and carrying case.



**EMC** 

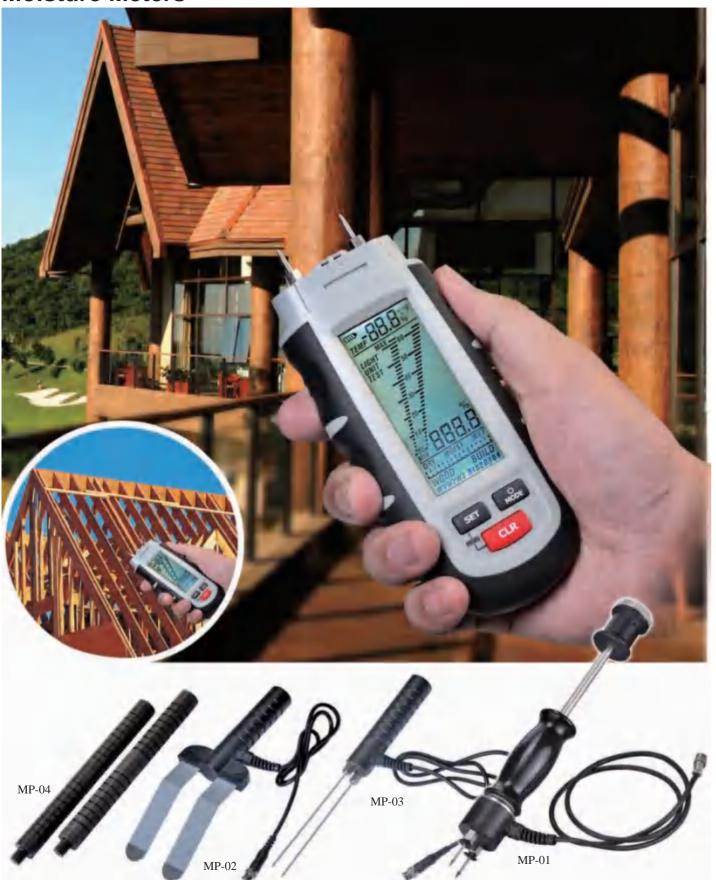
EN: 61326

Model 322



Model 323

#### **Moisture Meters**



# Features Dual backlit LCD digital display of moisture & temperature Readings with Integral electrod Pins User selectable Wood moisture, Building material moisture, °C, °F Auto power off

Specifications	
Electrode length	8 mm
Measuring range	Wood: 6 – 44%
	Building material: 0.2-2.0%
	Ambient temperature: 0 to 50°C (32 to 122°F)
Accuracy	Wood: ±2 %
	materials: ±0.2%
Ambient temperature	±1°C / ±1.8°F
Auto power OFF	After approx. 3 minutes
Operation temperature	0 - 40°C
Ambient Relative humidity	0 - 85 %RH





Model 120

Size(HxWxD):  $96mm \times 40mm \times 20mm$  Accessories:

**Neight:** 83g 4xLR44 button batteries, gift box and carrying case

#### DT-125H/125G Moisture Meters

125H/125G series moisture meters are used for testing moisture in wood, plaster and building materials. Integrated characteristics for 8 material groups increase the accuracy of measurements. The wet/dry indicator evaluates and interprets measurements with respect to the given material. The clearly organised, functional display and rubber guard around the housing make this unit well-suited for use in the rough professional environment.

125G can meet with different measuring requirements with various professional remote probes.

Features
Large LCD display
Readings with Moisture Probe or Hammer Electrode
Readings with Integral electrod Pins

Specifications				
Model	125H	125G		
Electrode length	8 mm			
Electrodes	Integrated, replaceable			
Measuring range Wood:	1 – 75 %			
Measuring range	Wood: 1 – 75 %			
	Building material: 0.1-2	.4 %		
	Ambient temperature: -4	0 to 70°C (-40 to 158°F)		
	Ambient Relative Humid	lity: 0 to 100%		
Accuracy	Wood: 030% / ±1 %			
	3060% / ±2%			
	6075% / ±4%			
	Other materials: $/\pm0.5\%$			
Ambient temperature range	-40 °C~ -10°C and +40 ~	+70°C / ±2°C		
	-10 °C~ +40°C / ±1°C			
Ambient Relative Humidity	0~20% and 80 ~ 100%	/±5.0%		
	20~ 80%/±3.5%			
Auto power OFF	After approx. 3 minutes			
Auto LCD backlight OFF	After approx 10 seconds			
Housing material	Impact-proof plastic house	sing		
Operation temperature	0 - 40°C			
Ambient Relative humidity	0 – 85 % RH			
Professional remote probes	No	Yes		



Weight: 203g

#### Accessorie

3xCR2032 button batteries, Moisture Hammer Probe, Moisture Baseboard Probe, Moisture Probe Extenders, gift box and carrying case (125G)

3 x CR2032 button batteries (125H)





Model 125G



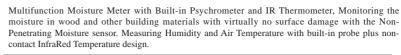




**IR Thermometer** 

**Multifunction Moisture Meter with Psychrometer &** 





Ouickly indicates the moisture content of materials with Pinless technology without damaging the surface (239)

Easy to read, large dual display with automatic backlight feature

Simultaneously displays moisture value of wood or material being tested, Air Temperature, Humidity

Pinless measurement depth to 0.75" (19mm) below the surface (239)

Programmable high/low Moisture and Humidity alarms

Designed with an IR circuit to measure non-contact surface temperature; 8:1 distance to spot ratio with 0.95 fixed emissivity

Built-in Humidity/Temperature probe measures Relative Humidity, Air Temperature plus Grains Per Pound (GPP)/(g/kg), Dew Point (DP), Vapor Pressure, and condensation point

Automatic calculation of differential Temperature (IR - DP) to determine condensation point Min/Max and Data Hold

Auto power off and low battery indication

Specifications			
		229	239
Pin-type moisture Measurement			
Range	0 to 99.9 (Relative)	*	
Accuracy (of reading)	±5%	*	
Resolution	0.1	*	
Pinless Moisture Measurement			
Range	0 to 99.9 (Relative)		*
Accuracy (of reading)	±5%		*
Resolution	0.1		*
Pinless Depth	up to 0.75" (19mm)		*
IR Temperature Measurement			
Range	-50 to 200°C(-58 to 392°F)		*
Distance to Spot size	8:1 Distance to Spot size		*
Emissivity	0.95		*
Response Time	Less than 1 second		*
Resolution	0.1		*
Basic Accuracy	±3.5°C(±6.3°F)		*
Air Temperature Measurement			
Air Temp Range	-28 to 77°C/-20 to 170°F	*	*
Basic Accuracy	±2°C/3.6°F	*	*
Humidity Range	0 to 100%RH	*	*
Basic Accuracy	$\pm 5\%$ RH @0% to 20% and 80% to 100% $\pm 3.5\%$ RH @20% to 80%	*	*
Vapor Pressure	0 to 20.0kPA	*	*
Dew Point	-22 to 199°F (-30 to 100°C)	*	*
Mixing ratio	0 to 999GPP (0 to 160g/kg)	*	*



Measure moisture of wall material with non-invasive Pinless technology





Patented IR thermometer design locates cold spots on walls, which identifies surfaces subject to condensation (direct differential display of IR - DP)











replaceable pin





Model 239

Weight: 280g

Size(HxWxD): 170mm x 70mm x 38mm

Accessories: Gift Box with Carrying Case

wood based on a wood temperature of 20°C.

Features

123/123H/123L/125/125B/127 are used to measure the moisture level in sawn timber (also cardboard, paper) and hardened

materials (plaster, concrete and mortar). They display the moisture

level. The instruments have an average adjustment for European

123L is 2 in 1 digital and analog moisture meter with flashlight

127 is 2 in 1 digital and analog moisture meter

**Moisture Meters** 

#### Moisture Meter









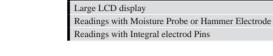




Model 123H

CE

EN: 61326



Specifications	
Measuring principle	Electrical resistance
Electrode length	8mm
Electrodes	Integrated, replaceable
Measuring range	Wood: 6-44%
	Material: 0.2-2.0%
Display Accuracy	Wood: ±1%
	Material: ±0.05% (127)
Battery	3 x Cr 2032, replaceables
Ambient temperature	0-40°C
Ambient humidity	0-85%

Size(HxWxD): 123/123L/127: 130mm x 40mm x 33mm

Weight: 99g

**Size(HxWxD):** 125/125B: 140mm x 48mm x 33mm

Weight: 93g



Model 123L

Model 125



Model 125B



Calibration and battery check





Accessories: battery, clamshell

www.cem-instruments.com

E-mail:cemyjm@cem-instruments.com



Model 123

129 is a conductivity moisture instrument designed for use in wood, used to measure the moisture level in sawn timber (also cardboard, paper) and hardened materials (plaster, concrete and mortar). They display the moisture level. The instruments have an average adjustment for European wood based on a wood temperature

129B is with various professional remote probe.

- Large LCD display
- Automatically Temperature Corrected (ATC) Readings when used with the temperature probe
- Readings with Moisture Probe or Hammer Electrode
- Readings with Integral electrod Pins

Laura LCD diaglass	
Large LCD display	
Readings with Moisture Probe or Hammer Electrode	
Automatically Temperature Corrected (ATC) Readings	
when used with the temperature probe	
Readings with Integral electrod Pins	

Specifications	
Measuring principle	Electrical resistance
Electrode length	8mm
Electrodes	Integrated, replaceable
Measuring range	Wood: 6-99.9%
Display Accuracy	Wood: ±1%
Battery	2 x AAA
Temperature measuring	0-60°C
Ambient temperature	0-40°C
Ambient humidity	0-85%

Size(HxWxD): 180mm x 50mm x 31mm

Weight: 175g Accessories :

Gift Box with Carrying Case







Optional remote probe



#### DT-190 Moisture Datalogger

Features
Recording and alarm setup and indication
Readings with Moisture Probe or Hammer Electrode
Real-time data transmission
Low battery indication

Specifications	
Measuring range	Wood: 6 – 99.9 %
	Building material: 6-99.9 %
	Ambient temperature: -40 to 70°C (-40 to 158°F)
	Ambient Relative Humidity: 0 to 100%
Accuracy	Wood: ±1 %
Ambient temperature	-40 °C~ -10°C and +40 ~ +70°C $/\pm 2$ °C
	-10 °C~ +40°C / ±1°C
Ambient Relative Humidity	0~20% and 80 ~ 100% /±5.0%
	20~ 80%/±3.5%
Memory	50000 readings
Measuring rate	2sec. to 24h
Professional remote probes	YES

Size(HxWxD): 145mm x 35mm x 30mm Weight: 49g Accessories: 3.6V Lithium battery, software and clamshell.



330

#### Pinless Moisture Meter



128M/128H is the NON-Contact Moisture Meter, It is an electronic dampness indicator with a measuring process working on the principle of high frequency. The instrument is used for non-destructively tracing dampness in building materials of all kinds as well as for detecting damp distribution in walls , ceilings and floors. It is particulary suitable for pre-testing the readiness of building materials for covering prior to CM measurement.

Features
Quickly indicate the moisture content of materials
CM % measured function
Depth of penetration about 20-40mm with alarms.
Measure and HOLD Function
MAX/MIN display Function
Programmable moisture alarms
Auto Power Off & low battery indication
White Backlit LCD Display
Multiple Material Groups (128H)

Specification	ns
Measuring Range	0.0~100.0 %
Penetration Depth	20~40mm
Resolution	0.1
Battery	Three "AAA" Batteries

Specifications	
Measuring Range	0.0~100.0 %
Penetration Depth	20~40mm
Resolution	0.1
Battery	Three "AAA" Batteries

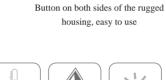


Moisture Table of Comparison Construction material Display <30 digits dry 30 - 60 digits at risk >60 digits Cement <25 digits 25 – 50 digits at risk 50 – 75 digits wet >75 digits all wet

Size(HxWxD): 242mm x 63mm x 30mm Weight: 226g

Accessories:

3×"AAA" V battery, gift box with carrying case.







EN: 61326

#### DT-126H Pinless Moisture Meter

126H is designed to non-invasively detect hidden moisture content up to 3/4-Inch (19 mm) depth. Easily select between materials with mode button to test surface of drywall, masonry, hardwood, and softwood. The 126H has easy viewing with bright, reverse-contrast display and LED bar graph

Features
Pinless, electromagnetic field (EMF) technology allows for nondestructive detection
of moisture content in building materials
Detects moisture content up to 3/4-Inch (19 mm) deep
Easy viewing with bright reverse-contrast display
Nine LED bars indicate moisture range
Easy-to select materials with mode button; drywall, masonry, hardwood, and softwood
Hold, Low battery, and Auto-Power off functions
Built to withstand a 6.6 foot (2 m) drop

Specifications	
Sensing Depth	3/4" (19 mm)
Moisture Reading Range	0 to 100%
Display Resolution	0.1%
Measurable Materials	Drywall, Masonry, Hardwood, Softwood
Display	Bright Reverse-Contrast Display and a Nine LED Bar Graph
Application	Detect Moisture Content and Water seepage/Leakage
Special Features	Audible Alert, Auto-Power Off, Visual Notification

Size(HxWxD): 180mm x 67mm x 38mm Accessories:

Weight: 180g 9V battery, gift box with carrying case.







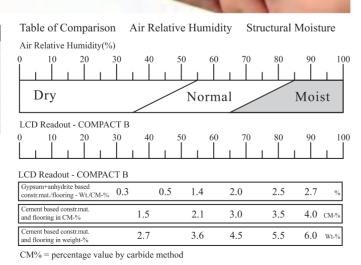
Model 126H

Features
Quickly indicate the moisture content of materials
Depth of penetration about 20-40mm.
Low battery indication
MAX/MIN Function
HOLD Function
Auto Power Off

HOLD Function	
Auto Power Off	
White Backlit LCD	Display
Specification	ns
Sensor Type	metal spheroid
Measuring Range	0 to 100 digit
Max Resolution	1
Battery	9V battery
Dimensions	189 x 47 x 35mm
Weight	178g

Accessories:

9V battery and gift box

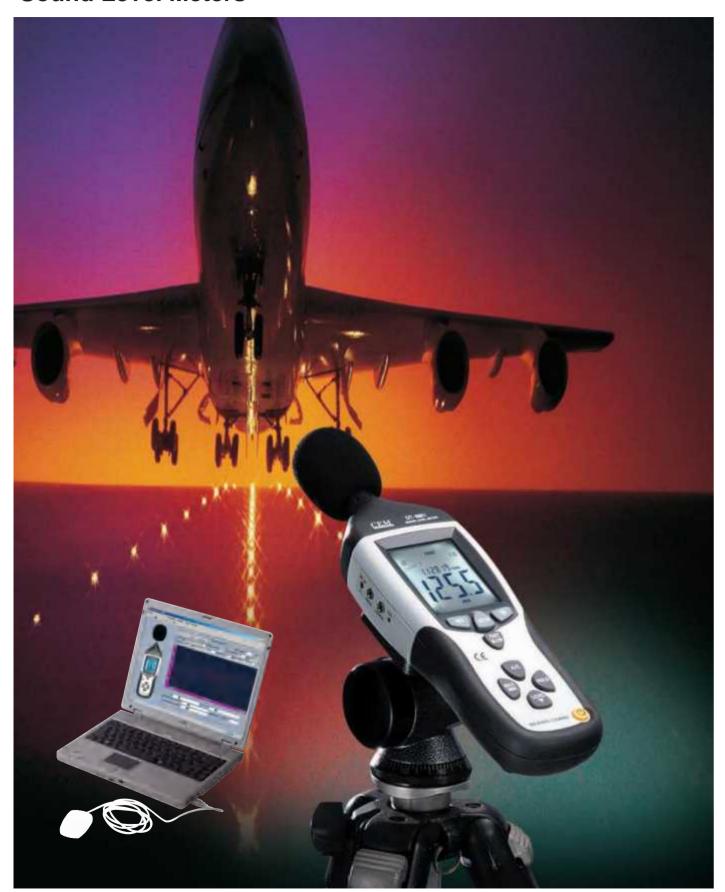


331

CEM DT-128



#### **Sound Level Meters**





Features

MAX & MIN measurements Overrange display A & C Weighting

FAST & SLOW response

Datalogger function (8852) Adjustable Alarm-Levels (8852) Memory for 32700 readings (8852)

Specifications

Dynamic range

Time weighting Microphone

Resolution Display Update

Analog output

Level ranges





8851/8852 Sound Level Meters are designed for noise Control project, quality control, illness prevention & cure and all kinds of environmental sounds measurements. It is applied to the sounds measurement at factory, school, office, hospital, traffic access and household etc.

Analog AC/DC outputs for connection to frequency analyzer or X-Y shaft recorder

 $\pm 1.4 dB$ 31.5HZ ~ 8KHZ

50dB

0.1dB

IEC61672-1 Type 2, ANSI S1.4 Type2

LO:30dB~80dB Med:50dB~100dB

Hi:80dB~130dB Auto:30dB~130dB FAST ( 125mS ), SLOW ( 1s )

1/2 inch electret condenser microphone

AC/DC outputs, AC=1Vrms, DC=10mV/dB

This unit confirms to the IEC61672-1 class 2 for Sound Level Meters















Analog AC/DC outputs

Time weighting & Frequency weighting, Current reading



CEM DT-MS1

Model 8851



Battery, screwdriver, audio plug, windscreen, software, USB cable, tripod and DC 9V power supply and gift box with carrying case.



Size(HxWxD): 278mm x 76mm x 50mm Weight: 350g

Features

MAX & MIN measurements Over range display A & C Weighting

FAST & SLOW response

Readings memories

Specifications Standard applied

Accuracy

Frequency range

Dynamic range

Time weighting:

Reading display update

Bargraph display update

Microphone

Resolution

Level ranges

#### **Features** 94dB and 114dB Sound Calibration at 1kHz Accurate and simple to use Fits 1/2" diameter microphone

Specifications	
Output Sound Pressure Levels	114dB and 94dB re 20 uPa under refrence conditions.
Output Frequency	1000Hz, ±4%
Reference Temperature Conditions	>23°C (73°F)
Atmospheric pressure	>1013 mbar (760mm of Hg)
Relative humidity	>65%RH
Accuracy of Sound Pressure Level	Under stated reference environment conditions $\pm 0.5 dB$

Size(HxWxD): 120mm x 50mm x 42mm Weight: 278g

Accessories:

9V battery, Carrying case,1/2"Microphone Adaptor (optional) and Clamshell.



Model SC-05



#### DT-8850 Sound Level Meter



CE

8850 Sound Level Meter can be used to measure noise in factories, schools, offices, airports and home etc, checking acoustics of studios, auditoriums and Hi-Lo installations. 8850 meets IEC 61672-1 Type 2 standards. The 30 to 130 dB range makes this meter ideal for all general purpose sound level measurements.



ы	Features
	Provides 1.4dB accuracy
ě	Meets IEC61672-1 type 2 standards
	Newly Design Shape
	High Performance
	Max Hold and Data Hold Functions
£	Analog AC/DC outputs for connection to an analyzer or recorder
	Built-in calibration check

Specifications	
Range	Lo (Low)-Weighting: 35dB~100dB
	Hi (High)-Weighting: 65dB~130dB
Frequency Weighting: A/C	Lo (Low)-Weighting: 35dB~100dB
	Hi (High)-Weighting: 65dB~130dB
Resolution	0.1dB
Accuracy	1.4dB at 94dB sound level, 1kHz sine wave
Measurement rate	1.5 times per second, norminal
Storage temperature	-10°C~60°C (<80% R.H.)
Over range	"OL" mark indication

Size(HxWxD): 251mm x 63.8mm x 40mm Weight: 250g

Accessories : 9V battery, Carrying case and Gift box. Sound Level Meter

815 Sound Level Meter is designed for noise project, quality control, illness prevention & cure and all kinds of environment sounds measurements. It is applied to the sounds measurement at factory, school, office, traffic access and household, etc.

IEC61672-1 Type 2, ANSI S1.4 Type2

LO:30dB~80dB Med:50dB~100dB Hi:80dB~130dB Auto:30dB~130dB

1/2 inch electret condenser microphone

FAST ( 125mS ), SLOW ( 1s )

This unit confirms to the IEC61672-1 class 2 for Sound Level Meter

This unit confirms to the IEC61672-1 class 2 for Sound Level Meters

Digit LCD display with a resolution of 0.1dB, bargraph & white backlight

±1.4dB

50dB

0.1dB

2 times/sec

20 times/sec

31.5Hz ~ 8KHz





1.4dB Accuracy (805)



EN: 61672-1







Model 815

Size(HxWxD): 210mm x 55mm x 32mm	
Weight: 230g	

Accessories : 9V battery, Carrying case and Gift box.

#### DT-805/805L Mini Sound Level Meters

Features
Provides 1.4dB accuracy (805); Provides 2.0dB accuracy (805L)
Meets IEC61672-1 Type 2 (805)
Newly Design Shape
High Performance
Max Hold and Data Hold Function

Specifications	
Level Range	Low = 30 ~ 100dB
	$High = 60 \sim 130 dB$
Accuracy	±1.4dB (ref 94dB @ 1kHz)
Frequency Range	31.5Hz to 8kHz
Frequency Weighting	A, C
Time Weighting	Fast, Slow
Battery Type	9V Battery NEDA 1604, IEC 6F22, JIS 006P
Operation Temp	0°C~40°C(<80% R.H.)
Storage Temp	-10°C~60°C(<70%R.H.)

Size(HxWxD): 210mm x 55mm x 32mm

Weight: 230g





Model 805

Model 805L

10185-1018 10185-10185

Model 8850

1.4dB Accuracy (805)

#### CFM/CMM Thermo-Anemometer with IR temperature

#### **CMM/CFM Thermo-Anemometer** with IR temperature







CFM/CMM Thermo-Anemometer with built-in non-contact IR Thermometer measure remote surface temperature to 500°C (932°F) and 30:1 distance to spot ratio.



Model 8893







EN: 61326



Size(HxWxD): 203mm x 75mm x 50mm Weight: 280g

9V battery, USB cable, software,

Anemo probe and Gift box with carrying case.

Simultaneous display of Air Flow or Air Velocity plus Ambient Temperature

Easy to set Area dimensions (cm<sup>2</sup>) are stored in the meter's internal memory for the next power on Resolution of 0.01m/sec

20 points average for Air Flow

Super large (9999 counts) LCD Backlit Display

3% velocity accuracy via low friction 2.83"D (72mm) ball bearing vane wheel on 3.9ft (120cm) cable

Complete with vane sensor with 3.9ft (120cm) cable, 9V battery, and protective rubber holster

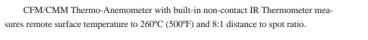
MAX/MIN, Data Hold functions

Specifications				
Air Velocity	Range	Accuracy	8893	8894
m/s(meter per second)	0.40~30.00	±3% ±0.20m/s	*	*
ft/min(feet per minute)	80~5900	±3% ±40ft/min	*	*
km/h(kilometers per hour)	1.4~108.0	±3% ±0.8km/h	*	*
MPH(miles per hour)	0.9~67.0	±3% ±0.4MPH	*	*
Knots(nautical miles per hour)	0.8~58.0	±3% ±0.4knots	*	*
Air Temperature	-10-60°C(14-140°F)	$\pm 2.0^{\circ} C(4.0^{\circ} F)$	*	*
InfraRed Temperature	-50 to -20°C(-58 to -4°F)	± 5.0°C(9.0°F)		*
	-20 to 500°C(-4 to 932°F)	±2% reading		*
Air Flow	Range	Area		
CFM	0-999900	0-999.9 ft <sup>2</sup>	*	*
CMM	0-999900	0-999.9 m <sup>2</sup>	*	*

20 points average for Air

Resolution of 0.01m/sec





- Multifunction Air Velocity Meter with wide temperature range (618/618B)
- CFM/CMM Thermo-Anemometer (619)
- CFM/CMM Thermo-Anemometer + InfraRed Thermometer (620)
- Max/Min/Avg value with relative time stamp (619/620)

DT-618/618B/619/620

Low battery indication and Auto Power Off

Features

Resolution of 0.01m/sec (619/620)

High Sensitive and Accurate

20 points average for Air Flow (619/620) Super large LCD Backlit Display(618/619/620)

Type K sensor for temperature measurements (618/618B)

• Display Air Flow (CFM/CMM), or Air Velocity plus Temperature simultaneously (619/620)

Easy to set Area dimensions (cm<sup>2</sup>) are stored in the meter's internal memory for the next power on(619/620)

3% velocity accuracy via low friction 2.83"D (72mm) ball bearing vane wheel on 3.9ft (120cm) cable(619/620)



Simultaneous display of Air Flow or Air Velocity plus Ambient Temperature(619/620)

Resolution of 0.01m/sec 20 points average for Air Flow

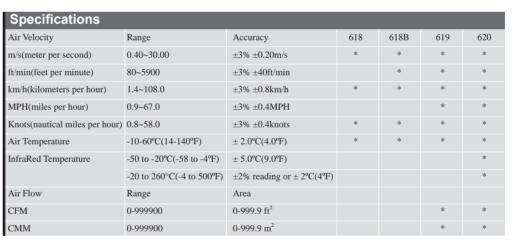
Thermo- Anemometer with builtin non-contact IR Thermometer













Meter Size(HxWxD): 150mm x 72mm x 35mm Weight: 210g (618/618B)

9V battery and Anemo probe, Gift box with carrying case.















Model 620















CFM/CMM Thermo-Anemometer remote sensor is the most popular model for HVAC applications.

#### Features

Display Air Flow (CFM/CMM), or Air Velocity plus Temperature & Max/Min/Avg value Easy to set Area dimensions (cm<sup>2</sup>) stored in the meter's internal memory for the next power on Resolution of 0.01m/sec

20 points average for Air Flow

Super large LCD Backlit Display

3% velocity accuracy via low friction 2.83"D (72mm) ball bearing vane wheel on 3.9ft (120cm) cable

Low battery indication and Auto Power Off

Specifications		
Air Velocity	Range	Accuracy
m/s(meter per second)	0.40~30.00	±3% ±0.20m/s
ft/min(feet per minute)	80~5900	±3% ±40ft/min
km/h(kilometers per hour)	1.4~108.0	±3% ±0.8km/h
MPH(miles per hour)	0.9~67.0	±3% ±0.4MPH
Knots(nautical miles per hour)	0.8~58.0	±3% ±0.4knots
Air Temperature	-10-60°C(14-140°F)	± 2.0°C(±4.0°F)
Air Flow	Range	Area
CFM	0-999900	0-999.9 ft <sup>2</sup>
CMM	0-999900	0-999.9 m <sup>2</sup>

Size(HxWxD): 160mm x 62mm x 21mm

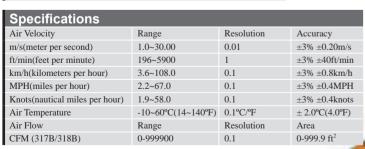
Weight: 200g Accessories:

9V battery and Anemo probe, Gift box with carrying case.



#### DT-317/317B/318/318B Flexible Thermo-Anemometers

Features
16" inch Gooseneck detector is easy to measure the hard-to-reach areas.
High Sensitive and Accurate
Easy-to-use design
Double LCD digital display
Low power consumption
Data Hold and MAX Hold function
Low battery indication



Size(HxWxD): 163mm x 45mm x 34mm Weight: 210g

Accessories: 9V battery and Anemo probe, Gift box with carrying case.



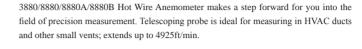
Model 317

Model 318



#### DT-3880/8880

High Quality Sensor



Specifications				_	
Air Velocity	Range	Resolution	Accuracy	3880	8880
m/s (meter per second )	0.1~25.0m/s	0.01m/s	±5% ±0.1m/s	*	*
km/h(kilometers per hour)	0.3~90.0km/h	0.1km/h	±5% ±0.1km/h	*	*
ft/min(feet per minute)	20~4925ft/min	ft/min	±5% ±1ft/min	*	*
MPH(miles per hour)	0.2~55.8MPH	MPH	±5% ±0.1MPH	*	*
Knots(nautical miles per hour)	0.2~48.5knots	0.1knots	±5% ±0.1knots	*	*
Air Temperature Range	0°C to 50°C (32°F to 122°F)	0.1°C/0.1°F	1°C/1.8°F	*	*
Humidity	0 to 100 %RH	0.1	±3.5%RH		

#### Features

Thermal anemometer, available for very low air velocity measurement.

Slim probe, ideal for grilles & diffusers.

Combination of hot wire and standard thermistor, deliver rapid and precise measurements

Records maximum/minimum readings with recall & data hold function.

Microprocessor circuit assures maximum possible accuracy, provides special functions and features.

Super large LCD display with backlight, reading the air velocity & temp. at the same time.

The portable anemometer provides fast, accurate readings, with digital readability Multi-functions for air flow measurement: m/s, km/h, ft/min, MPH, Knots & build in temperature °C / °F

Thermistor sensor for Temperature measurement, fast response time. Applications: Environmental testing, Air conveyors, Flow hoods, Clean rooms, Air velocity,

Air balancing, Fans/motors/blowers, Furnace velocity, Refrigerated case and Paint spray booths.

Size(HxWxD): 198mm x 78mm x 51mm (8880), 160mm x 62mm x 21mm (3880)

Accessories: 9V battery and Anemo probe, Gift box with carrying case.











Model 8880





Model 3880

#### Hot Wire Anemometer with Datalogger





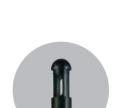


















Meterbox Pro





1880 Hot Wire Anemometer makes a step forward for you into the field of precision measurement. Telescoping probe is ideal for mea-

Features		
	1880	1880A
Smart phone APP		*
Single-point and continuous data log options	*	*
Velocity alarm	*	*
A bluetooth telescopic probe	*	*
LED backlight	*	*
Auto power off	*	*
Low-battery indication	*	*
Data hold	*	*
Probe sensor cover	*	*
Bluetooth communication		*

suring in HVAC ducts and other small vents; extends up to  $20 \mbox{m/s}.$ 

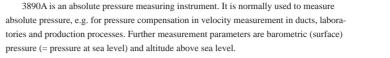
Specifications			
Air Velocity	Range	Resolution	Accuracy
m/s(meter per second )	0.1~20m/s	0.01m/s	±5%+0.03 m/s
ft/min(feet per minute)	20~3937ft/min	1ft/min	±5%+6ft/min
km/h(kilometers per hour)	0.3~72km/h	0.1km/h	±5%+0.1 km/h
MPH(miles per hour)	0.2~44.7MPH	0.1MPH	±5%+0.1 MPH
Air Temperature	-20~60℃ (-4~140℉)	0.1℃/0.1°F	$0.5$ °C (0 $\sim$ 45°C), $1.0$ °C (rest of range) $1.0$ °F (32 $\sim$ 113°F), $2.0$ °F (rest of range)
Relative Humidity	0∼100%RH	0.1%RH	±3.5%RH

Size(HxWxD): 165mm x 60mm x 40mm

Weight: 320g

Accessories: 3.7V Lithium battery, Gift box with carrying case.





3890/3890B are Differential Pressure Manometers with large LCD display.









Features Large Dual LCD with backlight Data Hold Max / Min / Avg value with relative time stamp USB interface Zero Adjust, Offset and DIF function (3890/3890B) Low battery indication and Auto Power Off

High resolution & Accuracy

Specifications						
	3890 (Differ	rential)	3890A(absolute)		3890B (Differential)	
Accuracy	±0.3%F	SO	±2hpa		±0.3%FSO	
Repeatability	±0.2% (Max.+/-	0.5% FSO)			±0.2% (Max.+/ -0.5% FSO)	
Linearity/Hysteresis	±0.29% I	FSO			±0.29% FSO	
Pressure Range	±2PSI(±55.40	)inH2O)	300∼1	200hpa	±5PSI(±138.3inH2O)	
Units and Resolution	inH2O	0.01	psi	0.001	inH2O	0.1
	PSI	0.001	hPa	0.1	PSI	0.001
	mbar	0.1	Pa	1	mbar	0.1
	kPa	0.01	mbar	0.1	kPa	0.01
	inHg	0.001	mmHg	0.1	inHg	0.001
	mmHg	0.1	inHg	0.001	mmHg	0.1
	ozin2	0.01	mmH2O	1	ozin2	0.01
	ftH2O	0.001	inH2O	0.01	ftH2O	0.01
	cmH2O	0.1			cmH2O	0.1
	kgcm2	0.001			kgcm2	0.001
	bar	0.001			bar	0.001



Model 3890





Accessories: 3xAAA batteries, USB cable, gift box with carrying case.





**USB Interface** 



Model 3890A

The device measures Gauge/Differential Pressure, it features 11 selectable units of measurement: inH2O, psi, bar, mbar, kPa,

inHg , mmHg ,ozin,ftH2O , cmH2O, kgcm. Additional features including Data Hold, Auto Power Off disabled, and an USB for cap-

turing reading to a PC using optional software. Careful use of this

8890C measures Gauge/Differential Pressure from -13.86 inH2O to

8890B measures Differential Pressure from -20Pa to+20Pa and



















USB Interface

Model 8890D

+13.86 inH<sub>2</sub>O ( 0.5 psi)

meter will provide years of reliable service.

connect to the printer GPT-4379 with USB interface.

Features	
Large Dual LCD with backlight	
Data Hold	
Max / Min / Avg value with relative time stamp	
Optional USB software	
Zero Adjust, Offset and DIF function	
Low battery indication and Auto Power Off	

Mod	le1	8890	

Size(HxWxD):				
210mm x 75mm x 50mm				
Weight: 280g				
Aggesties . OV bettery				

Accessories: 9V battery, USB cable, 9V power supply, Software, soft tube and gift box with carrying case.

Specifications																
	889	0	889	0A	889	90B	889	0C	889	0D	889	0E	889	0F	889	0G
Accuracy							±	0.3%FS	С							
Repeatability							±0.2% (N	lax.+/ -0	.5% FSC	)						
Linearity/Hysteresis							±(	).29% F	80							
Pressure Range	±5P	SI	±2F	PSI	±0.5	5PSI	±20	PSI	±29	PSI/	±72.	5 psi	±72.5	5 psi	±145	5 psi
1 iessure Range	(±138.3 i	nH2O)	$(\pm 55.40$	inH2O)	(±13.83	inH <sub>2</sub> O)	$(\pm 554.0$	inH2O)	(±21	oar)	(±5t	oar)	(±5t	ar)	(±10	bar)
	inH <sub>2</sub> O	0.1	inH <sub>2</sub> O	0.01	inH <sub>2</sub> O	0.001	inH <sub>2</sub> O	0.01	psi	0.01	psi	0.01	psi	0.1	psi	0.1
	PSI	0.001	PSI	0.001			PSI	0.001	bar	0.001	bar	0.001	bar	0.01	bar	0.01
	mbar	0.1	mbar	0.1	mbar	0.001	mbar	0.01	kpa	0.1	kpa	0.1	kpa	0.1	kpa	0.1
	kPa	0.01	kPa	0.01	Pa	0.1	kPa	0.001	inHg	0.01	inHg	0.1	inHg	0.1	inHg	0.1
	inHg	0.001	inHg	0.001	inHg	0.0001	inHg	0.001	mHg	0.001	mHg	0.001	mHg	0.001	mHg	0.001
Units and Resolution	mmHg	0.1	mmHg	0.1	mmHg	0.001	mmHg	0.01	inH2O	0.1	inH2O	1	inH2O	1	inH2O	1
	ozin <sup>2</sup>	0.01	ozin <sup>2</sup>	0.01			ozin <sup>2</sup>	0.01	ftH2O	0.01	ftH2O	0.1	ftH2O	0.1	ftH2O	0.1
	ftH <sub>2</sub> O	0.01	ftH <sub>2</sub> O	0.001			ftH <sub>2</sub> O	0.001	mH2O	0.01	mH2O	0.01	mH2O	0.01	mH2O	0.1
	cmH <sub>2</sub> O	0.1	cmH <sub>2</sub> O	0.1	$cmH_2O$	0.001	$cmH_2O$	0.01	mbar	1	mbar	1	mbar	1	mbar	1
	kgcm	0.001	kgcm	0.001			kgcm <sup>2</sup>	0.001								
	bar	0.001	bar	0.001			bar	0.001								



#### DT-15 Compact Digital Pressure Temperature Chart

15 is a compact digital pressure temperature chart. This pocket sizes device offers fast and accurate temperature references on a large and easy-to-read LCD display. The automatic power down feature shuts the unit off five minutes after the last command to ensure extended battery life.

Size(HxWxD): 114mm x 50mm x 23mm

Weight:

Accessories :

CR2032 button battery and clamshell.

8897/8897H measures Gauge/Differential Pressure, Air Velocity, Air Flow and temperature.

Hot wire anemometer(8897H) .

Accuracy

Repeatability

Linearity/Hysteresis Pressure Range

Units and Resolution

Large LCD display with backlight.

DT-8897/8897H

- Relative time clock on MAX MIN and AVG provides a time reference for measurement.
- Pressure measurement provides Zero Adjust and DIF function.

Manometer Specifications (8897/8897H)

- Display Pressure, Air Velocity or Air Flow plus Temperature simultaneously.
- Easy to set Area dimension (up to 8 point).
- USB interface, USB to UART Bridge Controller.
- Low battery indication, and Auto Power Off mode (Sleep mode) increases battery life.

Units

psi mbar

kPa

inHg

mmHg

±0.3%FSO ±0.2% (Max.+/-0.5% FSO)

±0.29% FSO

Range/Resolution 2.000/0.001

137.8/0.1

13.78/0.01

4.072/0.001

103.4/0.1

±2psi (±55.40 inH<sub>2</sub>O)



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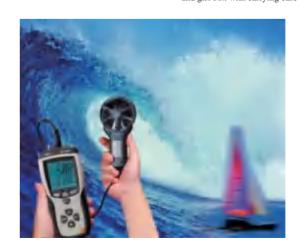
Differential Pressure Manometer & Anemometer

Flow meter Specifications							
Air Velocity	Range	Resolution	Basic Accuracy	8897	8897H		
m/o(motor mor cocond)	0.40~30.00	0.01	±3% ±0.20m/s	*			
m/s(meter per second)	0.1~25.0	0.01	±5% ±1m/s		*		
ft/min/foot mon minuto)	80~5900	1	±3% ±40ft/min	*			
ft/min(feet per minute)	20~4925	1	±5% ±1ft/min		*		
Irm /h (Iril amatana man haya)	1.4~108.0	0.1	±3% ±0.8km/h	*			
km/h(kilometers per hour)	0.3~90.0	0.1	±5% ±1km/h		*		
MPH(miles per hour)	0.9~67.0	0.1	±3% ±0.4MPH	*			
	0. 2~55. 8	0.1	±5% ±1MPH		*		
Knots(nautical miles per hour)	0.8~58.0	0.1	±3% ±0.4knots	*			
Knots(nautical fillies per flour)	0.2~48.5	0.1	±5% ±1knots		*		
Temperature °C	0 to 50.0°C	0.1	±1.0°C	*	*		
Temperature °F	32.0 to 120.0°F	0.1	±2.0°F	*	*		
Air Flow	Range	Resolution	Area	*	*		
CFM (CFM=ft <sup>3</sup> /min)	0-999,900ft <sup>3</sup> /min	0.001~100	0-999.9 ft <sup>2</sup>	*	*		
CMM (CMM-m <sup>3</sup> /min)	0-999 900m <sup>3</sup> /min	0.001~100	0-999 9 m <sup>2</sup>	*	*		

Size(HxWxD): 210mm x 75mm x 50mm Weight: 280g

Accessories :

9V battery, USB cable, software, Anemo probe, Soft tube and gift box with carrying case













Model 8897

#### E-mail:cemyjm@cem-instruments.com

Model 8920



8920 is a Pressure and flow meter simultaneously with an easy-to-read, large, backlit LCD display. Measurement data is printed on site with minimum and maximum values. It can monitor air pressure across key HVAC components and promote good indoor air quality, which ensure proper air flow balance and maintain a comfortable environment.

#### Features

CE

EN: 61326

Larger LCD display with backlight.

Relative time clock on MAX MIN and AVG provides a time reference for measurement.

Pressure, velocity or air flow measurement provides Zero Adjust.

Display pressure, Air velocity or air flow plus environment temperature simultaneously.

Easy to calculate the area of a rectangular or circular duct.

USB interface, USB to UART Bridge Controller.

Specifications					
Manometer					
Accuracy	±0.3%FSO (25°C				
Repeatability	±0.2% (Max.±0.5	% FSO)			
Linearity/Hysteresis	±0.29% FSO				
Pressure Range	±5000Pa				
Maximum Pressure	10psi				
Response Time	0.5 Seconds typic	al			
Over range Indicator	OL				
Under range Indicator	-OL				
	Units	Range	Resolution		
	PSI	0.7252	0.0001		
Measurement	mbar	50.00	0.01		
Measurement	inH <sub>2</sub> O	20.07	0.01		
	mmH <sub>2</sub> O	509.8	0.1		
	Pa	5000	1Pa (0.1Pa only 8920B)		
Air Velocity					
	Range	Resolution	Accuracy		
m/s(meter per second)	1-80.000	0.001	±2.5% of reading at 10.00m/s		
ft/min(feet per minute)	200-15733	1			
km/h(kilometers per hour)	3.5-288.0	0.1	Accuracy is function of velocity		
MPH(miles per hour)	2.25-178.66	0.01	and duct size		
Knots(nautical miles per hour)	2.0-154.6	0.1			
Air Flow					
	Range	Resolution			
CFM	0-99999ft <sup>3</sup> /min	0.0001 to 10	0		
CMM	0-99999m³/min 0.001 to 100				
Temperature					
	Range	Resolution	Accuracy		
°C	0 to 50.0°C	0.1	±1.0°C		
°F	32.0 to 122.0°F	0.1	±2.0°F		

Size(HxWxD): 212mm x 78mm x 51mm Weight: 338q

9V battery, USB cable, software, pitot tube, AC adaptor, Gift box with carrying case.

HVAC Superheat and Subcooling Analyzer can be used for various refrigerants, automatically calculating superheating/subcooling and can be connected to your smartphone/tablet via App (8922). You can also monitor the analyzer via your smartphone/tablet and to store the measurement results or send them by e-mail as a complete report(8922).

Measures suction line or liquid line pressure and line temperature to calculate and display superheat and subcooling for A/C.

- R-22 or R-410A
- Digital LCD display in °F/°C
- Digital LCD displays pressure in PSI/kPa

#### **Features**

Quick, accurate measurement of high and low pressure with two temperature-compensated pressure sensors; automatic measurements of the evaporation and condensation temperature

Two temperature inputs for attaching temperature pipe clamp probes providing the simultaneous calculation of superheating and subcooling: this means you can do away with any error-prone manual calculations and get a reliable result straight away

Including 2 hoses (red, yellow), suitable for all common refrigerants

Two pipe clamp temperature probes included in the scope of delivery: when clamped directly onto the pipes, these enable reliable mea surement of the pipe temperature

Various refrigerants stored in the instrument: just one instrument covers all the most important refrigerants.

Bluetooth interface(8922)

3.5" TFT color LCD display(8922)

<b>Specifications</b>	
Temperature	Range (temperature): -40°C to 204°C/-40°F to 400°F;
	Resolutions: 0.1°;
	Sensor type: Dual k-type thermocouple input;
	Accuracy:±1°C/±1.8°F;
Pressure and vacuum	Working range (pressure):0 to 500 psi; 0 to 4000 kPa
	Resolutions: 0.1psi or kPa, 0.1"Hg or cmHg vac.
	Accuracy: ±1 psi/±6.9 kPa;
	Sensor breakdown pressure: 800psi (5500 kPa)
Superheat:	Range (temperature): 0°F to 80°F; 0°C to 27°C
	Resolutions: 0.1°;
	Accuracy: ±1°C/±1.8°F;
Subcooling:	Range (temperature): 0°F to 80°F; 0°C to 27°C
	Resolutions: 0.1°;
	Accuracy: ±1°C/±1.8°F;

Size(HxWxD): 212mm x 78mm x 51mm

Weight: 338g

Accessories: Li battery, K-type thermocouple, Gift box



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#### AT-8/AT-10 Contact/Non-contact Digital Tachometers



EN: 61326



AT-8/AT-10 Digital Tachometer provides fast and accurate contact and Non-contact RPM and surface speed measurements of rotating objects.

- Wide measurement range and high resolution
- 40 readings memories
- Built-in laser pointer
- 5 digits LCD display

Specifications			
	AT-8	AT-10	
Contact test range	2 to 20,000 RPM	2 to 20,000 RPM	
Non-contact test range	2 to 99,999 RPM	2 to 200,000 RPM	
Tot test range	1 to 99,999 RPM	1 to 200,000 RPM	
Accuracy	$\pm (0.05\% + 1 digit)$	±(0.05% + 1digit)	
Resolution	0.1RPM(2 to 9999.9 RPM)	0.001RPM to 1RPM	
Resolution	1RPM(over 10000 RPM)	U.UUIRPM to IRPM	
Sampling time	0.5 sec.(over 120 RPM)	0.5 sec.(over 120 RPM)	
Detecting distance	50 mm to 500 mm	50 mm to 2500 mm	
Time base	Quartz crystal	Quartz crystal	
Power consumption	Approx. 45mA	Approx. 45mA	
Battery	9V	9V	



Size(HxWxD): 160mm x 60mm x 42mm Weight: 160g

#### Accessories:

9V battery and Gift box with carrying case.

#### AT-6 Digital Tachometer

Model AT-10

AT-6 Digital Tachometer provides fast and accurate Non-contact RPM and TOT measurements of rotating objects. Using reflective tape on object to be measured and pointing with the laser.



Features	
Display	Large 5 digit LCD display
Accuracy	±0.05%±1d
RPM Range	2 to 99,999
Max RPM Resolution	0.1RPM
TOT Range	0-99,999
Memory	Built-in memory recalls Max/Min/Last

Size(HxWxD): 160mm x 60mm x 42mm Weight: 151g

9V battery and Gift box with carrying case.



#### Fast and accurate RPM and surface speed measurements. 6234B Digital Tachometer provides fast and accurate Non-contact RPM and surface speed measurements of rotating objects. Using reflective tape on object to be measured and pointing the integral light beam or laser. 6236B contact Tachometer combines both contact and non-contact models for use in all applications.

- Large 5 digits LCD display is easy to read.
- Autoranging with 0.05% accuracy
- Built-in memory recalls last Max/Min value stored

Features		
	6234B	6236B
Large 5 digits LCD display	*	*
Autoranging with 0.05% accuracy	*	*
Built-in memory recalls last Max/Min value stored	*	*
Non-contact measurement	*	*
Contact measurement		*

Specifications		
	6234B	6236B
Display Counts	99,999 counts LCD	99,999 counts LCD
Range RPM	2.5 to 99,999	5 to 99,999
M/min		0.05 to 1999,9
Basic Accuracy	±0.05%±1d	$\pm 0.05\% \pm 1d$
Max RPM Resolution	0.1RPM	0.1RPM

Size(HxWxD): 160mm x 72mm x 37mm

Weight: 200g

#### Accessories:

6236B: Cone, RPM sensor tip, Surface speed wheel, Four 1.5V "AA" batteries, Gift box with carrying case.

6234B: Reflective tape, Four 1.5V "AA" batteries, Gift box with carrying case.

EN: 61326









Model 6236B

#### AT-86F/AT-86V High Accuracy Tachometer Adaptors

High accuracy tachometer adaptors are compatible with any Test Tool, Power Harmonics Analyzer, Oscilloscope, Multimeter, or other voltage measurement device.

- AT-86F Output signal is pulse frequency output signal;
- AT-86V Output signal is analog voltage signal.

6 to 120,000RPM
±0.5%
50 to 500mm
Approx. 15mA

Size(HxWxD): 166mm x 50mm x 40mm

Weight: 189g Accessories: 9V battery and clamshell.







#### **Light Meter with PC Interface**



Size(HxWxD): 160mm x 58mm x 27mm Weight: 280g

9V battery, Photo Detector and USB cable, software,

Carrying case and Gift box.

#### **LED Light Meter**



• LCD display range:

1.999 to 19,990 µW/cm<sup>2</sup> • Accurate to ±4% of full scale





Features According to JISC1609:1993 and CNS 5119 general A class specifications. Spectral response close to CIE luminous spectral efficiency. Measuring intensities of illumination in unit of Lux or Foot-candle. Measuring lights source include all visible range.

99 records storage.

Cosine angular corrected.

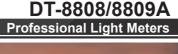
Length of wire for light sensor: approximately 1.5M.

Specifications	
Light Source Selecting	Tungsten/Daylight, Fluorescent, 0~9 select rating
Measuring range	40, 400, 4,000, 40,000, 400,000 Lux,
Measuring range	40, 400, 4,000, 40,000, Foot-candle
Accuracy	+/-3% (Calibrated to standard incandescen lamp 2856°K and corrected LED day while-ligh spectrum) . $+/-6%$ other visible light source.

Size(HxWxD): 160mm x 58mm x 27mm Weight: 280g

Accessories: 9V battery, Gift box.

# DT-8808/8809A





Specifications			
	8808	8809A	
Max Range	400,000Lux	400,000Lux	
Accuracy	±5%±10d(<10,000Lux)	±3% rdg ±5% f.s.(<10,000Lux)	
	$\pm 10\% \pm 10 d(>10,000 Lux)$	±4%rdg ±10d(>10,000Lux)	
Max Resolution	0.1Lux/0.01Fc		
Measuring rate	1.5 times/second		
Photo Detector	115mm x 60mm x 27mm		

Size(HxWxD): 203mm x 75mm x 50mm Weight: 280g

Accessories :

Auto Power Off

Low battery indication User selectable FC/Lux

Capacity for data logging 99

9V battery, Photo Detector and USB cable(8809A), software(8809A), Carrying case and Gift box.

Total accuracy: for C.I.E standard illuminate A(2856K)

## Widest range to 40,000Fc/ 400,000 Lux

8808/8809A light meters provide accurate display light level in terms of Foot Candles (FC) or LUX over wide range. Just turning the Function Switch to select the "lux" scale and setting the range to desired range, then removing the photo detector to light source in a horizontal position and reading the illuminance norminal from the LCD display. When the measurement is completed, replace the photo detector from the light source.

USB Interface (8809A)

## DT-1300/1301/1308/1309

Light Meters



1300/1301/1308 are easy to use with pocket size and light weight, providing accurate display light level in terms of Foot Candles (FC) or LUX over wide range. Just turning the Function Switch to select the "lux" scale and setting the range to desired range, then removing the photo detector to light source in a horizontal position and reading the illuminance norminal from the LCD display. When the measurement is completed, replace the photo detector from the light source.

- Over-range indication
- Long life silicon photo diode inside
- Measurement rate:1.5 times per second

Widest range to 40,000Fc/ 400,000 Lux

Features			
	1300	1301	1308/1309
LCD display counts	2000	2000	4000
Auto Ranging			*
Analog bargraph/segments			41-segments
Peak Hold	*	*	*
Relative mode			*
Max and Data Hold		*	*
Auto Power Off		*	*
Low battery indication	*	*	*
User selectable FC/Lux		*	*
USB interface			-/*
Total accuracy: for C.I.E standard illuminate A(2856K)			

Specifications		
Max Range	50,000lux/Fc(1300,1301); 400,000Lux(1308)	
Accuracy	±5%±10d(<10,000Lux)	
	±10%±10d(>10,000Lux)	
Max Resolution	0.1lux/Fc	
Measuring rate	1.5 times/second	
Photo Detector	115mm x 60mm x 27mm	



#### Accessories :

One 12V (A23) battery and One Photo Detector.(1300,1301) One 9V battery and One Photo Detector.(1307/1308/1309) Carrying case and Gift box.





Size(HxWxD): 162mm x 63mm x 28mm Weight: 176g

Light (LUX/FC)









Sumgit measurement up to 1999 with of 034B10/(it ii)
High accuracy and rapid response
Data Hold funtction to hold measurement values
Unit and sign display for easy reading
Measuring unit selection among w/m² and BTU/(ft²*h)
Manual scale selection
Direct reading with no adjustments needed
Maximum and minimum values
Low battery indication

	Specificat	ions
	Display	3-1/2 digits LCD with maxmum reading 1999.
П	Range	1999W/m <sup>2</sup> ,634BTU/(ft <sup>2</sup> *h)
П	Resolution	$1\text{W/m}^2$ ; $1\text{BTU/(ft}^2*\text{h)}$ .
	Accuracy	typically within $\pm 10 \text{W/m}^2 [\pm 3 \text{BTU/(ft}^2 * \text{h)}] \text{or } \pm 5\%$
٦	Sampling time	Approx 0.25 second.





9501 radiation scanner is a tested precision instrument, reliably measures not only  $\gamma$  rays, but  $\alpha_x$   $\beta$  and X rays as well. It allows multifuctions such as dose accumulating, maximum recording, hand-operated store, data transfer to PC in real-time, data analysis etc. Low power consumption ensures that the testing data will be not lost for several years.

• Large LCD display High precision Internal memory • Data evaluation by PC









Model 9501



9501 is with bluetooth function for data tranferring, analysis, editting, storage and sharing



The top of 9501 can be rotated and easily used for  $\alpha$ ,  $\beta$ ,  $\gamma$  and X rays selection

	Short time heavy radiation medical response			Radioa	active radiation and to the health effects	
		1mSv=1000		Whole body instantly accept measurement		100,000 -200,000mSv(to suppose)
		<b>⊢</b>	>4000	Dogth	4	<ul> <li>Death people in JCO accident</li> </ul>
<ul> <li>Large LCD display</li> </ul>		4500	74000	District	•	7000 - 10000mSv All death
<ul> <li>High precision</li> </ul>		3500		The diseases: bone marrow and	•	3000 - 5000mSv Half of the people death
<ul><li>Internal memory</li><li>Data evaluation by PC</li></ul>		3000 2500	2000-4000→	bone mineral density are destroyed, the number of red and white blood cells are extremely reduced, intraperitoneal hemorrhage, vomit and diarrhea symptom.		_ 100mSv People in the cancer are on the rise
<ul><li>Low power consumption</li><li>Bluetooth interface</li></ul>		_ 2000 _ 1500 _ 1000	1000-2000→	Slight radiation disease, tiredness, vomit, anorexia, temporary trichomadesis and red cell decrease		6.9mSv People in the cancer are on the rise 2.4mSv Radiation quantities for a year in the daily life
• Date reset		500 — E <sub>0</sub>	100-500→ <100→	No any disease, but the number of white cells in the blood sample are reduced No harm to human	I	0.2mSv Tokyo-New York flights (Unit: mSv)
					•	

Specifications	
Ray types	$\alpha$ , $\beta$ , $\gamma$ and $X$ rays
	Radiation dose rate: 0.01μSv/h - 1000μSv/h
Donos	Impulse dose rate: 0-30,000cpm, 0-5,000cps
Range	Radiation dose accumulation: 0.001µSv -9999Sv
	Impulse dose accumulation: 0-9999
	108pcs impulse or 1000 cpm/mR/hr in Cobalt-60 radial
	environment with power of 1µSv/h.
Sensitivity	Alpha ray: from 4 MeV
Sensitivity	Beta ray: from 0.2 MeV
	Gamma ray: from 0.02 MeV
	X ray: from 0.02 MeV
Ray selection switch	$\alpha$ , $\beta$ , $\gamma$ and $X$ rays selection
Sensor	Halogen filled detector
Output port	Bluetooth
Display	Dual LCD display, numeric with all inspection data, with
	bar chart.
Alert	Can set alert value free, default set:5µSv/hr
Accuracy	Typical 15%
Storage	Can store 2000 data automatically or by manually
Detector working temperature	0°C to 50°C

Size(HxWxD): 200mm x 70mm x 45mm Accessories:

Weight: 206g Software, Carrying case and Gift box.

#### DT-2G Microwave Leakage Detector/DT-3G Magnetic Field Meter

The 2G is a high sensitive product to detect the microwave accurately, even at a low volume the injury of the radiation of microwave.

The 3G is capable of measuring the electromagnetic field radiation intensity that is produced from electric transmission equipment, power line, electric oven, air conditioner, refrigerator, computer monitor, video/audio device and so forth.

- Digital LCD display with white backlit
- Leakage volume in dangerous zone will sound beeping and a red lamp flashing(2G)
- Low leakage volume display for warning
- Max. hold function

Specifications			
	2G	3G	
Range	0- 9.99 mW/ cm <sup>2</sup>	200/2000mG,20/200μT	
Warning values	5.0mW/cm <sup>2</sup>	Frequency response: 30Hz-300Hz	
Sample rate	2 times per second	2 times per second	

Size(HxWxD): 160mm x 60mm x 42mm Weight: 151g

Accessories:

9V battery and Gift box with carrying case.







Model 3G

968C can accurately detect the pollution from automobile exhausts and for agricultural/ industrial odors/waste gas. The meter can detect the concentration of CO, NO2 and NH3 in the odor. The device has a data recording function, which can be automatically set according to the sampling time and interval set by the user. Record measurement data and generate a readable file. Users can view data directly from the device and export the data to a computer via USB. Built-in high-capacity lithium battery ensures long-time measurement, sleep mode and auto power off function.

Features
Powerful MEMS Sensor, high accuracy and reliability
2.4" TFT color display
Real-time display the concentration of odors
Measuring three types of pollution concentrations
Audio and Light alarm when pollution
Auto power off
Smart upload to the Cloud, access to large data
Open and close control Purifier
Wireless interface

Specifications				
Function	Range	Resolution	Repeatability accuracy	
CO	0 ~1000ppm	1ppm	±2%	
NO2	0.05 ~ 10ppm	0.01ppm	±2%	
NH3	1 ~ 500ppm	1ppm	±2%	

Size(HxWxD): 160mm x 85mm x 73mm

Weight: 360g Accessories :

**DT-968C** 

CO/NO<sub>2</sub>/NH<sub>3</sub> Odor Detector

NiMH battery, gift box with carrying case.



EN: 61326





#### DT-900A 2 in1 HCHO & TVOC Meter

The HCHO Tester provides a real time measurement of HCHO and TVOC tech product to meet with a variety of occasions air pollution measurement needs, timely responds air pollution. This instrument has a high accuracy, fast response, sensitivity. It is compact, easy to carry, suitable and home, offices, factories, hotels and schools and other indoor environments. It can be displayed at any formaldhyde in the air and the concentration of TVOC, and calculate the value of API(Air Pullution Index).

Features
Fuel Cell.HCHO sensor, high accuracy and reliability
LCD display with backlight
Real-time display the concentration of HCHO in the air
Real-time display the concentration of TVOC in the air
Real-time display the API
Sound and Light alarm when pollution
Auto power off

Specifications	
НСНО	
Range	0.00 to 5.00mg/m <sup>3</sup>
Resolution	$0.01 \text{mg/m}^3$
Repeatability accuracy	±2%
TVOC	
Range	0.00 to 9.99mg/m <sup>3</sup>
Resolution	$0.01 \text{mg/m}^3$
Repeatability accuracy	±2%
Operation temperature range	0°C to 50°C
Storage temperature range	-10°C to 60°C
Working Voltage	7.4V(Rechargeable battery)

Size(HxWxD): 248mm x 160mm x 100mm Weight: 584g

Accessories: Li battery, power adaptor, gift box with carrying case.



Model 900A





Features
Digital LCD Display
Auto/manual zero
Memory for 10 complete data sets
Record mode
Red & Blue LED light and audible alarm
High Accuracy, quick response
Pocket size and easy to use
Fast sampling
Max Hold
Data Hold
Above 200 PPM, the beeper sounds continuously

Specifications	
Operating temperature	0°C to 50.0°C
Storage temperature	-30°C to 60.0°C
Operating humidity	0-90% relative humidity (non-condensing)
Measurement Range	0 to 1000PPM
Measurement Resolution	1PPM
Accuracy	±5% or ±10PPM
Warm up period	Less than 2 seconds
Battery	9V, NEDA 1604A or equivalent
Sensor type	Stabilized electrochemical Gas-specific (CO)
Typical sensor life	3 years

Size(HxWxD): 102mm x 52mm x 29mm Accessories :

Weight: 84g 3.6V battery and Gift box with carrying case.

#### 16" inch Gooseneck detector

High quality Sensor

#### Features

16" inch Gooseneck detector is easy to measure the hard-reached areas.

Highly sensitive and reliable

GD-3300

Easy to Use: One-hand operation with thumb controlled tick adjust knob. Tick accelerates when sensor tip approaches leak.

Use in contaminated Environments: Eliminates background gas concentration with fully adjustable tick rate.

Pinpoint small Leaks: Detects all combustible gas leaks even tiny leaks.

Specifications	
Pump Driven field Calibrateable Range	10ppm
Sensor Type	Solid State
Alarm	Visible & Audible at 10% LEL for Methane.
	Can be calibrated for other concentrations or gases.
Warm-Up	Approx. 1 minute
Response Time	Less than 2 sec. (up to 40% LEL)
Duty Cycle	Intermittent
Probe Length	16"
Battery	3 "C" Alkaline

#### Accessories :

Batteries and Gift box with carrying case.

Size(HxWxD): 221mm x 72mm x 46mm

Weight: 498g



Model 3303



CE

Model 3300



#### GD-3303 Refrigerant Leak Detector

#### **Features**

16" inch Gooseneck detector is easy to measure the hard-reached areas.

EN: 61326

lighly sensitive and reliable

Easy to Use: One-hand operation with thumb controlled tick adjust knob. Tick accelerates when sensor tip

Use in contaminated Environments: Eliminates background gas concentration with fully adjustable tick rate.

Pinpoint small Leaks: Detects all Refrigerant leaks even tiny leaks.

Specifications	
Pump Driven field Calibrateable Range	10ppm
Sensor Type	Solid State
Alarm	Visible & Audible at 10% LEL for Refrigerant leaks.
	Can be calibrated for other concentrations or gases.
Warm-Up	Approx. 1 minute
Response Time	Less than 2 sec. (up to 40% LEL)
Duty Cycle	Intermittent
Probe Length	16"
Battery	3 "C" Alkaline

Size(HxWxD): 221mm x 72mm x 46mm

Weight: 498g

High quality Sensor

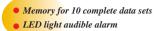


RE TO BE

CEM CO-181

CARBON MONOXIDE

METER











CO-180/181 Carbon Monoxide Meter detects the presence of carbon monoxide (CO) and measures concentrations between 1-1000 parts per million (PPM). The Meter indicates the presence of CO by a reading on the LCD and a beeper tone. The beeper function much like clicking of a Geiger counter: Above 200 PPM, the beeper sounds continuously with the concentration of CO. From 35 PPM to 200 PPM, the beeper sounds discontinuously with the concentration of CO.

CO-180	CO-181
*	*
*	
*	*
	*
	*
	*
*	*
*	*
*	*
*	*
*	
*	*
*	*
	* * * * * * * * *

Specifications	
Operating temperature	0°C to 50.0°C
Storage temperature	-30°C to 60.0°C
Operating humidity	0-90% relative humidity (non-condensing)
Measurement Range	0 to 1000PPM
Measurement Resolution	1PPM
Accuracy	±5% or ±10PPM
Warm up period	Less than 2 seconds
Battery	9V, NEDA 1604A or equivalent
Auto Power Off	after 15 minutes of inactivity
Sensor type	Stabilized electrochemical Gas-specific (CO)
Typical sensor life	3 years

Size(HxWxD): 160mm x 56mm x 40mm Accessories:

Weight: 180g 9V battery and Gift box with carrying case.

#### GD-3000 Flammable Gas-Leak Detector

- Audible and Visual Annunciation
- Detects: LAG, LPG,CH4, Methane, Butane,Flammable Gas
- Catalytic Combustion Sensor

Specifications			
Name	Portable gas detector		
Function	Detecting the gas leakage and absorbing static electricity		
Power consumption	DC 200mA	Battery size	1.5V x 2(AAA Size)
Detectable gas	LNG, LPG	Temperature	10°C~50°C
Humidity	95%RH or lower	Duration	About 4 hours continuously

Size(HxWxD): 164mm x 21mm Accessories:

Weight: 25g 2 x "AAA" Alkaline Batteries and clamshell.





3100 is Combustible Gas Leak Detector detects the presence of combustible gas and measures concentrations between 0~10000 parts per million(PPM) with auto zero. The Detector indicates the presence of combustible gas by a reading on the LCD, a red LED & a beeper tone. The beeper will sound rapidly due to the increasing concentrations of combustible gas. It provides quick, precise gas leak locating, would be the best instrument for explosion preventing and safe production.

Features
Digital LCD Display
Visible, audible and vibration alarm for noisy & bright environments
Auto Zero
Highly sensitive and reliable
Pinpoint small Leaks: Detects all combustible gas leaks even tiny leaks
16" inch flexible probe with replaceable sensor
Auto Power Off

Specifications	
Sensitivity	<50ppm(methane)
Range	0~10000ppm(methane)
Response Time	< 2 secs
Warm-Up Time	Approx. 50 secs
Audible Alarm	> 75db
Vibration Alarm	Standard
Probe Length	16" inch
Sensor Type	Solid State
Duty Cycle	Intermittent
Battery	3.7V 1400mA Lithium battery

#### Accessories:

Batteries and Gift box with carrying case.

#### GD-3301 Combustible Gas Leak Detector

Model 3301



#### **Features**

Easy to Use: It fits comfortably in your hand and operates with the simple push of a button.

Fast Response: Pump driven design ensures immediate response.

Faculto Read: See the results even in poorly lit areas with the back light, two line LCD display.

Quick Set Up: Push zero button is much easier than manual adjust instruments.  Calibrate in the Field: No need to send your instrument to the factory for service. Eliminary in the Field: No need to send your instrument to the factory for service. Eliminary in the Field: No need to send your instrument to the factory for service. Eliminary in the Field: No need to send your instrument to the factory for service. Eliminary in the Field: No need to send your instrument to the factory for service. Eliminary in the Field: No need to send your instrument to the factory for service. Eliminary in the Field: No need to send your instrument to the factory for service. Eliminary in the Field: No need to send your instrument to the factory for service. Eliminary in the Field: No need to send your instrument to the factory for service. Eliminary in the Field: No need to send your instrument to the factory for service. Eliminary in the factory for service. Eliminary for serv	splay.
Specifications  Pump Driven field Calibrateable Range 0-1000ppm  Resolution 1ppm  Response Time 3 seconds, 90% of reading in 30 seconds  Accuracy ±5ppm, ±3% of reading  Operating Temperature 0-104°F, 5-95% Relative Humidity, non cordinate to the second s	
Pump Driven field Calibrateable Range Resolution 1ppm Response Time 3 seconds, 90% of reading in 30 seconds Accuracy ±5ppm, ±3% of reading Operating Temperature 0-104°F, 5-95% Relative Humidity, non cor Zero Adjustment Push Button Battery 3 "C" Alkaline	es time.
Pump Driven field Calibrateable Range Resolution 1ppm Response Time 3 seconds, 90% of reading in 30 seconds Accuracy ±5ppm, ±3% of reading Operating Temperature 0-104°F, 5-95% Relative Humidity, non cor Zero Adjustment Push Button Battery 3 "C" Alkaline	
Resolution 1ppm  Response Time 3 seconds, 90% of reading in 30 seconds  Accuracy ±5ppm, ±3% of reading  Operating Temperature 0-104°F, 5-95% Relative Humidity, non cor  Zero Adjustment Push Button  Battery 3 "C" Alkaline	
Response Time 3 seconds, 90% of reading in 30 seconds  Accuracy ±5ppm, ±3% of reading  Operating Temperature 0-104°F, 5-95% Relative Humidity, non cor  Zero Adjustment Push Button  Battery 3 "C" Alkaline	
Accuracy ±5ppm, ±3% of reading Operating Temperature 0-104°F, 5-95% Relative Humidity, non cor Zero Adjustment Push Button Battery 3 "C" Alkaline	
Operating Temperature 0-104°F, 5-95% Relative Humidity, non corn Zero Adjustment Push Button Battery 3 "C" Alkaline	
Operating Temperature 0-104°F, 5-95% Relative Humidity, non cor Zero Adjustment Push Button  Battery 3 "C" Alkaline	
Battery 3 "C" Alkaline	nsing
Power Life 20 hours and in the continue and in	
EMC Battery Life 20 hours continuous operation	
EN: 61326	
Size(HxWxD): 221mm x 72mm x 46mm Weight: 365g	

3307 3309





3306/3308 Combustible Gas Leak Detector detects the presence of combustible gas and measures concentrations between 0~10000 parts per million (PPM). The Detector indicates the presence of combustible gas by a reading on the LCD (3308) or five red LEDs (3306), The five red LEDs indicate different concentration of gas. The beeper function much like clicking of a Geiger counter: Above 3200 PPM, the beeper sounds continuously with the concentration of gas. From 0 PPM to 3200 PPM, the beeper will sound rapidly due to the increasing concentrations of combustible gas. It provides quick, precise gas leak locating, would be the best instrument for explosion preventing and safe production.

Features		
	3306	3308
Digital LCD Display		*
Visible, audible and vibration alarm for noisy & bright environments	*	
Highly sensitive and reliable	*	*
Pinpoint small Leaks: Detects all combustible gas leaks even tiny leaks	*	*
Auto Zero	*	*
Highly Accuracy, quick response	*	*
16" inch flexible probe with replaceable sensor	*	*
Auto Power Off	*	*

Specifications			
		3306	3308
Sensitivity	<50ppm(methane)	*	*
Range	0~10000ppm(methane)	*	*
Response Time	< 2 secs	*	*
Warm-Up Time	Approx. 40 secs	*	*
Audible Alarm	> 75db	*	*
Vibration Alarm	Standard	*	*
Probe Length	16" inch	*	*
Visual Alert	5 Red LEDs: Gas Measuring Levels; Sensitivity Visual Alert	*	
Display Type	LCD		*
Audible Alert(>75 db)	Loud Audible Ticking Rate(w/Continuous Modulation Proportional to Gas Level)	*	*

Size(HxWxD): 220mm x 62mm x 40mm Weight: 480g

Accessories :

9V battery and Gift box with carrying case.













EN: 61326

Specifications	
Refrigerant Leak Detector	
Sensitivity to detect	100ppm Of R- 134a/ R- 22
Sensor Type	Low power semiconductor
Warm Up Time	Approx.1 minute
ResponseTime	Less than 2 seconds
Alarm	Visible & Audible
SF6 Leak Detector	
range	0 to 3000ppm
sensitivity	<1ppm
accuracy	<2% F.S
Repeatability	< + 1%

Size(HxWxD): 220mm x 62mm x 40mm

Weight: 480g Accessories :

Features

High sensitivity to detect 3000ppm of SF6 High sensitivity to detect.100ppm of R-134a / R-22 Adjustable tick rate to locate leaks quickly and easily

Visual leak detection by L ED indicators
Precision sensor detects even the smallest leaks

Compatible with pumping or diffusion of two sampling modes

9V battery and Gift box with carrying case.

Model 3306







#### **Features**

- Checks for Carbon Dioxide (CO₂) concentrations (0 to 9,999ppm) and displays Temperature (14 to  $140^{\circ}F$  / -10 to  $60^{\circ}C$ ) and Relative Humidity (0.1 to 99.9%) readings
- NDIR (non-dispersive infrared) CO2 sensor
- Indoor Air Quality displayed in ppm with Good, Normal, Poor indication
- Displays Year, Month, Date, and Time
- Max/Min CO<sub>2</sub> value recall function



#### Features Measures Carbon Dioxide (CO2), Air Temperature and Humidity with user adjustable high/low alarms and choice of datalogging model with memory 999 points 2.4" TFT Color Display Checks for Carbon Dioxide (CO2) concentrations (0 to 9,999ppm) and displays Temperature (14 to $140^{\circ}F$ / -10 to 60°C) and Relative Humidity (0.1 to 99.9%) readings NDIR (non-dispersive infrared) CO<sub>2</sub> sensor Indoor Air Quality displayed in ppm with Good, Normal, Poor indication Displays Year, Month, Date, and Time Max/Min CO2 value recall function **Specifications**

Resolution Accuracy ±5%±75ppm CO, 0-9999ppm Temperature -10 to 60°C/14 to 140°F 0.1°C/°F ±1°C/1.8°F 0.1 to 100.0%RH 0.1%RH ±3%RH(25°C/30 to 99%RH) ±4%RH(25°C/0 to 30%RH)

Size(HxWxD): 110mm x 100mm x 48mm Weight: 210g

Accessories:

NiMH battery, gift box with carrying case.



#### DT-802/802D/802W Desktop Indoor Air Quality CO<sub>2</sub> Monitors



Checks for Carbon Dioxide (CO<sub>2</sub>) concentrations with Max/Min value recall function

NDIR (non-dispersive infrared) CO<sub>2</sub> sensor

Indoor Air Quality displayed in ppm with Good (380 to 420ppm), Normal (<1000ppm), Poor (>1000ppm) indication

Visible and Audible CO2 warning alarm

Displays Year, Month, Date, and Time

Automatic Baseline Calibration (minimum CO<sub>2</sub> level over 7.5 days) or manual calibration in fresh air

802D Desktop Indoor Air Quality CO<sub>2</sub> Monitor with datalogger memory 32000 points.

802W Desktop Indoor Air Quality CO2 includes wireless

1 100 070					
and the last	Specifications				
30 1 pm 1 234	Function	Range	Resolution	Accuracy	
	CO <sub>2</sub>	0-9999ppm	1ppm	±75ppm(0-2000ppm)/±8%(2000-9999ppm)	
	Temperature	-5 to 50°C/23 to 122°F	0.1°C/°F	±1°C/1.8°F	
	Humidity	0.1 to 90.0%RH	0.1%RH	±3%RH(25°C/30 to 99%RH) ±4%RH(25°C/0 to 30%RH)	
Model 802					
	Size(HxWxD): 1	10mm x 105mm x 61mm	Access	sories :	
	Weight: 230g		NiMH	battery, gift box with carrying case.	
DT-1703 Desktop Indoor Air Quality CO <sub>2</sub> Mor	nitor				





		- 1		
	Specific	ations		
	Function	Range	Resolution	Accuracy
0	CO <sub>2</sub>	0-9999ppm	1ppm	±5%±75ppm
	Temperature	-10 to 60°C/14 to 140°F	0.1°C/°F	±1°C/1.8°F
H	Humidity	0.1 to 100.0%RH	0.1%RH	±3%RH(25°C/30 to 99%RH) ±4%RH(25°C/0 to 30%RH)
			-	

Size(HxWxD): 205mm x 110mm x 35mm Weight: 350g

Accessories: NiMH battery, gift box with carrying case.

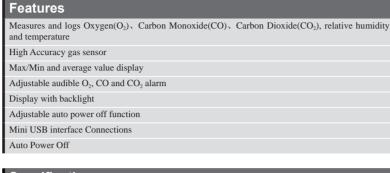


Model 1703

O. / CO. / CO Detector

logged files.

Model GD-3803



3803 is a multifunction GAS meter that simultaneously measures and records O<sub>2</sub>, CO, CO<sub>2</sub> temperature and humidity. It includes the relational software which can be used to program, download data and save

Specifications	
O <sub>2</sub> Measurement	
Oxygen Range	1 - 30% vol. O <sub>2</sub>
Oxygen Resolution	0.1%
Oxygen Respond Time	<15 Seconds
CO Measurement	
Carbon Monoxide(CO) Range	0 - 1000ppm
Carbon Monoxide(CO) Accuracy	±5%F.S
Carbon Monoxide(CO) Resolution	1 ppm
Carbon monoxide(CO) Respond time	<2 Seconds
CO <sub>2</sub> Measurement	
Carbon Dioxide(CO <sub>2</sub> ) Range	0 - 9999ppm CO <sub>2</sub>
Carbon Dioxide(CO <sub>2</sub> ) Resolution	1 ppm
Carbon Dioxide(CO <sub>2</sub> ) Accuracy	±75ppm or ±5% of reading
Carbon Dioxide(CO <sub>2</sub> ) Respond time	120 Seconds
Temperature & Humidity Measurement	
Temperature Range	$0^{\circ}\text{C}$ to $50^{\circ}\text{C}$ $(32^{\circ}\text{F}$ to $122^{\circ}\text{F})$
Temperature Resolution	0.1°C /°F
Temperature Accuracy	±1°C /1.8°F
Humidity Range	0 to 100%RH
Humidity Resolution	0.1%RH
Humidity Accuracy	±3.5%RH @20 to 80%RH ±5%RH @0 to 20%RH or 80 to 100%RH
Operate Environment	$0^{\circ}$ C to $50^{\circ}$ C (23°F to 122°F) at < 90%RH
Size(HxWxD): 240mm x 75mm x 57mm	Weight: 380g

Humidity Resolution

O.1%RH

Humidity Accuracy

±3.5%RH @20 to 80%RH
±5%RH @0 to 20%RH or 80 to 100%RH

Operate Environment

O°C to 50°C (23°F to 122°F) at < 90%RH

Size(HxWxD): 240mm x 75mm x 57mm

Weight: 380g

Accessories: NiMH battery, gift box with carrying case.

Electrochemical Exhaust Ozone Concentration Detector for gas concentration detection in a variety of industrial environments and special environments, with imported electrochemical sensors and microcontrollers technology for fast response, high accuracy, stability and repeatability, Machine performance ranks the world's leading level, the parameters of the user can customize the settings, simple operation. Using 2.0-inch industrial color screen, the perfect display of the technical indicators and gas concentration values, you can view the historical data on the screen, with storage, data export, temperature and humidity detection and other functions.

Features
imported electrochemical sensors and ultra-low power 32-bit microprocessors
2.0-inch industrial grade color screen with a resolution of 220x176
PPM, mg / m3 two units of concentration can be free to switch
has a data storage function, can store 5000 sets of data, you can view the historical data of
the screen, you can export data
with temperature and humidity detection function, can detect the site or the gas temper
ture and humidity within the pipeline
built-in powerful pumping device, can work in the micro-negative pressure environment
Automatic shutdown function
Bluetooth interface (99B)

Specifications					
Measuring Range	0~100ppm				
Resolution	0.01ppm				
Air Temperature Range	-20 to 70°C				
Humidity Range	0 to 100%RH	0 to 100%RH			
Detection	Suction, built-in powerful suction device, flow rate: 50-500mL / min adjustable, can work in the micro-negative environment				
Response time	≤60s	Repeatability	≤±1%		
Storage mode		age, can store data of data on the screen	f 5000 group, you can view		

Size(HxWxD): 185mm x 55mm x 38mm Weight: 139g

Accessories: 3.7V Li-on battery, Clamshell.

# DT-176 Waterproof pH/Conductivity Meter

176 Combination rugged Flat Surface pH electrode & innovative design with flat surface technology support quick on-the-spot pH measurements with autoranging high accuracy.

Features	
Measures pH and Temperature using one electrode	
Memory stores up to 25 labeled readings	
RENEW feature alerts user when electrode needs replacement	
Auto power off and low battery indicator	
IP55 Waterproof	

Specifications					
Specifications	Range	Max Resolution	Basic Accuracy		
pН	0.00 to 14.00pH	0.01pH	±0.01pH		
Temperature	23° to 194°F (-5 to 90°C)	0.1°F/°C	±1.8°F/1°C		
Waterproof	IP55				
Memory	25 datasets				

Size(HxWxD): 36mm x 186mm x 41mm Weight: 110g

Accessories :

NiMH battery, gift box with carrying case.







Conductivity cell

## 4 in 1 Multifunction Environment Meter

**DT-8820** 

for professional and home use.

#### **Multifunction Environment Meters**









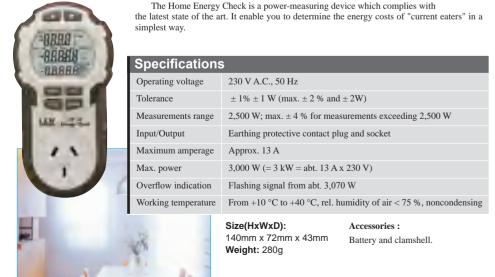
22/2232 digital Multifunction Environment Meter have been designed to combine the functions of Sound Level Meter, Light Meter, Humidity Meter, and Temperature Meter. They are ideal Multifunction Environment Instruments with scores of practical applications for professional and



www.cem-instruments.com

E-mail:cemyjm@cem-instruments.com

## DT- 25 Home Energy Check



#### T-12/T-12B/T-12S Timers

Model T-12B



Battery and clamshell.

#### The Sound Level function can be used to measure noise in factories, schools, offices, home, etc, checking acoustics of studios, auditoriums and hi-fi installations. The Light function is used to measure illuminance in the field. It is fully cosine corrected for the angular incidence of light. The light sensitive component used in the meter is a very

The 4 in 1 digital Multifunction Environment Meter has been designed to combine the

functions of Sound Level Meter, Light Meter, Humidity Meter, and Temperature Meter. It is an ideal Multifunction Environment Meter Instrument with scores of practical applications

stable, long life silicon diode. The Humidity/Temperature uses a humidity/semiconductor sensor and K type thermocouple.

Features
4 in 1 for Light meter, Sound level meter, Humidity/Temperature meter
3 <sup>1</sup> /2 large LCD display
Data Hold and Max Hold
Auto Power Off
"OL" Over-range indication
"BAT" Low battery indication
Total accuracy: for C.I.E standard illuminate A(2856K)

Specific	ations		
Function	Range	Resolution	Accuracy(%rdg+digits)
Temperature	-20°C~200°C	0.1°C	±(3.0%+2°C)
(K-type)	-20°C~750°C	1°C	$\pm (3.0\% + 2^{\circ}C) \le 150^{\circ}C; \pm 3.0\% \ge 150^{\circ}C$
	-4°F~200°F	0.1°F	±(3.0%+2°F)
	-4°F~1400°F	1°F	$\pm (3.0\% + 2^{\circ}F) \le 302^{\circ}F; \pm 3.0\% \ge 302^{\circ}F$
Light	20,200,2000,20000	0.01,0.1,1	$\pm (5.0\% + 10d)$
	(2000 x 10 Lux)		
Humidity	35%~95%RH	0.1%RH	±5.0%RH at 25°C
Sound Level	35dB~100dB	0.1dB	±3.5dB at 94dB sound level, 1KHz sine wave

Size(HxWxD): 251mm x 63.8mm x 40mm

Weight: 250g











9V battery and K-type temperature probe, humidity probe, light probe, gift box with carrying case.



Particle Counter with TFT color LCD display & Camera function

## DT-9880/9881/9880M/9881M/9883M

Particle Counter with TFT color LCD display & Camera function

## **Particle Counter**



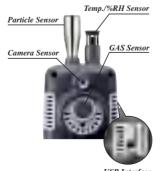
9880/9881/9880M/9881M are Particle Counter with 2.8" color TFT LCD display & a microSD memory card for capturing images(JPEG) or video(3GP) for viewing on your PC, providing fast, easy and accurate readings for particle counter, GAS (HCHO,CO) detectors, air temperature & relative humidity measurements. It is the first combination of these measurements in global, would be the best instrument for environment protection and energy save. The dewpoint temperature measurement will be very visiable for wet and dry proof. It is a good hand for industrial measurements and data analyzing, the real scene and time can be displayed on color TFT LCD. Any memory readings can be recorded in SD card. The user can be back in office to analyze the measured air quality under the support of software. 9883M is 4 in 1 Particle Counter.

Features				
	9880	9881	9880M/9881M	9883M
2.8" TFT 320x240 pixels Color LCD display	*	*	*	*
Images(JPEG) & Video(3GP)	*	*	*	*
Simultaneously measure and display 6 channel of particle sizes, measure particle size down to $0.3\mu m$	*	*	*	*
The determination of suspended particle concentration in the air of the weight method (PM2.5/PM10)			*	*
GAS (HCHO,CO) detectors		*	-/*	*/_
TVOC, CO <sub>2</sub>				*
Air temperature and humidity, Dewpoint & Wet bulb temperature	*	*	*	*
Max, Min, DIF, AVG record, Date/time setup controls, alarm	*	*	*	*
MicroSD (MAX. use 8GB) memory card, USB interface	*	*	*	*
Auto Power Off	*	*	*	*
Selectable sample time, count data, programmable delay	*	*	*	*
Store 5000 records of date, time, counts, relative humidity, temperature, sample volumes, alarms and location label	*	*	*	*
Language selection English, Chinese, French, German, Spaish	*	*	*	*

Specifications					
Particle Counter		9880	9881	9880M 9881M	9883M
Channel	0.3, 0.5, 1.0,2.5, 5.0, 10μm	*	*	*	*
Flow Rate	0.1ft <sup>3</sup> (2.83L/min) controlled by internal pump	*	*	*	*
Count Modes	Totalize, Concentration, Audio	*	*	*	*
Coincidence Loss	5%, 2,000,000 particles per ft <sup>3</sup>	*	*	*	*
Mass Concentration Channel	PM2.5: 0~500ug/m <sup>3</sup> ; PM10: 0~500ug/m <sup>3</sup>			*	*
Air Temperature Measure					
Air Temp Range	0 to 50°C/32 to 122°F; Basic Accuracy: ±0.5°C/1°F	*	*	*	*
Humidity Range	0 to 100%RH; Basic Accuracy: ±2.5%RH(20%~80%RH)	*	*	*	*
Dew Point Temp. Range	-30~100°C/ -22~199°F	*	*	*	*
Wet Bulb Temp. Range	0~80°C/32~176°F	*	*	*	*
GAS Detectors					
HCHO (methanal) Range	0.01~5.00ppm; Basic Accuracy: ±5% F.S		*	-/*	*
CO (carbon monoxide) Range	0~1000ppm; Basic Accuracy: ±5%F.S		*	-/*	
CO <sub>2</sub> Range	0~9999ppm; Basic Accuracy: ±75PPM ±5% of reading				*
TVOC Range	0.00~10mg/m <sup>3</sup> ; Accuracy: ±5% F.S				*

Size(HxWxD): 240mm x 75mm x 57mm Accessories:

Weight: 570g NiMH battery, gift box with carrying case.











GAS Detectors Show reading on the images JPG images/AVI videos

www.cem-instruments.com

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Model 9880

9850M/9851M are Particle Counter with 2.8" color TFT LCD display & a microSD memory card, providing fast, easy and accurate readings for particle counter, HCHO detector, air temperature & relative humidity measurement. It is the first combination of these measurements in global, would be the best instrument for environment protection and energy save. The dewpoint temperature measurement will be very visible for wet and dry proof. It is a good hand tool for industrial measurements and data analyzing, the real scene and time can be displayed on color TFT LCD. Any memory readings can be recorded in SD card. The user can be back in office to analyze the measured air quality under the support of software. CE Specifications **Particle Counter** 0.3, 0.5, 1.0,2.5, 5.0, 10μm Channel EN: 61326 Flow Rate 0.1ft<sup>3</sup>(2.83L/min) controlled by internal pump Count Modes Totalize, Concentration, Audio Coincidence Loss 5%, 2,000,000 particles per ft<sup>3</sup> Mass Concentration Channel PM2.5 : 0~500ug/m<sup>3</sup> ; PM10: 0~500ug/m<sup>3</sup> Air Temperature Measure HCH0 0 to 50°C/32 to 122°F; Basic Accuracy: ±1°C/1.8°F Air Temp Range 0 to 100% RH; Basic Accuracy: ±3.5% RH(20~80% RH) Model 9851M ±5%RH(0~20%RH) Humidity Range ±5%RH(80~100%RH) Dew Point Temp. Range -30~100°C/ -22~199°F Wet Bulb Temp. Range 0~80°C/32~176°F **HCHO Detectors** HCHO (methanal) Range 0.01~5.00ppm; Basic Accuracy: ±5%F.S Size(HxWxD): 240mm x 75mm x 57mm Accessories : NiMH battery, gift box with carrying case.

PM-280/CM-280 PM2.5 Air Quality Detector



Model PM-280

Features	
PM2.5/PM10 (PM-280)	
Air temperature and humidity	
HCHO/ TVOC/CO detection	
CO <sub>2</sub> detection (CM-280)	
Auto Power Off	
Wireless interface	

2	
1	oos
	-

Specifications						
	Size Channels	Range	Precision	Resolution	PM-280	CM-280
Particulate matter detection	PM2.5/PM10	0~2000ug/m <sup>3</sup>		1 ug/m <sup>3</sup>	*	
HCHO detection		0.00~5.00ppm	±5% F.S	0.01ppm	*	*
TVOC detection		0.00~9.99ppm	±5% F.S	0.01ppm	*	*
CO <sub>2</sub> detection		0~9999ppm	±75 ppm ±5% of reading	1ppm		*
CO detection		0~1000ppm	±5% F.S	1ppm	*	*
Temperature		-10 to 60°C / 14 to 140°F	±2°C (±3.6°F)	0.1°C /°F	*	*
Humidity		0~100%RH	±3.5%RH(20~80%RH) ±5%RH (0~20%RH/80~100%RH)	0.1%RH	*	*

Size(HxWxD): 112mm x 60mm x 50mm Weight: 240g Accessories: NiMH battery, gift box with carrying case.

9680 Series is Particle Mass Concentration Monitor with LCD display, providing fast, easy and accurate readings for particle counter, air temperature & relative humidity measurements. It can real-time monitor the indoor air quality and can store 5000 data, help you know the the health level of indoor environment. It will open the wireless interface, implementing household electronic products such as air conditioner, air purifier, so as to realize home automation and environment protection.

Features			
	9680	9681	9682
Digital LCD display	*	*	*
Indicates health level of indoor environment.	*	*	*
PM2.5/PM10	*	*	*
HCHO detector	*	*	*
TVOC detector	*		*
CO <sub>2</sub> detector		*	*
Air temperature and humidity detector	*	*	*
Memory for 100 complete data sets (counts, relative humidity, temperature, date, time)	*	*	*
Date/Time setup controls, alarm	*	*	*
Low-power consumption mode	*	*	*
Wireless interface (Optional)			

Specification	ıs			
		9680	9681	9682
Particle Mass Conce	ntration			
Channel	PM2.5: 0~999ug/m³	*	*	*
Channel	PM10: 0~999ug/m <sup>3</sup>	*	*	*
Air Temperature Me	asurement			
Air Temp Range	-20 to 70°C/-4 to 158°F; Basic Accuracy:±1°C/°F	*	*	*
Humidity Range	0 to 100%RH;	*	*	*
Basic Accuracy:	±3.5%RH@20 to 80%RH ±5%RH@0 to 20%RH or 80 to 100%RH	*	*	*
Gas Detectors				
HCHO Range	0.01~5.00 ppm; Basic Accuracy: ±5% F.S	*	*	*
TVOC Range	0.01~9.99 ppm; Basic Accuracy: ±5% F.S	*		*
CO2 Range	0~10000 ppm; Basic Accuracy: ±5%±75ppm		*	*

Size(HxWxD): 160mm x 85mm x 73mm Accessories : Weight: 360g NiMH battery, gift box with carrying case.

DT-968/968W/969/969W PM2.5 Air Quality Detector

968/969 is a new core algorithm, comprehensive dynamics, night detection, digital signal processing, optical electromechanical integration, and other high-tech. Testing has high precision, stable performance, fast response time, easy to carry, easy to operate. On PM2.5 testing to innovative design and algorithm, greatly reducing the cost of the tester, and reach the international advanced level of similar products.

Features				
2.4" TFT 320 x 240 pixels Color LCD display	968	968W	969	969W
PM2.5/PM10	*	*	*	*
Air temperature and humidity	*	*	*	*
Analog bar indicator	*	*	*	*
Auto Power Off	*	*	*	*
НСНО			*	*
Wireless interface		*		*

Specifications					
		968	968W	969	969W
Particle Counter Channel	2.5,10um	*	*	*	*
Mass Concentration	PM2.5:0~2000ug/m <sup>3</sup> ;PM10:0~2000ug/m <sup>3</sup> ;	*	*	*	*
Resolution	1ug/m <sup>3</sup>	*	*	*	*
НСНО	0.00~5.00mg/m <sup>3</sup>			*	*
HCHO Accuracy	±5% F.S			*	*
Air Temperature Measure	ement				
Air Temp Range	0 to 50°C/32 to 122°F	*	*	*	*
Basic Accuracy	±1°C/1.8°F	*	*	*	*
Humidity Range	0 to 100%RH	*	*	*	*
Basic Accuracy	$\pm 5\% RH$ @0 to 20%RH and 80 to 100%RH $\pm 3.5\% RH$ @20 to 80%RH	*	*	*	*

Size(HxWxD): 160mm x 85mm x 73mm Accessories :

NiMH battery, gift box with carrying case. Weight: 360g







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# DT-96/96B/96H Mini Particle Counter







96 Particle Counter with 2.0" color TFT LCD display provides fast, easy and accurate readings for particle counter & particle mass concentration with air temperature & relative humidity measurements. It is the first combination of these measurements in global, would be the best instrument for environment protection and

96B provides particle counter, air temperature, relative humidity with Bluetooth interface. 96H provides particle counter, air temperature, relative humidity & HCHO Measurement.

Features			
	96	96B	96H
2.0" TFT 220*176 pixels Color LCD display	*	*	*
The determination of suspend particle concentration in the air of the weight method (PM2.5/PM10)	*	*	*
Particle Counter PM2.5/PM10	*	*	*
Air temperature and humidity	*	*	*
Auto Power Off	*	*	*
Real time clock display	*	*	*
Analog bar indicator	*	*	*
HCHO Measurement			*
Bluetooth interface		*	*

Specifications				
Particle Counter		96	96B	96H
Channel	2.5,10um	*	*	*
Mass Concentration	PM2.5:0~2000ug/m3; PM10:0~2000ug/m3;	*	*	*
Resolution	1ug/m3	*	*	*
Air Temperature Measu	re			
Air Temp Range	0 to 50℃/32 to 122°F	*	*	*
Basic Accuracy	±1°C/1.8°F	*	*	*
Humidity Range	0 to 100%RH	*	*	*
Basic Accuracy	$\pm 5\% RH$ @0 to 20% RH and 80 to 100% RH $\pm 3.5\% RH$ @20 to 80% RH	*	*	*
HCHO Measurement				
HCHO Range	0 to 5.00PPM			*
Basic Accuracy	+5% F.S			*

Size(HxWxD): 185mm x 55mm x 38mm

Weight: 139g

Accessories :

NiMH battery, gift box with carrying case.



Model 96



EN: 61326



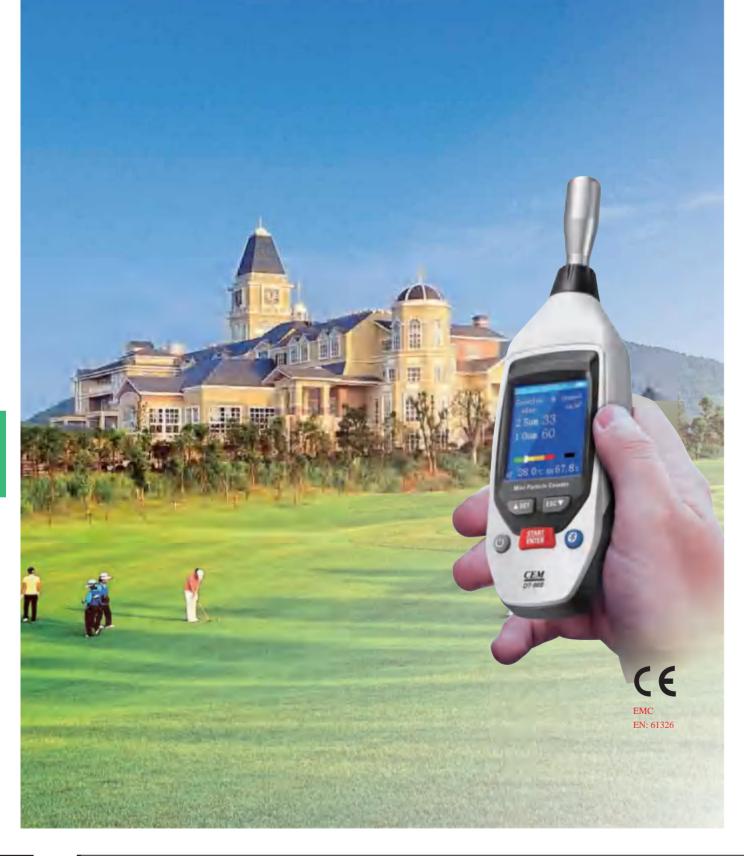


Model 96H









NB-iot

#### Conformance

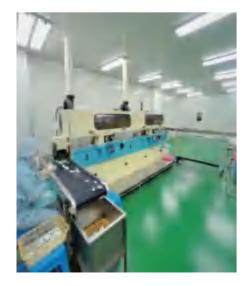
- ISO 21501-4
- Bluetooth interface

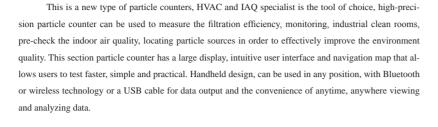
Wi-Fi connectivity(9891)





Model 9890





Features		
	9890	9891
3.5" TFT 960x480 pixels Color LCD display	*	*
Images(JPEG) & Video(3GP)	*	*
Simultaneously measure and display 6 channel of particle sizes, measure particle size down to $0.3\mu m$	*	*
Air temperature and humidity, Dewpoint & Wet bulb temperature	*	*
Max, Min, DIF, AVG record, Date/time setup controls, alarm	*	*
MicroSD (MAX. use 8GB) memory card, USB interface	*	*
Auto Power Off	*	*
Selectable sample time, count data, programmable delay	*	*
Store 10000 records of date, time, counts, relative humidity, temperature, sample volumes, alarms and location label	*	*
Language selection English, Chinese, French, German, Spanish	*	*
Bluetooth interface	*	*
Wi-Fi connectivity		*

Specifications	
Particle Counter	
Channel	0.3, 0.5, 1.0,2.5, 5.0, 10μm
Flow Rate	0.1ft <sup>3</sup> (2.83L/min) controlled by internal pump
Light source	Laser
Count Modes	Cumulative, Differential Concentration
Count efficiency	50% @0.3um;>0.45um 100%(according to ISO21501)
Zero count	every five minutes counting(JIS B9921)
Concentration limits	10%, 4,000,000 particles per ft <sup>3</sup>
Delay time	0 -24 hour
Calibration	PSL particles in air
Operation environment	10 to 40°C (50°F to 104°F)
Storage environment	-10 to 50°C (-14°F to 122°F)
Air Temperature Measure	
Air Temp Range	0 to 50°C/32 to 122°F; Basic Accuracy: ±1°C/2°F
Humidity Range	0 to 100%RH; Basic Accuracy: ±3.5%RH(20%~80%RH)
Dew Point Temp. Range	-30~100°C/ -22~199°F
Wet Bulb Temp. Range	0~80°C/32~176°F

Size(HxWxD): 92mm x 239mm x 63mm

Weight: 790g

Accessories:

3.7V Li battery, USB cable, CD, gift box with carrying case.



**GAS** Detectors



the images



6 channel of particle sizes

#### PM-127 is the device that contains PM2.5, PM10, HCHO, TVOC, CO2, temperature and humidity detecting. The device uses high precision sensor to ensure the reliability of detecting. What makes it different is the PM-127 uses NB-iot(Narrow Band Internet of Things) technology.

#### Features

PM-127

- Detecting PM2.5&PM10&HCHO&TVOC&CO2

Specifications

Specifications Particle Counter Channel

Air Temperature Measurement

Mass Concentration

Air Temp Range

Basic Accuracy

Humidity Range

Basic Accuracy

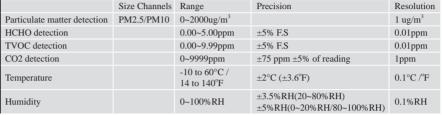
Resolution

 Breathing lamp • Hang it on the wall

PM2.5 Air Quality Detector

- · Air temperature and humidity
- RS-485 communication interface
- AC-220V&DC-24V power supply

<b>;</b>	Precision	Resolution
00ug/m <sup>3</sup>		1 ug/m <sup>3</sup>
5.00ppm	±5% F.S	0.01ppm
9 99nnm	+5% F.S	0.01ppm





Model PM-127



#### PM-122 PM2.5 Air Quality Detector

PM-122 is a new core algorithm, comprehensive dynamics, night detection, digital signal processing, optical electromechanical integration, and other high-tech. Testing has high precision, stable performance, fast response time, easy to carry, easy to operate.

	Features
	2.4" TFT 320 x 240 pixels Color LCD display
	The determination of suspend particle concentration in the air of the weight method (PM2.5/PM10)
ı	Air temperature and humidity
	Analog bar indicator
	Auto Power Off
ı	Wireless interface

PM2.5:0~2000ug/m<sup>3</sup>;PM10:0~2000ug/m<sup>3</sup>;

±5%RH @0 to 20%RH and 80 to 100%RH

2.5.10um

1ug/m<sup>3</sup>

±1℃/1.8℉

0 to 100%RH

0 to 50°C/32 to 122°F

±3.5%RH @20 to 80%RH







Model PM-122

#### PM-125 PM2.5 Air Quality Detector

Intelligent control purifiers, air purification equipment new fan
2.8" TFT Color display with 320*240 Pixels
Simultaneous measurement of PM2.5 and PM10
Analog bar indication & Auto power off
Wi-Fi IEEE802.11b/g/n Communication Interface



Specifications						
	Size Channels	Range	Precision	Resolution		
Particulate matter detection	PM2.5/PM10	0~2000ug/m <sup>3</sup>		1 ug/m <sup>3</sup>		
HCHO detection		0.00~5.00ppm	±5% F.S	0.01ppm		
TVOC detection		0.00~9.99ppm	±5% F.S	0.01ppm		
CO2 detection		0~9999ppm	±75 ppm ±5% of reading	1ppm		
Temperature		-10 to 60°C / 14 to 140°F	±2°C (±3.6°F)	0.1°C /°F		
Humidity		0~100%RH	±3.5%RH(20~80%RH) ±5%RH(0~20%RH/80~100%RH)	0.1%RH		



Model PM-125

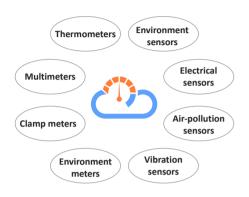








Meterbox Connect IoT platform enables your meters or sensor devices to be safely and efficiently connected to the network, allowing you and your team members to monitor measurement data in real time, easily manage assets, get the latest data at any time, and receive alarms in time.



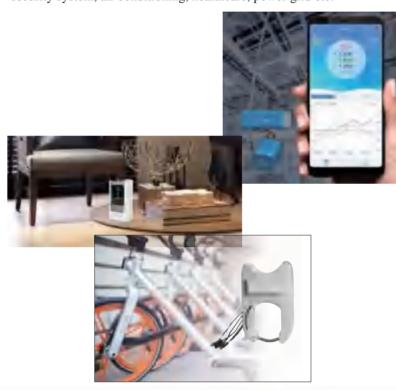
Wireless sensors paired with Meterbox Connect APP can improve your maintenance program.

Connect your measurement world

- Real-time monitor assets
- Asset trends analysis
- Troubleshoot and identify eventseasily and quickly
- Receiving alarms in time from anywhere
- Create analysis report

# Wisdom leads the future life

The wide applications of Bluetooth, WIFI, ZIGBEE, GPS, NB-IoT etc involve extending Internet connectivity beyond standard devices, such as desktops, laptops, smartphones and tablets, to any range of traditionally dumb or non-internet-enabled physical devices and everyday objects. Embedded with technology, these devices can communicate and interact over the Internet, and they can be remotely monitored and controlled. CEM IoT applications are: Intelligent agriculture, transportation, security system, air conditioning, healthcare, power grid etc.



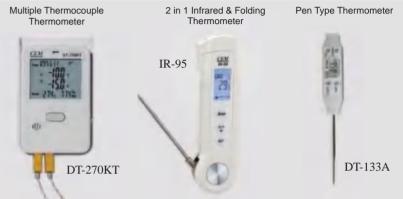








Internet of Things















color LCD display

## AT-9996

#### Professional Automotive Oscilloscope DMM with TFT color LCD display



EN: 61326

EN: 61010-1, EN: 61010-0





















**Model 9996** 

• IP67 dust and water proof • True RMS

## • TFT color LCD display • 50000 counts



EN: 61010-1, EN: 61010-02-031



















#### **Safety Conformance**

- EN61010-1 CAT IV 600V, CAT III 1000V
- 1000V input protection on all ranges
- 10A/1000V & 0.5A/1000V fuses protection on current ranges

#### Features

Large 50,000 count 320 x 240 TFT color LCD display 10MHz/50MS/s bandwidth/Real time sample rate Logging function with TrendCapture for easy review of logged data Bluetooth PC interface for easy data transfer & accuracy calibration 100kHz/100kHz bandwidth (voltage/current) AC, AC+DC true-RMS measurements

Records events and trends

Saves measurements

A/D convert fast sampling time

Peak capture (records transients as fast as 250µs)

Min/Max/Average with Time stamp (records signal fluctuations) Motor winding and low ohm (50 $\Omega$ ) measurement range

Low pass filter

IP Rating 67

Compatible with AC/DC clamp-on adaptor with bluetooth at mV range

10MHz

50MS/s

17.5ns

20mV to 100V/div

Ferr Run, Single Shot, Edge

3.5" color LCD; 320 x 240 pixels

# Specifications Oscilloscope Functions Display Size Bandwidth Real time sample rate Risetime Glitch Capture Vertical Sensitivity Vertical Resolution Trigger Mode Trigger Source

Trigger Coupling	AC/DC		
Input impedance	$1M\Omega/20pF$		
Max Input Volatge	400V(peak)		
Cursor Measurement	Voltage and time		
<b>Automotive True RMS Mul</b>	timeter Functions		
Function	Maximum	Max, resolution	Accuracy
Voltage DC	1000V	1μV	±(0.025% +
Voltage AC	1000V	$1\mu V$	±(0.4% + 40
Current DC	10A	0.01μΑ	$\pm (0.15\% + 2$
Current AC	10A	0.01μΑ	±(0.07% + 5
Temperature	-50°C to 1350°C	0.1°C	±(1.0% + 1°
Resistance	50ΜΩ	0.1Ω	$\pm (0.05\% + 2)$
Capacitance	10mF	0.001nS	$\pm (1.0\% + 5)$
Frequency	10MHz	0.01Hz	±(0.005% +
RPM(Tach)	600 ~ 4000RPM; 600 ~ 12000RPM(x 1	0RPM)	±(2.5%+2d)
Dwell Angle	1CYL, 2CYL, 3CYL, 6CYL, 8CYL, 10CYI		±(2.5%+2d)
Duty Cycle	0.1~99.9%		±(1.5%+2d)
Period	0.1~20mS		±(3.0%+5d)
Pulse Width	0.1~10mS		±(3.0%+5d)
Diode and Continuity	Yes		
PC Interface	Bluetooth		
Power Supply	6 hours Li-ion recharg	geable battery;AC A	daptor/charge

Size(HxWxD): 220mm x 96mm x 60mm

Weight: 631q Accessories:

Test leads, Li-ion batteries, Type K temperature probe, Software, gift box with carrying case.

## built-in datalogging and Trend Capture features. • RPM measurement for automotive engines with 2 to 10 Cylinders using the inductive Pick-up. • 14 Functions including DCV, ACV, DCA, ACA, Resistance, RPM (Tach), Dwell angle, Duty cycle, Frequency,

9996 is Professional Automotive True RMS Digital Multimeter with oscilloscope functions and TFT color LCD display, providing fast A/D converting sampling time, high accuracy,

- Temperature(°C/°F), Capacitance, Continuity and Diode Check. • Read pulse duty cycle and dwell angle for electronic fuel injection feedback carburetors, and ignition
- Measures Milliseconds pulse width to test on-time of fuel injectors, idle air control motors, and electronic trans mission controls.

**Professional Automotive Oscilloscope Multimeter with TFT** 



Bluetooth PC interface

Basic Accuracy

 $\pm (0.8\% \text{rdg} + 5 \text{dgt})$ 

 $\pm (0.8\%rdg + 5dgt)$ 

 $\pm (2.8\% \text{rdg} + 5 \text{dgt})$ 

 $\pm (2.0\% \text{rdg} + 3 \text{dgt})$ 

Resolution

0.01V

0.01V

0.1A

1°

Voltage: 50V~700V/ Current: ±(2.8%rdg+5dgt)

0.1%

0.01Hz

9008/3116 are designed as special automotive digital multimeter and clamp type

Range

0V~700V

 $0V \sim 700V$ 

1A~300A

0°~360°

0.1 to 99.9%

100number

1000

10Hz~400Hz

Year month date

3 times per second

About:  $10M\Omega$ 

 $\pm$  (1.2% reading +2 digits)

TFT, 320 (RGB) x240

 $10hm\sim10Mohm$ 

#### **Auto-ranging Automotive Digital Multimeters**

# **Automotive Digital Multimeter provides multi-functions:**

• RPM(RPM 2 Stroke or 4 Stroke mode active) measurement for automotive engines with 4 to 8 Cylinders using the inductive Pick-up.

• Oversized high contrast LCD display with backlight.

AT-9906DIS/9965

• 14 Functions including DCV, ACV, DCA, ACA, Resistance, RPM (Tach), Dwell angle, Duty cycle, Frequency, Temperature

• Read pulse duty cycle and dwell angle for electronic fuel injection feedback carburetors

• Data Hold, Relative functions & auto power off.

Specifications

Function

Voltage DC

Voltage AC

Current DC

Current AC Resistance

RPM(Tach)

Dwell Angle

Duty Cycle

Frequency

Temperature Capacitance

Pulse Width

Weight: 366g

9906DIS

4, 5, 6, 8CYL

0.1~99.9%

Size(HxWxD): 170mm x 79mm x 50mm

320mV/3.2V/32V/320V/600V

320uA,3200uA, 32mA, 320mA, 10A

320uA, 3200uA, 32mA, 320mA, 10A

Diode Check Open circuit voltage 3V dc; Test current 0.3mA typical.

 $320\Omega$ ,  $3.2k\Omega$ ,  $32k\Omega$ ,  $320k\Omega$ ,  $3.2M\Omega$ ,  $32M\Omega$ 

3.2V, 32V, 320V, 600V

320Hz/3200Hz/32kHz

Continuity Test Threshold 35Ω, Continuity Beeper 2kHz

-20°C ~ 760°C/-4°F ~ 1400°F

Range

• Fused current inputs and Overload protection on all ranges

Features					
	9906DIS	9965			
Digital display counts	3200 with Analog Bargraph	4000 with Analog Bargraph			
Auto ranging	**	*			
1ms Peak hold, MAX/MIN hold		*			
Overload protection on all ranges	*	*			
Low battery indication	*	*			
Inductive Pick-up	*	*			

Range

600 ~ 4000RPM;600 ~ 12000RPM(x 10RPM) 600~4000RPM;600~12000RPM(x 10RPM) ±(2.0%+2d)

0.1~99.9%

0.1~10mS

and gift box with carrying case.

4, 5, 6, 8CYL

0.001Hz~9.99MHz

-20°C ~ 760°C/-4°F ~ 1400°F

400mV, 4V, 40V, 400V, 600V

400mV, 4V, 40V, 400V, 600V

400uA, 4000uA, 40mA, 400mA, 10A

400uA, 4000uA, 40mA, 400mA, 10A

 $400\Omega$ ,  $4k\Omega$ ,  $40k\Omega$ ,  $400k\Omega$ ,  $4M\Omega$ ,  $40M\Omega$ 

40nF, 400nF, 4uF, 40uF,400uF,4mF,40mF







Basic Accuracy

 $\pm (0.5\% + 2d)$ 

 $\pm (0.8\% + 4d)$ 

 $\pm (1.2\% + 2d)$ 

 $\pm (1.5\% + 4d)$ 

 $\pm (0.8\% + 3d)$ 

 $\pm (2.5\% + 2d)$ 

 $\pm (1.5\% + 5d)$ 

 $\pm (2.0\% + 2d)$ 

 $\pm (3.0\% + 2d)$ 

 $\pm (3.0\% + 2d)$ 

 $\pm (3.0\% + 5d)$ 





Model AT-9906DIS



EN: 61326





EN: 61010-1, EN: 61010-02-031 Accessories: Test leads, type K temperature Probe, Inductive pick-up, 9V battery



Auto-ranging Automotive Digital



**Model 9008** 

Specifications 9008C Accuracy (% of reading) Range  $\pm (2.8 \% + 10 \text{ digits})$ 30.00AAC AC Current (50/60Hz) 300.0AAC  $\pm$  (2.8 % + 5 digits)

Size(HxWxD): 170mm x 79mm x 50mm (9008), 197mm x 70mm x 40mm (3116) 150mm x 58mm x 35mm (9008C)

Accessories: Test leads, Inductive pick-up, 9V battery and gift box with carrying

Weight: 188g (9008), 183g (3116), 205g (9008C)

Specifications

Measure Phase condition

Function Voltage DC

Voltage AC

Current AC

Resistance

Duty Cycle

Frequency

Well number

Data save

Duty Cycle

Measurement Rate

Input impedance

Clock

Display

Phase



**Model 3116** 

379



## AT-9955 Automotive Digital Multimeter With IR Laser Thermometer

#### **Automotive Digital Multimeter provides multi-functions:**

- RPM measurement for automotive engines with 2 to 10 Cylinders using the inductive Pick-up.
- Oversized high contrast 4000 counts LCD display with backlight
- 14 Functions including DCV, ACV, DCA, ACA, Resistance, RPM (Tach), Dwell angle, Duty cycle, Frequency, Temperature (IR Temperature) (°C/°F), Capacitance, Continuity and Diode Check.
- Read pulse duty cycle and dwell angle for electronic fuel injection feedback carburetors, and ignition
- Data Hold, Relative functions/ Auto Power Off
- Fused current inputs and Overload protection on all ranges.
- Measures Milliseconds pulse width to test on-time of fuel injectors, idle air control motors, and electronic

Specification	ons	
Function	Range	Basic Accuracy
Voltage DC	400mV, 4V, 40V, 400V, 1000V	$\pm (0.5\% + 2d)$
Voltage AC	400mV, 4V, 40V, 400V, 700V	±(0.8%+4d)
Current DC	400uA, 4000uA, 40mA, 400mA, 4A, 20A	±(1.2%+2d)
Current AC	400uA, 4000uA, 40mA, 400mA, 4A, 20A	±(1.5%+4d)
Resistance	$400\Omega$ , $4k\Omega$ , $40k\Omega$ , $400k\Omega$ , $4M\Omega$ , $40M\Omega$	±(0.8%+3d)
RPM(Tach)	600 ~ 4000RPM;600 ~ 12000RPM(x 10RPM)	$\pm (2.0\% + 2d)$
Dwell Angle	4, 5, 6, 8CYL	±(2.5%+2d)
Duty Cycle	0.1~99.9%	±(1.5%+2d)
Frequency	0.001Hz~9.99MHz	$\pm (2.0\% + 2d)$
Temperature	-20°C ~ 760°C/-4°F ~ 1400°F	±(3.0%+2d)
IR Temperature	-20°C ~ 550°C/-4°F ~ 1022°F	$\pm (3.0\% + 2d)$
Capacitance	40nF, 400nF, 4uF, 40uF, 400uF,4mF,40mF	$\pm (3.0\% + 2d)$
Pulse Width	0.1~10mS	$\pm (3.0\% + 5d)$
Diode Check	Open circuit voltage 3V dc; Test current 0.3mA	typical.
Continuity Tost	Threshold 200 Continuity Pagner 2 kHz	

Weight: 360g

Size(HxWxD): 182mm x 82mm x 55mm Accessories: Test leads, type K temperature Probe, IR temperature probe (IR-82 op tional), Inductive pick-up and 9V battery, Gift box with carrying case.

Automotive Digital Multimeter With IR Laser Thermometer

IP67 Dust and water proof



Model AT-9955

## **BT-120**

#### **Automotive Battery Tester**





Specifications						
MODEL	Fuse Type	1999 Counts LCD Display	Resolution	Banana Plug	Measuring Range	Accuracy
CF-01	20A/ Max-Blade			*	20A/48VDC/AC-10sec.	±2.0% reading
CF-01S	20A/ Mini-Blade			*	20A/48VDC/AC-10sec.	±2.0% reading
CF-02	20A /Max-Blade	*	10mA		20A/48VDC-10sec.	$\pm (2.0\% \text{ reading} + 2 \text{ digits})$
CF-02S	20A/ Mini-Blade	*	10mA		20A/48VDC-10sec.	$\pm (2.0\% \text{ reading} + 2 \text{ digits})$
CF-03	1A/Max-Blade	*	0.1mA		200mA/48VDC	$\pm (1.5\% \text{ reading} + 2 \text{ digits})$
CF-03S	1A/Mini-Blade	*	0.1mA		200mA/48VDC	$\pm (1.5\% \text{ reading} + 2 \text{ digits})$
CF-04	30A/Max-Blade	*	100mA		30A/48VDC-10sec.	$\pm (2.0\% \text{ reading} + 2 \text{ digits})$
CF-04S	30A/Mini-Blade	*	100mA		30A/48VDC-10sec.	$\pm (2.0\% \text{ reading} + 2 \text{ digits})$
Maximum	measuring voltage: 48	SV max.				
Cable leng	gth: approx. 75cm					





**Size(HxWxD):** CF-01/01S: 84mm x 30mm x 10mm **Weight:** 77g **Size(HxWxD):** CF-02/02S/03/03S/04/04S: 86mm x 37mm x 28.5mm **Weight:** 68g

12V battery (CF-02/02S/03/03S/04/04S).





## **CF-06/08 Automotive Current Testers**

Features
----------

Large 3<sup>1</sup>/2 LCD display with bar graph

Peak hold and Data hold function (CF-08)

30 A measurement greater than the current alarm sounds will be issued (CF-08)

DCA zero for accurate measurment

Unit with Max/Mini-Blade plug

CF-06: 30A/Max-Blade		Fuse Type Resolu	lution Banana Plu	ig Measuring Range	Acuracy
CF-08: 80A/Max-Blade 100mA 80A/48V/DC/AC 0-80A ±2.0%	CF-08: 80A/Max-Blade 100mA 80A/48V/DC/AC 0-80A			30A/48V/DC/AC	0-30A ±2.0%
		CF-08: 80A/Max-Bl	Blade 100mA	80A/48V/DC/AC	0-80A ±2.0%
					6

Size(HxWxD): CF-06/08: 112mm x 45mm x 33mm Accessories: Weight: 165g Clamshell and 9V battery. Size(HxWxD): 165mm x 40mm x 33mm

Weight: 200g







EN: 61326 EN: 61010-1, EN: 61010-02-031



AT-9950DIS/9950T/AT-950A/950B are very versatile automotive meters and can be used

for many different diagnostic works on car and truck. Many functions are offered for your

- AT-9950DIS/9950T: RPM (RPM 2 Stroke or 4 Stroke mode active) measurements for automotive engines with the Inductive Pickup
- AT-950B: RPM measurement for automotive engines with the inductive Pickup
- AT-950A: RPM measurements for automotive engines with the test leads
- Read pulse duty cycle and dwell angle for electronic fuel injection feedback carburetors

Features			
	9950DIS/9950T	950A	950B
Digital display counts	3200 with Analog Bargraph	2000	2000
AC True RMS	9950T		
Auto ranging	*		
Manual ranging		*	*
Overload protection on all ranges	*	*	*
Data Hold	*		
Low battery indication	*	*	*
Inductive Pick-up	*		*

	Digital display counts	3200 with Analog Bargraph	2000	2000
	AC True RMS	9950T		
	Auto ranging	*		
	Manual ranging		*	*
	Overload protection on all ranges	*	*	*
	Data Hold	*		
	Low battery indication	*	*	*
	Inductive Pick-up	*		*
Sp	ecifications			

Specific	Specifications						
Function	Max. Range	Resolution	Basic Accuracy	9950DIS/9950T	950A	950B	
Voltage DC	600V	0.1mV	$\pm (0.5\% + 2d)$		*	*	
	1000V	0.1mV	$\pm (0.5\% + 2d)$	*			
Voltage AC	750V	1mV	$\pm (1.0\% + 2d)$	*			
Current DC	10A	0.1uA	$\pm (1.5\% + 2d)$	*	*	*	
Current AC	10A	0.1uA	$\pm (1.5\% + 2d)$	*			
Resistance	$32M\Omega$	0.1Ω	±(2.0%+3d)	32M	20M	20M	
RPM (Tach)	12,000RPM	1RPM	$\pm (2.0\% + 5d)$	*	10,000RPM	*	
Dwell Angle	2~10CYL	0.1°	$\pm (1.2\% + 2d)$	*	*	*	
Frequency	32kHz	0.1Hz	$\pm (1.2\% + 2d)$	*			
Duty Cycle	0.1%~99.9%	0.1%	$\pm (1.2\% + 2d)$	*			
Temperature	760°C/1400°F	0.1°C/°F	±(3.0%+3d)	*			
Diode Test				*	*	*	
Continuity Ch	neck	*	*	*			

**Size(HxWxD):** AT-9950DIS/9950T: 189mm x 91mm x 31.5mm AT-950A/AT-950B: 209mm x 43mm x 30mm

Weight: AT-9950DIS/9950T: 280g AT-950A/AT-950B: 200g

www.cem-instruments.com

9V Battery, Rubber holster and Inductive pick-up(except AT-950A)



## Large LCD display

#### **Automotive Digital Multimeter provides multi-functions:**

- RPM measurement for automotive engines with 2 to 10 Cylinders using the inductive Pick-up
- AT-9945T is True RMS Autoranging Automotive DMM
- Oversized high contrast 4000 counts LCD display with backlight
- 13 Functions including DCV, ACV, DCA, ACA, Resistance, RPM (Tach), Dwell angle, Duty cycle, Frequency, Temperature (°C/°F), Capacitance, Continuity and Diode Check
- Read pulse duty cycle and dwell angle for electronic fuel injection feedback carburetors, and ignition
- Data Hold and Relative functions
- Over-range indication
- Auto Power Off
- Fused current inputs and Overload protection on all ranges
- AT-9945/9945T measures Milliseconds pulse width to test on-time of fuel injectors, idle air control motors, and electronic transmission controls





Specification	ıs	
Function	Range	Basic Accuracy
Voltage DC	400mV, 4V, 40V, 400V, 1000V	$\pm (0.5\% + 2d)$
Voltage AC	400mV, 4V, 40V, 400V, 700V	±(0.8%+4d)
Current DC	400uA, 4000uA, 40mA, 400mA, 4A, 20A	±(1.2%+2d)
Current AC	400uA, 4000uA, 40mA, 400mA, 4A, 20A	±(1.5%+4d)
Resistance	$400\Omega,4k\Omega,40k\Omega,400k\Omega,4M\Omega,40M\Omega$	±(0.8%+3d)
RPM(Tach)	600 ~ 4000RPM; 600 ~ 12000RPM(x 10RPM)	±(2.0%+2d)
Dwell Angle	4, 5, 6, 8CYL	±(2.5%+2d)
Duty Cycle	0.1~99.9%	±(1.5%+2d)
Frequency	0.001Hz~9.99MHz	±(2.0%+2d)
Temperature	-20°C ~ 760°C/-4°F ~ 1400°F	±(3.0%+2d)
Capacitance	40nF, 400nF, 4uF, 40uF, 100uF	±(3.0%+2d)
Pulse Width (9945)	$0.1 \sim 10 \text{mS}$ $\pm (3.0\% + 5d)$	
Diode Check	Open circuit voltage 1.5V dc; Test current 0.3mA typical.	
Continuity Test	Threshold 30Ω, Continuity Beeper 2.7KHz	

**Size(HxWxD):** AT-205P: 146mm x 66mm x 41.5mm

AT-9945/9945T: 195mm x 92mm x 38mm

AT-205P: 200g; AT-9945/9945T: 380g

#### Accessories:

Rubber holster, Test leads, type K temperature Probe, Inductive pick-up and 9V battery.









Automotive Circuit Multi-Function Tester is an equipment used to test the automotive electrical system within 12 to 24 volts.It can save the testing hours for the automotive electrical system. It is designed to testing the

AT-9995 is professional Automotive DMM with RS232 interface, AT-9995E is with wireless USB interface; It can be used for many different diagnostic works on car and truck. Many functions are offered for your

# Large LCD display

Wireless USB Interface (RF 433MHz) (AT-9995E)

- Oversized high contrast 4000 counts with Bargraph backlight LCD Display
- RPM measurement for automotive engines with 1 to 12 Cylinders using the inductive pick-up
- Data Hold and Relative functions
- Max Hold and Min Hold
- Auto Power Off
- Fused current inputs and overload protection on all ranges



EN: 61326

EN: 61010-1, EN: 61010-02-031

Specification	ons	
Function	Max Range	Basic Accuracy
Voltage DC	400mV, 4V, 40V, 400V, 1000V	$\pm (0.5\% + 2d)$
Voltage AC	400mV, 4V, 40V, 400V, 750V	$\pm (0.8\% + 4d)$
Current DC	$400 uA, 4000 uA, 40 mA, 400 mA, 4A, 20 A \\ \qquad \qquad \pm (1.2 \% + 2 d)$	
Current AC	$400 \text{uA}, 4000 \text{uA}, 40 \text{mA}, 400 \text{mA}, 4A, 20 \text{A} \pm (1.5\% + 4 \text{d})$	
Resistance	$400\Omega$ , $4k\Omega$ , $40k\Omega$ , $400k\Omega$ , $4M\Omega$ , $40M\Omega$ $\pm (0.8\% + 3)$	
RPM(Tach)	600 ~ 4000RPM;	$\pm (2.5\% + 2d)$
	600 ~ 12000RPM(x 10RPM)	
Dwell Angle	1CYL, 2CYL, 3CYL, 4CYL, 5CYL,	$\pm (2.5\% + 2d)$
	6CYL, 8CYL, 10CYL, 12CYL	
Duty Cycle	0.1~99.9% ±(1.5%+2	
Period	$0.1 \sim 20 \text{mS}$ $\pm (3.0\% + 5d)$	
Pulse Width	$0.1 \sim 10 \text{mS}$ $\pm (3.0\% + 5d)$	
Frequency	$30kHz$ $\pm(2.0\%+2d)$	
Temperature	$-20^{\circ}\text{C} \sim 760^{\circ}\text{C}/-4^{\circ}\text{F} \sim 1400^{\circ}\text{F}$ $\pm (3.0\% + 2d)$	
Diode Check	Open circuit voltage 1.5V dc typical;	
	Test current 0.3mA typical	
Continuity Test	Threshold 30Ω, Continuity Beeper 2.7kHz	



Size(HxWxD): 197mm x 88.4mm x 41.2mm Weight: 635g

## Accessories :

Rubber holster, Test leads, type K temperature Probe, software, RS-232 cable/USB interface, Pick-up, 9V battery and gift box with carrying case.









#### **Features**

- **Functions** Determine the polarity and circuit circumstance (short/open)
- Testing the continuity of the circuit Digital LCD display with backlight

system without re-connection between the vehicle battery and the testing components.

Locate missing cylinders

Measuring frequency of the high-tension ignition pulses and we could calculate the rotational speed of engine according to the measured frequency

Activating the components with positive or negative current without jumper wire

Model CF-09

Testing the voltage of the circuit and the voltage reading will be indicated on the LCD display within 1/10th of a volt

Size(HxWxD): 240mm x 78mm x 40mm Weight:200g



The automotive current short tester can test vehicle's short-circuit current range from 10 to 30 amp with CF-01/CF-01S adapters. LED indicate the circuit range. It is convenient to operate.

EN: 61326

Model AT-9135

Determine the circuit circumstance(short or open)

**CF-09 Automotive Current Short Tester** 

LED indication

Over-load audible warning

Manual and automatic test function Measurement current range: 10A,15A,20A, 25A, 30A.

Power charge by vehicle battery

Size(HxWxD): 200mm x 78mm x 44mm

Weight:206g

385

Accessories: CF-01/CF-01S adapter, Gift box.

## **DT-9010 Automotive Circuit Voltage Tester**



#### **TP-5 Tire Pressure Gauge**



- White LED lighted tip helps you find the tire stem easily
- Much easier use than conventional air gauges
- Red pushbutton turns on/ off and units selected
- Measures tire pressures of 5 to 100 pounds per square inch (PSI)
- Press red pushbutton turns on, LCD display 0.00 PSI
- Take the tire gauge spiracle at the tire stem, then the Tire gauge will memorize the maximal pressure value
- Press red pushbutton to select the different units, takes turns as PSI, Kpa, Bar
- Press red pushbutton 5s to turn off the tire gauge



Specifications		
Range	5-100PSI	
Accuracy	±(1%+0.5)PSI	

Size(HxWxD): 156mm x 42mm x 20mm

Weight: 77g Accessories:

One CR 2032 button battery, clamshell

#### AT-5 Engine Tachometer

The AT-5 tachometer can measure RPM of engine by bringing it close to plug cord of the engine. This tachometer has many measuring modes for various types of engines like 2 stroke (1 and 4 cylinders), 4 strokes (1, 6 and 8 cylincers). An antenna lead is supplied to use if needed.

- Measuring method count pulses
- RPM display interval 0.5sec
- Accuracy ±10 RPM

Specifications					
Measurable Engine		Measurable RPM Range			
Stroke	Cylinder				
2	1	100~20000			
4	2				
4	3	100~13000			
2	2	100~10000			
4	4				
2	3	100~6500			
4	6				
4	1	100~20000			
4	5	100~7000			
2	4	100~4800			
4	8				

Size(HxWxD): 156mm x 42mm x 20mm

Weight: 77g Accessories:

Antena lead and hang strap, Gift box with carrying case.



#### Automotive Testers

#### RT-05 Automotive Relay Tester

Quickly and accurately test 3 terminal electro-mechanical relays for many domestic and imported automobiles. The Automotive relay tester will interrogate and identify an unknown relay terminal configuration then self configure its own internal circuitry to perform all required test functions automatically. The Automotive relay tester can be used to perform the following tests: coil resistance, surge supression device (resistor or diode), open/closed contact integrity, contact cyclic testing for intermittent failure detection, loaded contact continuity, relay contacts stuck open or closed and time to contact closure and opening. Unit automatically indicates test results with a series on red, green and yellow performance lights.









**Specifications** 

Coil Resistance 20 to 500 ohms (includes any parallel transient supression resistors) Coil Test Voltage 9 Volts Contact Resistance Threshold 200 Milliohms

Size(HxWxD): 128mm x 68mm x 30mm Weight: 185g

Accessories:

AT-05A Automotive Tachometer

Professional digital tachometer measures accurate

engine RPM with Inductive Pick-up

One 9V battery, clamshell

#### **BT-12 Digital Automotive Battery Analyzer**



3 colors LED indicate different conditions

EN: 61326

## AT-05B Automotive Tachometer

**EMC** EN: 61326



RPM measurement for automotive engines with 1 to 8 Cylinders.

> EMC EN: 61326



#### RT-01 Refractometer for Anti-freeze & Battery Fluid testing



- Range: Ethylene glycol 1.15-1.30 specific gravity
- Minimum Scale Division: 5°C
- Automatic Temperature
- Compensation range: 10 to 30°C





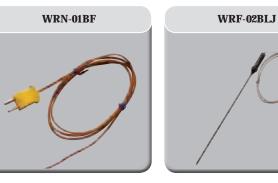


<u>CEM</u>





































# FC-A23B Diameter Φ4mm Voltage Rate: CAT III 1000V Current Rate: 10A

Accessories



















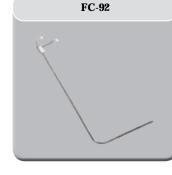








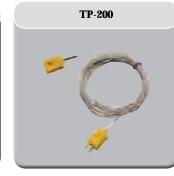


















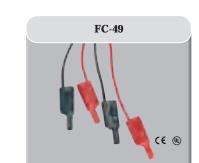
<u>CEM</u>





FC-A26























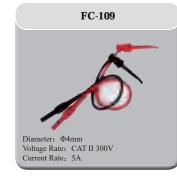






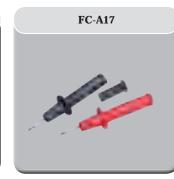










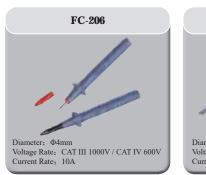
























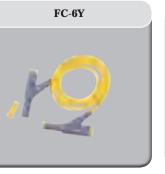
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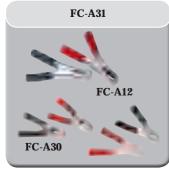
E-mail:cemyjm@cem-instruments.com











## Accessories



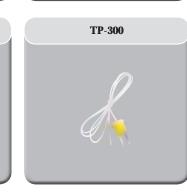


NR-886B













































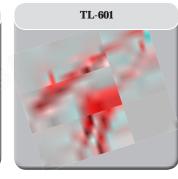








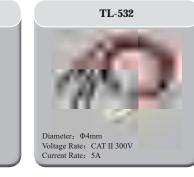






























TL-A014 Voltage Rate: Hand-held ratings – 30 VAC/60 DVC MAX.Hand free ratings –

2500 working VDC

Current Rate: 15A



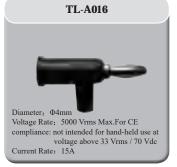




Current Rate: 5A

Diameter, Ø4mm Voltage Rate: Hand-held ratings – 30 VAC/60

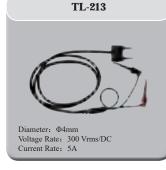
DVC MAX.Hand free ratings – 2500 working VDC Current Rate: 15A

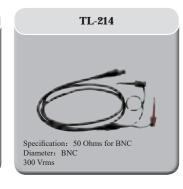








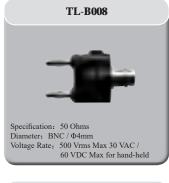
















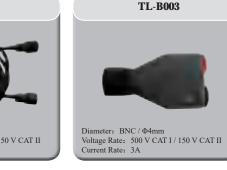




# TL-B001















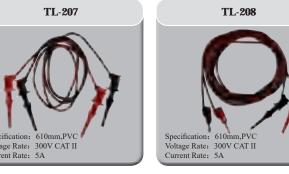








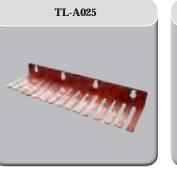


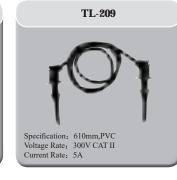










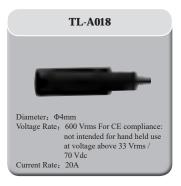




500 Vrms Max

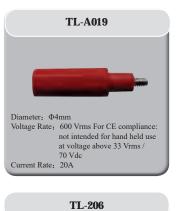
TL-A021

Diameter: Φ4mm Voltage Rate: CAT III 1000 Current Rate: 20A



TL-205

Specification: 1200mm Voltage Rate: CAT III 1000 Current Rate: 10A



Specification: 1200mm Voltage Rate: CAT III 1000

Current Rate: 10A

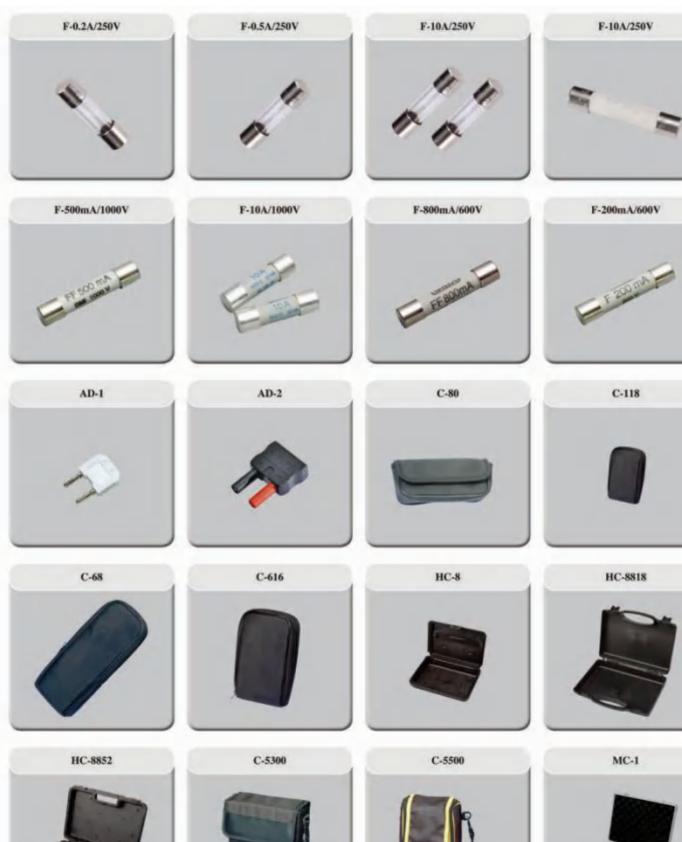


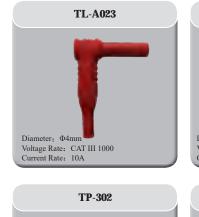
TL-217

TP-305

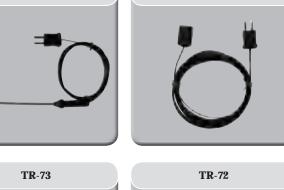
**Accessories** 















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