

# Multifunction Installation Tester

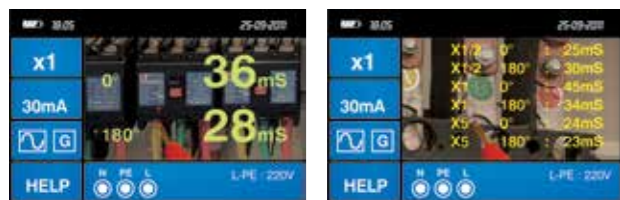
6650/6651/6652 rugged Multifunction Installation Tester with 3.5" TFT color LCD display, provides insulation resistance, earth resistance, loop impedance, voltage, RCD, PFG and PSC testing. It is designed with software system and ensure the safety of electrical installations in domestic, commercial and 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.



Test probe with test button design



Safety design with sliding shield plate to avoid the electric shock



Combined reading on the images

## Features

	6650	6651	6652
Camera function with Wireless Image Transmitter (650T)		*	
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.	*	*	*



EMC & LVD  
EN: 61326  
EN: 61010-1,  
EN: 61010-02-031



Model 650T  
Wireless Image Transmitter (Option)

Model 6651



Model 6650



Model 6652



**Size(HxWxD):** 220mm x 96.5mm x 60.5mm  
**Weight:** 631g  
**Accessories:**  
Test leads, 8 x 1.5V "AAA" batteries, USB cable and Software, gift box with carrying case.

## Specifications (6650/6651/6652)

Insulation					
Terminal Voltage	Range	Max Resolution	Accuracy	Test Current	Short circuit current
125V (0% ~ +10)	0.125~4000M	0.001M	±(2%+8)	1mA@load 125k	1mA
250V (0% ~ +10)	0.250~4000M	0.001M	±(2%+8)	1mA@load 250k	1mA
500V (0% ~ +10)	0.500~4000M	0.001M	±(2%+8)	1mA@load 500k	1mA
1000V (0% ~ +10)	1.000~4000M	0.001M	±(3%+8)	1mA@load 1M	1mA
Low OHM					
Range	Resolution	Accuracy	Max.open Circuit Voltage	Overload Protection	
4.000Ω	0.001Ω	±(1.2%+8)	5.8V	250Vrms	
40.00Ω	0.01Ω	±(1.2%+3)			
400.0Ω	0.1Ω				
Continuity Beeper					
Range	Resolution	Operation Resistance	Max.open Circuit Voltage	Overload Protection	
Continuity	0.01Ω	Resistance 35Ω	5.8V	250Vrms	
Short circuit current		≥200mA			
LOOP Resistance					
L-PE (Hi-Amp)					
Range (Ω)		Max. Resolution (Ω)		Accuracy	
0.00~999		0.01		±(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)					
Range (Ω)		Resolution (Ω)		Accuracy	
0.00~999		0.01		±(5% of reading+6 digits)	
L-N: Measuring Current:2.0A / Range of the Voltage Used:195V a.c.~260V a.c.(56,60Hz)					
Range (Ω)		Max. Resolution (Ω)		Accuracy	
0.00~999		0.01		±(4% of reading+4 digits)	
RCD Testing					
Test current			Accuracy		
x1/2, x1, x2, x5			1.5%~ -9%		
Voltage and Frequency					
Measurement Range (V)/ AC-DC		Resolution		Accuracy	
50~500V/(45~400Hz)		1V		±(1% of reading+2 digits)	
3-Phase quality power analyzer (6652)					
Power (P, S, Q)		0.00 W (VA, Var) ÷ 99.9 kW (kVA, kVar)			
Power factor		-1.00 ÷ 1.00			
Voltage harmonics		0.1 V ÷ 500 V			
Voltage THD		0.1 % ÷ 99.9 %			
Current harmonics and Current THD		0.00 A ÷ 199.9 A			

# Insulation Tester with True RMS Multimeter



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.

### Features

	9985	9985RF	9986
Save both time and money with Automatic calculation of Polarization Index and Dielectric Absorption Ratio			*
200 mA Continuity			*
Compare function (pass/fail) for fast repetitive tests			*
Insulation test voltages 125V, 250V, 500V, 1000V	*	*	*
Insulation test: 0.001MΩ to 4000MΩ	*	*	*
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		*	*

### Specifications (9985/9985RF/9986)

#### Multimeter

Function	Max Range	Resolution	Basic Accuracy
DC Voltage	1000V	0.1V	±(0.06% reading + 4digits)
AC Voltage	1000V	0.1V	±(1.0% reading + 30 digits)
DC Current	10A	0.001A	±(1.0% reading + 3 digits)
AC Current	10A	0.001A	±(1.5% reading + 30digits)
Resistance	40MΩ	0.0001MΩ	±(0.3% reading + 4 digits)
Frequency	40MHz	0.01MHz	±(0.1% reading + 1 digits)
Duty Cycle	0.1 to 99.90%	0.01%	±(1.2% reading + 2 digits)
Temperature	-50 to 1200°C	0.1°C	±(1.0% reading + 2.5°C)
	-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 circuit current
125V(0% ~10%)	0.125~4.000MΩ	0.001MΩ	±(2%+10)	1mA @load125kΩ	≤1mA
	4.001~40.00MΩ	0.01MΩ	±(2%+10)		
	40.01~400.0MΩ	0.1MΩ	±(4%+5)		
	400.1~4000MΩ	1MΩ	±(5%+5)		
250V(0% ~10%)	0.250~4.000MΩ	0.001MΩ	±(2%+10)	1mA @load250kΩ	≤1mA
	4.001~40.00MΩ	0.01MΩ	±(2%+10)		
	40.01~400.0MΩ	0.1MΩ	±(3%+5)		
	400.1~4000MΩ	1MΩ	±(4%+5)		
500V(0% ~10%)	0.500~4.000MΩ	0.001MΩ	±(2%+10)	1mA @load1500kΩ	≤1mA
	4.001~40.00MΩ	0.01MΩ	±(2%+10)		
	40.01~400.0MΩ	0.1MΩ	±(2%+5)		
	400.1~4000MΩ	1MΩ	±(4%+5)		
1000V(0% ~0%)	1.000~4.000MΩ	0.001MΩ	±(3%+10)	1mA @load1MΩ	≤1mA
	4.001~40.00MΩ	0.01MΩ	±(2%+10)		
	40.01~400.0MΩ	0.1MΩ	±(2%+5)		
	400.1~4000MΩ	1MΩ	±(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 9985RF



EMC & LVD  
EN: 61326  
EN: 61010-1,  
EN: 61010-02-031



- Double molded plastic housing
- CAT III 1000V

Large dual LCD display with bargraph



EMC & LVD  
EN: 61326  
EN: 61010-1,  
EN: 61010-02-031



Model 5505

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 feed 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	±1.2%rdg ±10dpts
Voltage DC	1000V	1V	±0.8%rdg ±3dpts
Resistance	40Ω, 400Ω	0.01Ω, 0.1Ω	±1.5%rdg ±6dpts
Insulation Resistance	4M, 40M, 400M, 4000MΩ	1kΩ~1MΩ	±2.0%rdg ±6dpts
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		



**Accessories:**  
Test leads, "AA" Battery x 6  
and gift box with carrying case.

**Size(HxWxD):** 200mm x 92mm x 50mm  
**Weight:** 582g



- 1mA test current for MegOhm range at rated voltage
- 200mA short current for continuity range

**Features**

	5500	5520	5530
Meets IEC10101, CATIII 1000V	*	*	*
Large dual display with backlight	*	*	*
Test hold function for easy operation	*	*	*
Easy to carry testing package	*	*	*
Over range Indication	*	*	*
Low Battery Indication	*	*	*
Measurement range(Ω)	200M/2000M	20M/200M/2000M	20M/200M/2000M

**Specifications**

	Range	Max Resolution	Accuracy
Voltage AC	750V	1V	±1.2%rdg ±10dpts
Voltage DC	1000V	1V	±0.8%rdg ±3dpts
Resistance	200Ω, 2000Ω	0.1Ω, 1Ω	±1%rdg ±2dpts
Insulation Resistance	200MΩ, 2000MΩ	100kΩ~1MΩ	±3.5%rdg ±5dpts
	20MΩ(5520 only)	10kΩ	±3.5%rdg ±5dpts
Test Voltage	250V-200MΩ/500V-200MΩ/1000V-2000MΩ, (500V-20MΩ only 5520)		
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		

**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 3Ω continuity range and a 500Ω 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 (Mid-Scale Value)	0-100MΩ(1MΩ); 0-200MΩ(2MΩ); 0-400MΩ(4MΩ)
Rated Current	1mA DC+20%, -0%
Output short Circuit Current	1.3mA DC approx
Accuracy Guaranteed Ranges	0.05-10MΩ ±5%; 0.1-20 Ω ±5%; 0.2-40MΩ ±5%;
Accuracy	±7% of Scale length at ranges other than above ranges

**Continuity Test Ranges**

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	1.2MΩ

**General**

Withstand Voltage	7400V AC 50Hz or 60Hz for one minute between electrical circuits and housing case
Safety Standards	IEC 61010-1 CAT III



EMC & LVD  
EN: 61326  
EN: 61010-1,  
EN: 61010-02-031



- Double molded plastic housing
- CAT III 1000V



**Size(HxWxD):** 200mm x 92mm x 50mm  
**Weight:** 582g



Model 5500

**Accessories:**  
Test leads, "AA" Battery x 6  
and gift box with carrying case.



Model 5503

**Size(HxWxD):** 200mm x 92mm x 50mm  
**Weight:** 546g

**Accessories:**  
Test leads, "AA" Battery x 6  
and gift box with carrying case.



EMC & LVD  
EN: 61326  
EN: 61010-1,  
EN: 61010-02-031

- Double molded plastic housing
- CAT III 1000V



Model 5300B



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.

**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
- Includes 6 "AA" batteries, test leads and carrying case

**Specifications**

	Range	Max Resolution	Accuracy
Earth resistance	10Ω	0.01Ω	±2%rdg ±0.1Ω
	100Ω	0.1Ω	±2%rdg ±3dgts
	1000Ω	1Ω	±2%rdg ±3dgts
Voltage AC	750V	1V	±1.2%rdg ±10dgts
Voltage DC	1000V	1V	±0.8%rdg ±3dgts
Resistance	200kΩ	0.1kΩ	±1.0%rdg ±2dgts
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" battery x 6		

**Size(HxWxD):** 200mm x 92mm x 50mm  
**Weight:** 582g  
**Accessories:** 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
- Large custom digital display readout on all models
- Measure low loop resistance(resolution of 0.01Ω)
- Automatic lock-out if test resistor overheats
- Visual indication of reversed phase and neutral wiring at socket

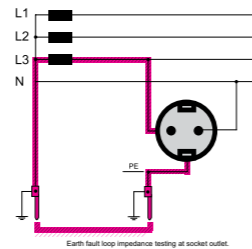
**Specifications**

	Max Resolution	Accuracy
Loop Impedance	20/200/2000Ω	±2.5% rdg ±4dgts
AC Test Current	20Ω 25A; 200Ω 2.3A;2000Ω 15mA	±2%rdg ±5dgts
AC Test Period	20Ω 20ms; 200Ω 40ms;2000Ω 280ms	±2%rdg ±5dgts
PSC	200A (2.3A 40ms); 2000A(25A 20ms); 20KA (25A 20ms)	Consider accuracy impedance
Voltage	50V ~ 250V	±2%rdg ±5dgts
Resistance	0.1kΩ	±1.0%rdg ±2dgts
Operating Voltage	230V + 10% - 15% (195V ~ 253V) 50Hz	
Safety Standard	IEC61010-1 CATIII 600V	

- Double molded plastic housing
- CAT III 600V



EMC & LVD  
EN: 61326  
EN: 61010-1,  
EN: 61010-02-031



**Size(HxWxD):** 200mm x 92mm x 50mm  
**Weight:** 582g

**Accessories:** Test leads and "AA" Battery x 6, gift box with carrying case.



Model 5301



- Double molded plastic housing
- CAT III 1000V



EMC & LVD  
EN: 61326  
EN: 61010-1,  
EN: 61010-02-031

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		
Trip time	10-2000 ms at 0.5x	1 ms	±(2%rdg. + 2Digits)
	10-500 ms at 1x		
	10-150 ms at 2x		
	10-40 ms at 5x		
Ramp test	0.4x to 1.4 times nominal rated current		10%
Mains voltage	230(+10%/ -10%)V	1V	±(2%rdg. + 2Digits)



Model 5554

**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>/<sub>4</sub> digital LCD display with backlight
- High resolution to 0.1mΩ with test current to 200mA
- Low battery indication
- Over load protection on all ranges

- Double molded plastic housing
- CAT III 1000V

**Features**

- High accuracy, high resolution portable Milliohm Meter or field use
- Digital display 4000 counts
- Safety design
- Relative zero & Data Hold
- MAX/MIN recording mode
- Auto Power Off
- 400mΩ Low Resistance & Wide 40mF capacitance range
- Diode Check & Continuity Test

**Specifications**

Function	Max. Range	Basic Accuracy
Low Resistance	400mΩ, 4Ω, 40Ω	±(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	40MΩ	±(1.0%+5d)
Capacitance	40mF	±(3.0%+10d)

**Size(HxWxD):** 200mm x 92mm x 50mm  
**Weight:** 582g

**Accessories:** Rubber holster, 4-wire cable and 6x1.5V "AA"battery, test leads, gift box with carrying case.



EMC & LVD  
EN: 61326  
EN: 61010-1,  
EN: 61010-02-031



Model 5302



# High Voltage Insulation Tester



- Wide range measurements from 500V to 5000V and up to 60GΩ.
- Large 6000 counts digital display with bargraph and backlight.
- Polarization index measurement(PI).
- Auto ranging & Timer measurement function.
- Indication of output voltage and discharge voltage.
- Auto-discharge function and voltage output warning function.
- Auto power off and battery check.
- MAX/MIN, PEAK, Relative value & Data hold functions for DC/AC voltage measurements
- Safety standard IEC61010-1 CAT IV 600V



CE  
EMC & LVD  
EN: 61326  
EN: 61010-1,  
EN: 61010-02-031

EN  
61010-1  
CATIV  
600V

Specifications						
Function	Insulation resistance				Voltage	Resistance
Range	500V	1000V	2500V	5000V	AC/DCV	
Measuring range (Auto ranging)	0-6.000MΩ	0-6.000MΩ	0-60.00MΩ	60-60.00MΩ	0-600.0V (50-1kHz)	0-600.0Ω 600-6000Ω
	6-60.00MΩ	6-60.00MΩ	60-600.0MΩ	60-600.0MΩ		
	60-600.0MΩ	60-600.0MΩ	0.6-6.000GΩ	0.6-6.000GΩ		
	600-6000MΩ	600-6000MΩ	6-60.00GΩ	6-60.00GΩ		
Accuracy	±5%rdg ±3dgt ; ±20% (>6GΩ or more)				±1.5%rdg ±5dgt	±1.5%rdg ±10dgt
Short Circuit Current	1.3mA approx				-	-
Rated test Current (at load Resistance)	1mA-1.2mA	1mA-1.2mA	1mA-1.2mA	1mA-1.2mA	-	-
	0.5MΩ	1MΩ	2.5MΩ	5MΩ	-	-
Open circuit voltage	500VDC/+20%-0%	1000VDC/+20%-0%	2500VDC/+20%-0%	5000VDC/+20%-0%	-	-
Continuity check	Buzzer sounds at 50Ω				-	-
Display	6000 Counts				-	-
Current consumption	About 1000mA (During measurement)				25mA approx.	-
Withstand Voltage	5320V AC for 5 seconds				-	-
Safety standard	IEC 61010-1 CAT IV 600V Pollution Degree 2				-	-
Power supply	DC12V : R14 x 8				-	-
Dimensions	198 ( L ) x 148 ( W ) x 86 ( D ) mm				-	-
Weight	1438g approx.				-	-
Accessories	Test leads, Instruction Manual and 120V/250V AC adaptor				-	-

Model 6611



• Double molded plastic housing  
• CAT IV 600V



EMC & LVD  
EN: 61326  
EN: 61010-1,  
EN: 61010-02-031

**Features**

Large 3 1/2 digital LCD Display with white backlight  
230V + 10%/-15% Mains voltage  
50-60Hz Mains frequency  
Current consumption approx. 15mA  
Auto power off after approx. 5 min.  
AC,DC & DC pulse Test current type  
25 & 50V Contact Voltage selectable  
Auto test with recall of test results  
Time delayed test at all nominal current settings  
Safety CAT IV 600V  
Correct polarity indication  
Display loop and PSC value on LCD at the same time  
Protective earth conductor must be free of interfering voltage.

**Specifications**

Measurement specifications	Range	Resolution	Accuracy
Loop Impedance	0.05...1999Ω	0.01...1Ω	±(5%rdg.+5Digits)
Resistance neutral connector	0.05...19.99Ω	0.01Ω	±(5%rdg.+5Digits)
Resistance phase connector	0.05...19.99Ω	0.01Ω	±(5%rdg.+5Digits)
Resistance earth connector	0.05...1999Ω	0.01...1Ω	±(5%rdg.+5Digits)
Prospective short circuit current	0...20KA	1A	10A
Voltage	0...440V	1V	±(3%rdg.+3Digits)
Mains frequency	10...200Hz	0.1Hz	±(1%rdg.+3Digits)
Contact voltage	25V/50V(selectable)		

**Accessories:**

Test leads, Instruction Manual , 8 x R14 batteries and gift box with carrying case.

**Size(HxWxD):** 198mm x 148mm x 86mm  
**Weight:** 1438g

**DT-6612 RCD Tester**

Model 6612



• Double molded plastic housing  
• CAT IV 600V



EMC & LVD  
EN: 61326  
EN: 61010-1,  
EN: 61010-02-031

**Features**

Large 3 1/2 digital LCD Display with white backlight  
230V + 10%/-15% Mains voltage  
50-60Hz Mains frequency  
Current consumption approx. 15mA  
Auto power off after approx. 5 min.  
AC,DC & DC pulse Test current type  
25 & 50V Contact Voltage selectable  
Auto test with recall of test results  
Time delayed test at all nominal current settings  
Safety CAT IV 600V  
0 & 180 degree select

**Specifications**

Measurement specifications	Range	Resolution	Accuracy
Nominal test current	10/30/100/500mA/1A Time delayed : 100mA/300mA/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 nominal rated current		10 %
Mains voltage	230V	1V	+10%/-10%

**Accessories:**

Test leads, Instruction Manual , 8 x R14 batteries and gift box with carrying case.

**Size(HxWxD):** 198mm x 148mm x 86mm  
**Weight:** 1438g

**DT-6613  
Insulation Tester**

- 1mA test current for MegOhm range at rated voltage
- 200mA short current for continuity range

• Double molded plastic housing  
• CAT IV 600V



EMC & LVD  
EN: 61326  
EN: 61010-1,  
EN: 61010-02-031

**Features**

Meets IEC10101, CAT IV 600V  
Large dual LCD display with backlight  
Test hold function for easy operation  
Easy to carry with testing package  
Over range Indication  
Low Battery Indication  
Measurement range(Ω): 20M/200M/2000M

**Specifications**

	Range	Max Resolution	Accuracy
Voltage AC	750V	1V	±1.2%rdg ±10dgt
Voltage DC	1000V	1V	±0.8%rdg ±3dgt
Resistance	20Ω, 200Ω	0.01Ω, 0.1Ω	±1%rdg ±2dgt
Insulation Resistance	200MΩ, 2000MΩ	100kΩ-1MΩ	±3.5%rdg ±5dgt
Test Voltage	250V-200MΩ/500V-200MΩ/1000V-2000MΩ		
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.)		

**Accessories:** Test leads, Instruction Manual , 8 x R14 batteries and gift box with carrying case.  
**Size(HxWxD):** 198mm x 148mm x 86mm **Weight:** 1438g



Model 6613

**DT-6615 5 in 1 Multifunction Installation Tester**

6615 is a 5 in 1 Multifunction Installation tester with two measurements at once and a dual display. PEFC/PSC and loop impedance are measured and displayed in parallel, saves you more than 50% of test time compared to other loop testers. It is an additional new high current loop mode. Faster measurements compared to loop tests with non-trip mode for RCD's. Unique zero adapter for fast, always reliable and accurate test lead and mains cord compensation. Fast voltage measurement between L-N, L-PE and N-PE using the mains cord. No need to change measurement connections.



EMC & LVD  
EN: 61326  
EN: 61010-1,  
EN: 61010-02-031

**Specifications**

Function	Range	Accuracy
Voltage	60V, 230V, 480V	±(2%rdg.+2Digits)
Continuity	0.5Ω, 1Ω, 10Ω, 100Ω, 1000Ω	±(5%rdg.+3Digits)
Insulation (Test V @ 1mA)	250V, 1MΩ, 90MΩ	±(5%rdg.+3Digits)
Loop Test HI	0Ω, 0.05Ω, 0.5Ω, 1Ω, 10Ω, 100Ω, 1000Ω	±(5%rdg.+5Digits)
Loop Test No Trip	0Ω, 1Ω, 10Ω, 1000Ω	±(5%rdg.+5Digits)
Trip Current @ (200ms x 1)	10mA, 30mA, 100mA, 300mA, 500mA, 1A	±(3%rdg.+4Digits)
Trip Time	30ms @ 30mA, 90ms @ 30mA, 250ms @ 30mA	±(1% + 1ms)

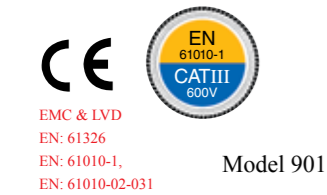
**Accessories:** Test leads, Instruction Manual , 8 x R14 batteries and gift box with carrying case.

**Size(HxWxD):** 198mm x 148mm x 86mm **Weight:** 1438g



Model 6615

## 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

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

## DT-903 Socket Polarity and Earth Leakage Tester

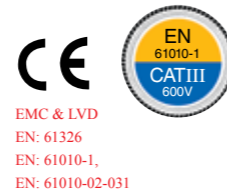


903 Socket Polarity and Earth Leakage Tester tests 3 wire 220V AC outlets and earth leakage circuit breakers(ELCB).

## 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

Size(HxWxD): 128mm x 68mm x 30mm  
Weight: 185g



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 tripping 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 error

## 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 ± 5%
Test Current (Trip Test)	100% of circuit breaker trip current selected	2000mS ± 5%
Test Current (Fast Trip Test)	250mA regardless of circuit breaker trip current selected	40mS ± 5%
Fault trip Time	2000mS (40mS for Fast Trip)	±2%rdg ±3dgt
Resistance	0.1kΩ	±1.0%rdg ±2dgt
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.

- 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 neutral, live faults, and those errors detected by the two pushbutton tests.

Size(HxWxD): 69mm x 67mm x 32mm  
Weight: 80g



Model 906A

RCD Tester



EMC & LVD  
EN: 61326  
EN: 61010-1,  
EN: 61010-02-031



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 %



Model 9054



EMC & LVD  
EN: 61326  
EN: 61010-1,  
EN: 61010-02-031



Size(HxWxD): 200mm x 70mm x 45mm  
Weight: 253g

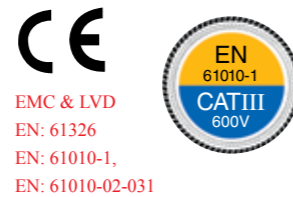
Accessories:  
Test leads, 4 x "AA" batteries and Clamshell.



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
Nominal output current	500V, 1mA
Measurement range	0, 300k, 400k, 500k, 600k, 700k, 800k, 900k, 1000kΩ, ∞
Size	210 x 70 x 45mm
Total weight	316g

**Accessories:**  
Test leads, 4 x "AA" batteries and Clamshell.



EMC & LVD  
EN: 61326  
EN: 61010-1,  
EN: 61010-02-031



Model 9050

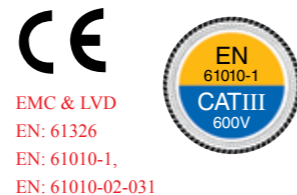
**DT-9051 Earth Tester**



Model 9051



Model TL-951



EMC & LVD  
EN: 61326  
EN: 61010-1,  
EN: 61010-02-031

Specifications	
Max input AC Voltage	400V±10%
Operating AC Voltage	230V±10%
Operating Frequency	50Hz±10%
Measurement range	0Ω, 5Ω, 10Ω, 30Ω, 50Ω, 100Ω
Fuse size	5 x 20mm/160mA

**Size(HxWxD):** 210mm x 70mm x 45mm  
**Weight:** 311g

**Accessories:**  
TL-951, 9V battery and Clamshell.



EMC & LVD  
EN: 61326  
EN: 61010-1,  
EN: 61010-02-031

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 1999Ω (resolution 1Ω 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%+1 dgt) 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

**Accessories:**  
TL-951, 9V battery and Clamshell.



Model 9052

**DT-9053 Circuit Analyzer**

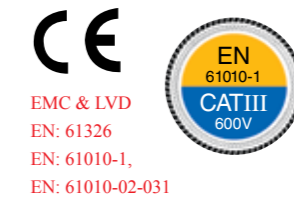
9053 insulation test has been evaluated and complies with insulation category III (overvoltage category III). Pollution degree II in accordance with IEC-644 indoor use.

- Digital LCD display with backlight
- Display update for voltage less than 2.5 times/second
- Over-range indication on all functions
- ACV True RMS measurement

Specifications			
	Range	Resolution	Accuracy
Line voltage	85.0~250.0 VAC	0.11V	±1.0%rdg ±0.2dpts
Peak line voltage	121.0~354.0 VAC	0.1V	±1.0%rdg ±0.2dpts
Frequency	45.0~65.0 Hz	0.1Hz	±1.0%rdg ±0.2dpts
%voltage drop	0.1%~99.9%	0.1%	±2.5%rdg ±0.2dpts
Voltage loaded	10.0 ~ 250.0 VAC	0.1V	±2.5%rdg ±0.2dpts
Neutral-Ground V	0.0 ~ 10.0 VAC	0.1V	±2.5%rdg ±0.2dpts
Impedance-Hot neutral & Ground	0.00Ω~3.00Ω> 3Ω	0.01Ω	±2.5%rdg ±0.02dpts
GFCI Trip Time	1ms to 6.5ms counter	1ms	±1.0%rdg ±2ms
GFCI Trip Current	6.0 ~ 9.0mA	0.1mA	±1.0%rdg ±2mA
EPD Trip Current	30.0 ~ 37.0mA	0.1mA	±1.0%rdg ±2mA

**Size(HxWxD):** 200mm x 70mm x 45mm  
**Weight:** 206g

**Accessories:**  
9V battery and Clamshell.



EMC & LVD  
EN: 61326  
EN: 61010-1,  
EN: 61010-02-031



Model 9053

DT-175CVS/175CV1/176CV2/177CV3  
AC Current and Voltage DataloggersEMC & LVD  
EN: 61326  
EN: 61010-1, EN: 61010-02-031

Model 175 CV1

- 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 maximum/minimum values exceed
- Analysis software used to view graph for logging data

The 175CVS is a datalogger for measuring and recording current and voltage.  
The 175CV1/176CV2/177CV3 is a datalogger 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.



Model 176 CV2

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	*	*	*	*

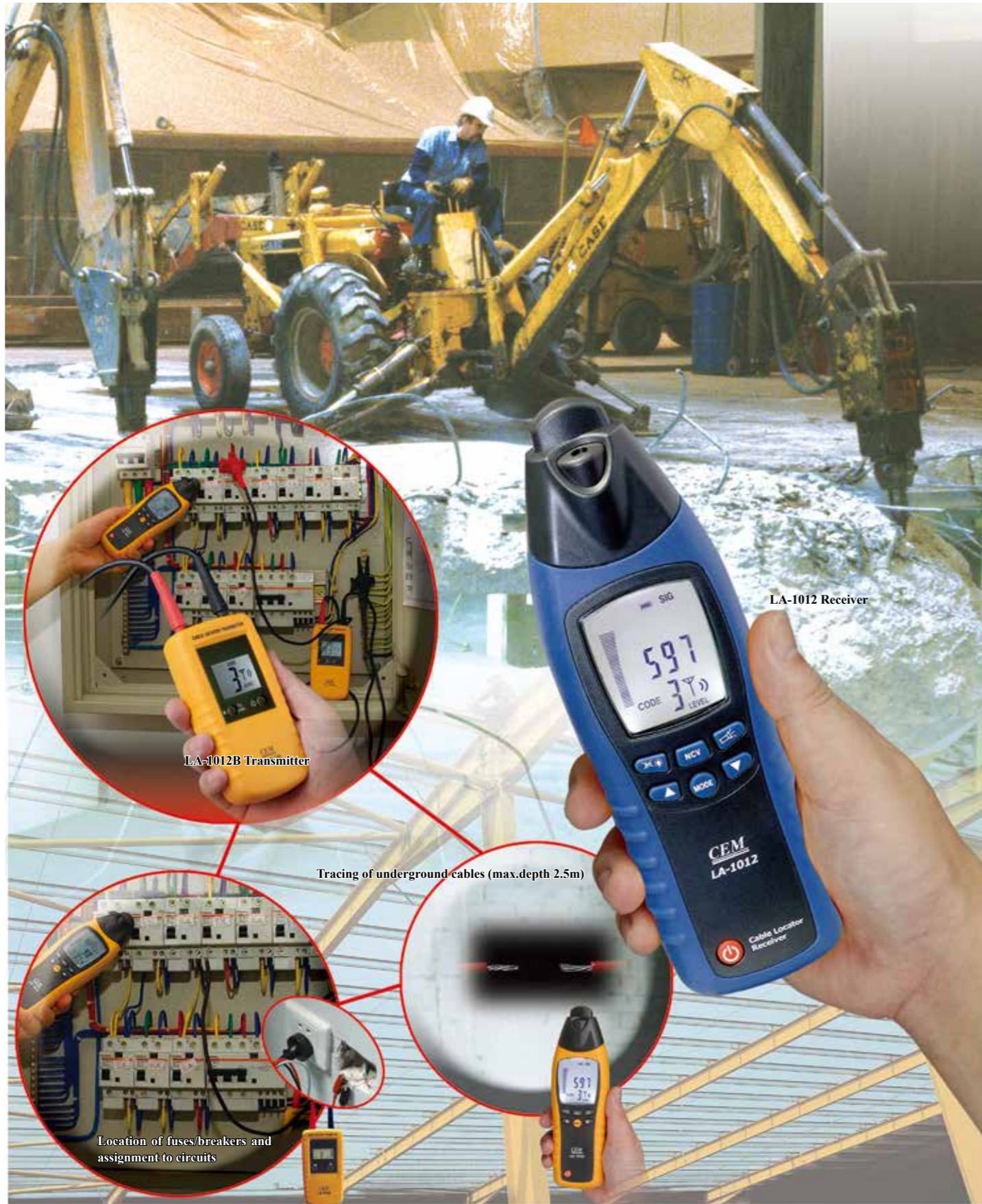
Specifications	Function	Range	Basic Accuracy	175CVS	175CV1	176CV2	177CV3
AC Current (True RMS)	2-200A	±2%	*	*	*	*	
AC Voltage (True RMS)	6-600V	±1.5%	*	*	*	*	
Reading Memories			100,000	100,000	256,000	256,000	
Measuring rate	1 sec. to 24h						
Analysis software	windows 98/2000/XP/Vista						

**Accessories :**  
ACA current clamp sensor(CP-09) & Voltage sensor,  
USB cable, Software, battery and gift box.  
**Size(HxWxD):** 114mm x 63mm x 34mm  
**Weight:** 248g



Model 177 CV3

## Cable Locator



LA-1012 Receiver

LA-1012B Transmitter

Tracing of underground cables (max.depth 2.5m)

Location of fuses/breakers and assignment to circuits

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 purpose-made 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
- 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
- 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  
TransmitterModel LA-1012  
Receiver

## Technical Specifications

Voltage measurement range	Transmitter: 12V, 50V, 120V, 230V, 400V
Frequency range	Transmitter: 0...60Hz
Output signal	Transmitter: 125kHz
Voltage	Transmitter: Up to 400V AC/DC
Tracing depth cable location	Receiver: 0...2.5 m wall/underground cables
Main voltage detection	Receiver: 0...0.4 m

## 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.



EMC & LVD  
EN: 61326

EN: 61010-1, EN: 61010-02-031



# Non-Contact detection of AC Voltage



- 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 voltage without metallic contact
- Self-test button (AC-8)

Specifications	
Standard	CATIV 600V, CAT III 1000V
Operating Range	VoltFinder: 200 ~ 1000V AC; 100 ~ 1000V AC
Operating Temp.	-10°C ~ 50°C
	0°C ~ 30°C; 95%RH
Operating Humidity	30°C ~ 40°C; 75%RH
	40°C ~ 50°C; 45%RH

**Size(HxWxD):** 158mm x 21mm x 25mm  
**Weight:** 48g (AC-8/AC-8S)

**Size(HxWxD):** 176mm x 26mm  
**Weight:** 48g (AC-9/AC-9B)

**Accessories:**  
 Two "AAA" batteries and clamshell



Model AC-8



Model AC-9

Model AC-10

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.

- Suitable for outlets or against wire insulation testing
- Flashing red LED light indicator
- Built-in bright flashlight with ON/OFF button
- Convenient size with pocket clip
- Green light means you're close the voltage(AC-10/AC-10<sup>+</sup>)
- Red LED light and audible beeper indicator(AC-9B/AC-10/AC-10<sup>+</sup>)
- Motor Shaking and LED light (AC-9C)



- Bright Flashlight
- CATIII 1000V

- Red LED light and audible beeper indicator (AC-9B)
- Motor Shaking and LED light (AC-9C)



EMC & LVD  
 EN: 61326  
 EN: 61010-1, EN: 61010-02-031



Model AC-10<sup>+</sup>



Model AC-10<sup>+</sup>

Features	AC-8	AC-8B	AC-8S	AC-9	AC-9B	AC-9C	AC-10	AC-10B	AC-10S	AC-10 <sup>+</sup>
ACV Non-Contact Detection	*	*	*	*	*	*	*	*	*	*
Operating Range	24V to 1000V		*							
	50V to 1000V	*					*		*	*
	(50Hz/60Hz)	100V to 1000V	*	*	*	*		*		
	200V to 1000V	*	*	*	*	*		*		
Voltage Sensitivity detector (Single)	*	*	Dual	*	*	*	*	*	*	*
Red LED indicators	*	*	*	*	*	*	*	*	*	*
Green LED indicators							*	*	*	*
Beeper sounds		*	*		*	*	*	*	*	*
Motor Shaking						*				
Flashlight function	*	*	*	*	*	*	*	*	*	*
Auto Power Off	*	*	*	*	*	*	*	*	*	*
System self test	*	*	*	*	*	*	*	*	*	*
Switchable audible and silent mode									*	*
Rugged, double molded case	*	*	*	*	*	*	*	*	*	*
CATIII-1000V	*	*	*	*	*	*	*	*	*	*



### Features (AC-10<sup>+</sup>)

- Safe CAT IV-1000V rating and toolbox tough with rubber reinforced case and buttons and low-profile detection tip
- Vibration and red LED alarms alert users to the presence of voltage in noisy areas
- Versatile High/Low sensitivity modes detect voltage on industrial equipment and low-voltage installations
- Powerful LED worklight always ready to illuminate poorly lit locations
- Inspection light at the probe tip facilitates testing in dark areas
- IP67 Waterproof

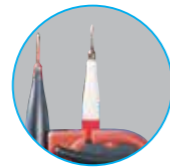


9902 & 9903 Electrical Testers provide voltage, continuity with one compact tool. They will turn on automatically when you place the probe across a complete circuit. So you don't even have to turn them on or off.



EMC & LVD  
EN: 61326  
EN: 61010-1,  
EN: 61010-02-031

**Safety 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	1MΩ	400kΩ
Non-contact voltage detection	9902N	9903N
Low battery indication		*

Specifications	9902	9903	Accuracy
Function	9902	9903	
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.



Model 9903



**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	0-5MΩ (test current: <7μA)
Lamp Tester Voltage	3kV/160kHz (test current: <200μA)
Measurement Category	CAT II 250V

**Size(HxWxD):** 189mm x 26.5mm x 2.6mm  
**Weight:** 60g



**Features**

	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		*/*	*/*	*/*

- Double molded plastic housing
- CAT III 1000V

Model 9030

Bright Flashlight



- Bright Flashlight
- VAT self-test button

EMC & LVD  
EN: 61326  
EN: 61010-1  
EN: 61243  
EN: 61010-3 (9030/9130)



Model 9020



Model 9011

Model 9121



**Specifications**

	9011/9011B	9020/9120	9021/9121	9030/9130
Voltage range (AC/DC)	6, 12, 24, 50, 120, 230, 400V	12, 24, 36, 50, 120, 230, 400V	12, 24, 36, 50, 120, 230, 400V	12, 24, 36, 50, 120, 230, 400V
Tolerance	-30% to 0% of reading	-30% to 0% of reading	-30% to 0% of reading	±1.5%±3D
ACV Frequency range	0-60Hz	0-60Hz	0-60Hz	50/60Hz
Internal impedance	-	<200kΩ/-	<200kΩ/-	≤1MΩ/-

**Size(HxWxD):** 240mm x 78mm x 40mm  
**Weight:** 237g

**Accessories:**  
Two "AAA" batteries (9021/9030/9121), gift box with carrying case

**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.



Receiver  
Model CT-230A



Model CT-230B  
Transmitter



**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



Model CT-240B  
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  
 RJ45 and RJ11 modular connectors

**Specifications**

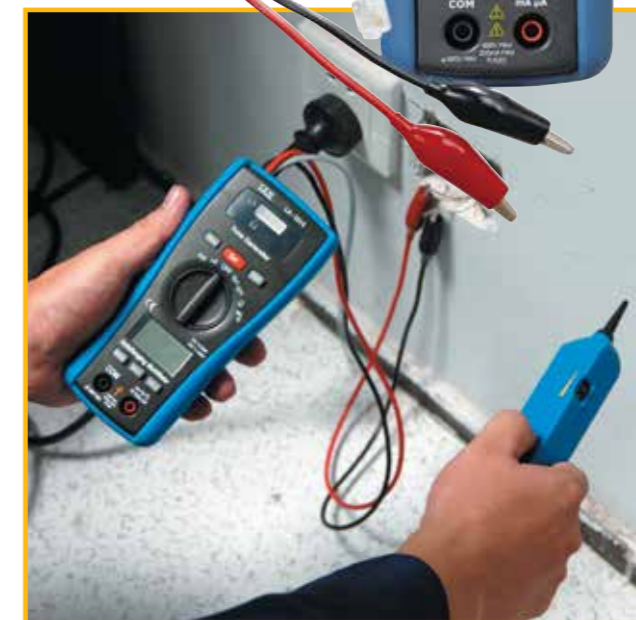
Function	Max Range	Basic Accuracy
Voltage DC	600V	±0.5%
Voltage AC	600V	±1.2%
Current DC	200mA	±1.5%
Current AC	200mA	±2.0%
Resistance	20MΩ	±0.8%
Continuity Test	Beep if less than 100Ω	

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

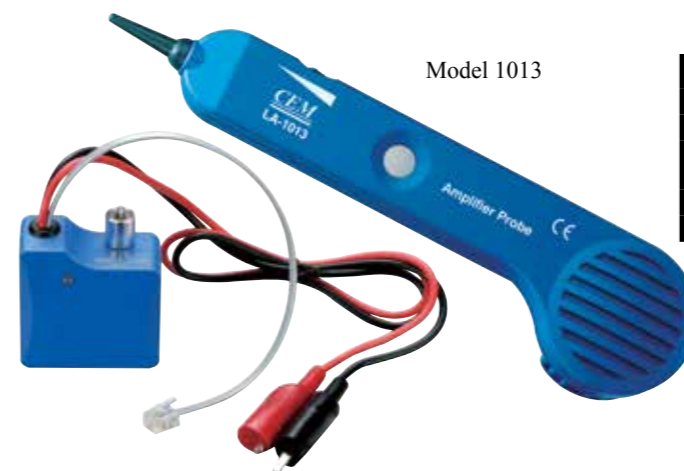
**Size(HxWxD):** 162mm x 74.5mm x 44mm  
**Weight:** 308g  
**Accessories:**  
 Test leads, 9V batteries and gift box.



Model 1014



**LA-1013 Amplifier Probe**



Model 1013

**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

**Size(HxWxD):** 231mm x 56mm x 27mm  
**Weight:** 270g  
**Accessories:**  
 9V battery and clamshell



Model 1011



EMC & LVD  
EN: 61326  
EN: 61010-1, EN: 61010-02-031



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 modular 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 cross-connect. 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 cable etc.
- 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	20MΩ	±0.8%
Continuity Test	Beep if less than 100Ω	

**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 Identifier & DMM



EMC & LVD  
EN: 50081-1, 50082-1  
EN: 61010-1, EN: 61010-02-031



Model 1015

LA-1015 is a transmitter/receiver device which enables 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	20MΩ	±0.8%
Continuity Test	Beep if less than 100Ω	

#### 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.

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 satellite receiver to the "TOREC" input on the Satellite Finder. DMM function make it easy to measure DC/AC voltage, DC/AC current, Resistance, continuity & diode.



EMC & LVD  
EN: 61326

EN: 61010-1, EN: 61010-02-031



Model 1016

#### 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	20MΩ	±0.8%
Continuity Test	Beep if less than 100Ω	

**Size(HxWxD):** 162mm x 74.5mm x 44mm  
**Weight:** 308g

**Accessories:**  
9V battery & Two "AAA" batteries, remote terminator and gift box with carrying case.



#### LA-1017 Solar Power Meter & DMM

#### Features

Sunlight measurement up to 1999W/m<sup>2</sup> or 634BTU/(ft<sup>2</sup>\*h)  
High accuracy and rapid response  
Data HOLD function to hold measurement values  
Unit and sign display for easy reading  
Measuring unit selection among W/m<sup>2</sup> and BTU/(ft<sup>2</sup>\*h)  
Manual scale selection  
Direct reading with no adjustments needed  
Maximum and minimum values  
Low battery indication

#### 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	20MΩ	±0.8%
Continuity Test	Beep if less than 100Ω	

#### Solar Power Meter

Display	3-1/2 digits LCD with maximum reading 1999.
Range	1999W/m <sup>2</sup> , 634BTU/(ft <sup>2</sup> *h)
Resolution	1W/m <sup>2</sup> , 1BTU/(ft <sup>2</sup> *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  
**Weight:** 308g

**Accessories:**  
9V battery & Two "AAA" batteries, remote terminator and gift box with carrying case.



EMC & LVD  
EN: 61326

EN: 61010-1, EN: 61010-02-031



Model 1017





Dual Technology Features Automatic Selection of Magnetic Induction or Eddy Current Measurement Techniques



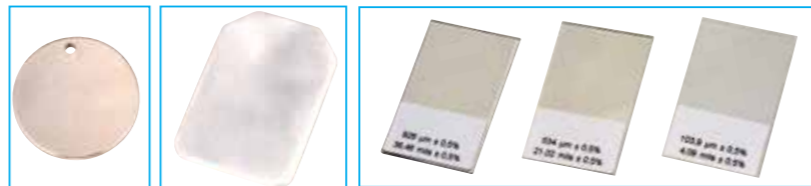
EMC  
EN: 61326



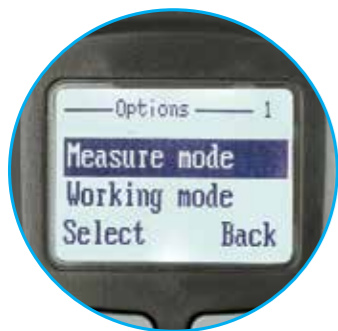
Model 156

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 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)	
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	

Specifications		
Sensor probe	F	N
Working principle	magnetic induction	Eddy current principle
Measuring range	0~1250um	0~1250um
Guaranteed tolerance (of reading)	(+/- 3%+1)um	(+/- 3%+1.5)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



Calibration Iron    Calibration Aluminum    Precision Standard



**Size(HxWxD):** 113.5mm x 54mm x 27mm  
**Weight:** 110g

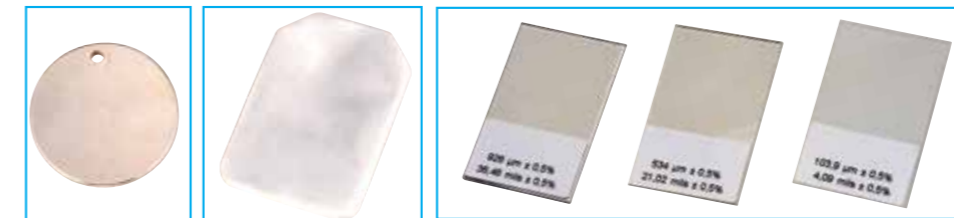
**Accessories:**  
Two "AAA" batteries, USB cable, CD, Calibration Iron, Calibration Aluminum, Precision Standard, gift box with carrying case.



Dual Technology Features Automatic Selection of Magnetic Induction or Eddy Current Measurement Techniques. The measuring data is easily transferred to PC for edit and storage.

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 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 2500 readings( 50 GROUP readings)	
Delete single readings and all group readings easily	
High alarm and Low alarm for all working modes	
4 levels of battery 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
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



Calibration Iron    Calibration Aluminum    Precision Standard

**Size(HxWxD):** 113.5mm x 54mm x 27mm  
**Weight:** 110g

**Accessories:**  
Two "AAA" batteries, CD, Calibration Iron, Calibration Aluminum, Precision Standard, gift box with carrying case.



EMC  
EN: 61326

Model 157



# Professional Laser Distance Meter



High Accuracy ( $\pm 1.5\text{mm}$ )



Backlight



Clear display

LDM-180/200/220 professional Laser Distance Meter is designed to provide special users a high accuracy, one person distance measuring and estimating tool to measure remote and difficult to reach places. The compact and handy base model was specifically designed 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.

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

### Meterbox-iLDM Software for Laser Distance Meter

Amazing features and built-in apps.

The Meterbox-iLDM software can support our Laser Distance Meter product transferring 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.



LDM-180/200/220 professional Laser Distance Meters integrated with 2.4" color TFT LCD display, and the powerful embedded operating system support including large-capacity data storage, MicroSD memory card, and high pixel camera. The series offers 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 recorded images(JPEG) or video(3GP) in office to analyze the measured readings under the support of the software.



EMC  
EN: 61326  
EN: 60825-1



Made for  
iPod iPhone iPad

### Features

	LDM-180	LDM-200	LDM-220
2.4" TFT 320x240 pixels color LCD display		*	*
Camera built-in			*
Images(JPEG) & Video(3GP)			*
MicroSD memory card & datalogger function			*
Electrical compass		*	*
Angle measurement using tilt sensor( $\pm 65^\circ$ )		*	*
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 180

Model 200

### 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(2 $\sigma$ )	Typically: $\pm 1.5\text{mm}(\pm 0.06\text{in})$	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 635 nm, < 1mW	Class II 635nm,<1mW
Range of bluetooth	10m	10m	10m
Camera pixels			5Mega
Compass Measuring range		0-360°	0-360°
Compass Measuring accuracy		$\pm 2^\circ$	$\pm 2^\circ$
Tilt sensor Measuring range	$\pm 65^\circ$	$\pm 65^\circ$	$\pm 65^\circ$
Tilt sensor Measuring accuracy		$\pm 0.5^\circ$	$\pm 0.5^\circ$
Dust Protect/Splash proof	IP 54	IP 54	IP 54
History measurement records	50	100	100
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 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 instrument switch-off	after 3 min	after 3 min	after 3 min



Model 220

Size(HxWxD): 140mm x 55mm x 35mm  
Weight: 145g

Accessories:  
2 x 1.5V AA batteries and gift box with carrying case.



Model LDM-4S



The professional Laser Distance Meter is designed to provide special users a high accuracy, one person distance measuring and estimating tool to measure remote and difficult to reach places. The compact and handy base model was specifically designed 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. LDM-40 is integrated with Stud/Metal/AC voltage finder function. It also can be used to measure the wood, metal and live wire detection.

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

### Specifications

Measuring Range	0.05 to 100 m(0.15 ft to 328 ft)
Measuring accuracy(2σ)	Typically: ±1.5 mm(±0.06 in)
Measuring units	m,in,ft
Laser Class	Class II 635 nm, < 1mW
Smallest unit displayed	1mm
Tilt sensor Measuring range	± 65°
Bluetooth distance	10m
Dust Protect/Splash proof	IP 54
History measurement records	50
Keyboard Type	Super Soft-Touch (Long life)
Operating Temperature	0°C to 40°C(32°F to 104°F)
Storage Temperature	-10°C to 60°C(14°F to 140°F)
Battery Life	Up to 8,000 measurements
Batteries	Type AA 2 x 1.5V
Auto laser switch-off	after 30 seconds
Auto Power off	after 3 min

**Size(HxWxD):** 115mm x 48mm x 28mm

**Weight:** 135g

### Accessories:

2 x 1.5V AAA batteries and gift box with carrying case.

### Features (Laser Distance Meter)

Area, Volume Calculations  
 Indirect measurement using Pythagoras  
 Indirect measurement using tilt sensor  
 Angle measurement using tilt sensor(± 65°)  
 Addition/Subtraction  
 Continuous Measurement  
 Min/Max Distance Tracking  
 Timer (self-triggering)  
 Laser continuous  
 Stake out function  
 Display illumination and multi-line display  
 Multifunctional endpiece  
 Tripod thread  
 Beep indication

### Features (Stud/Metal/AC Voltage Finder)

Laser leveling, layout and stud locating on vertical and horizontal surfaces  
 wood, metal and live wire detection-detects wood up to 3/4" depth  
 LCD sensing and mode display with new target graphics  
 LED display with continuous live wire detection

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.

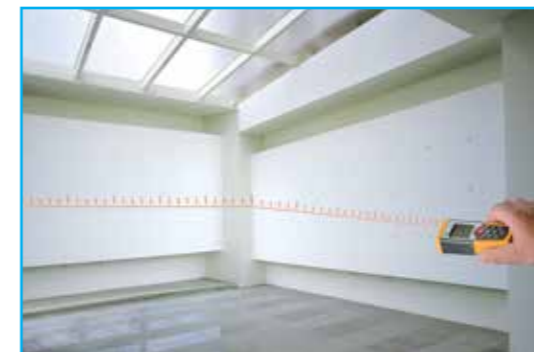


EMC  
 EN: 61326  
 EN: 60825-1

Accurate measurement  
 up to 80m (LDM-80S)

### Features

	LDM-35S	LDM-65S	LDM-80S
Area, Volume Calculations	*	*	*
Indirect measurement using Pythagoras	*	*	*
Angle measurement using tilt sensor(± 65°)		*	*
Addition/Subtraction	*	*	*
Continuous Measurement	*	*	*
Min/Max Distance Tracking	*	*	*
Display illumination and 4-line display.	*	*	*
Buzzer indication	*	*	*



### Simple to operate

Due to the shortcut keys addition and subtraction, as well as surface and volume calculations could be easier.

### Specifications

	LDM-35S	LDM-65S	LDM-80S
Measuring Range	0.05 to 35m(0.15ft to 98ft)	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: ±1.5 mm(± 0.06 in)	Typically: ±1.5 mm(± 0.06 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	50	50	50
Tilt sensor Measuring range		± 65°	± 65°
Tilt sensor Measuring accuracy		± 0.5°	± 0.5°
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 48mm x 28mm

**Weight:** 135g

### Accessories:

2 x 1.5V AAA batteries and gift box with carrying case.



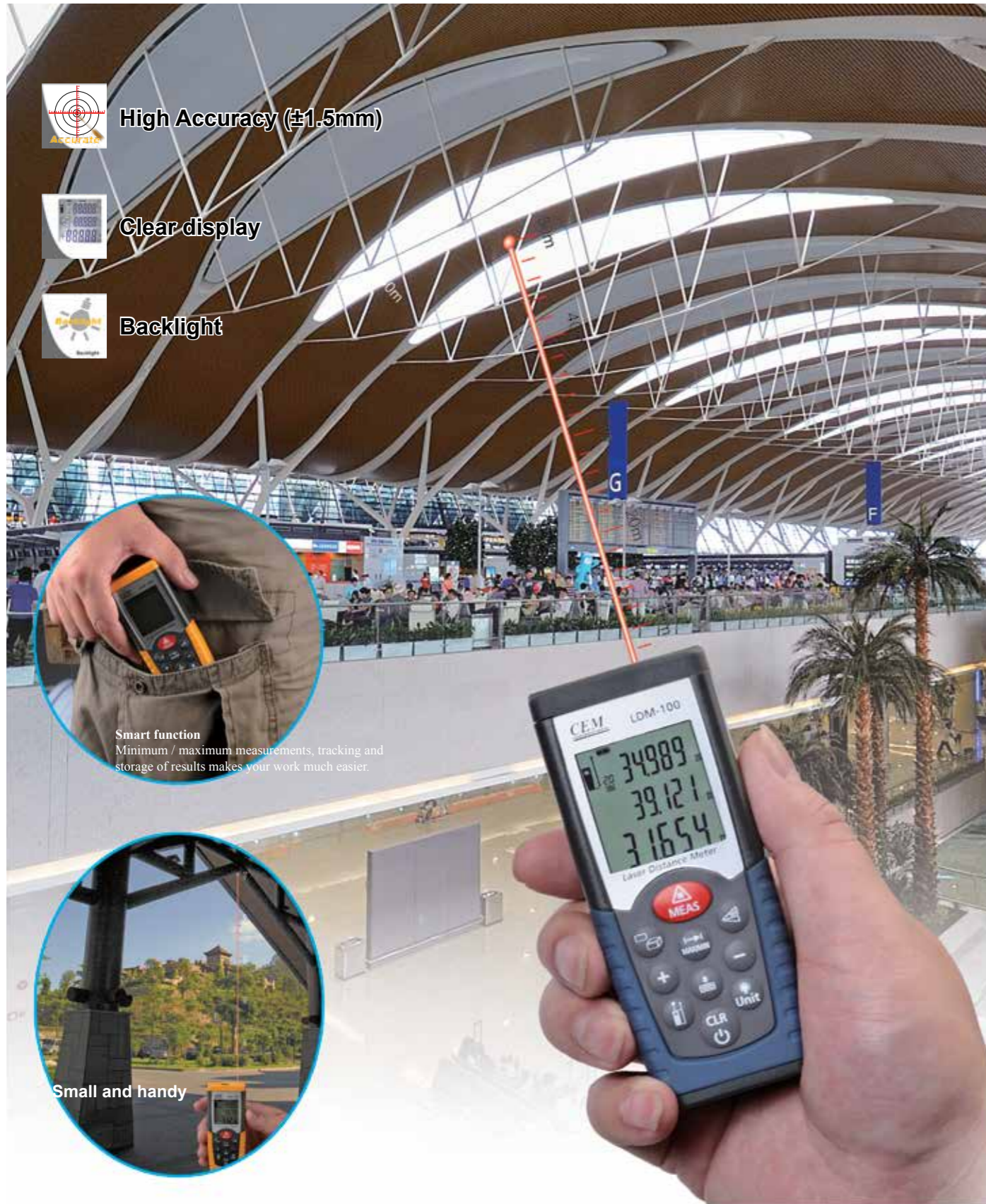
Model LDM-35S

Model LDM-65S



Model LDM-80S

Professional Laser Distance Meter



**High Accuracy (±1.5mm)**

**Clear display**

**Backlight**

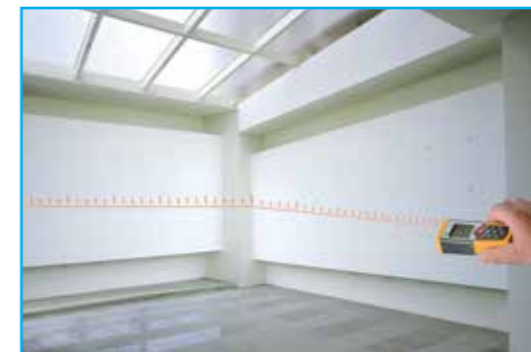
**Smart function**  
Minimum / maximum measurements, tracking and storage of results makes your work much easier.

**Small and handy**

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 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 20 measurements are also stored.

**CE**  
EMC  
EN: 61326  
EN: 60825-1

Features	LDM-35	LDM-100	LDM-65
Area, Volume Calculations	*	*	*
Indirect measurement using Pythagoras	*	*	*
Addition/Subtraction	*	*	*
Continuous Measurement	*	*	*
Min/Max Distance Tracking	*	*	*
Display illumination and multi-line display.	*	*	*
Buzzer indication	*	*	*



**Simple to operate**  
Due to the shortcut keys addition and subtraction, as well as surface and volume calculations could be easier.

Specifications	LDM-35	LDM-100	LDM-65
Measuring Range	0.05 to 35m(0.15ft to 114ft)	0.05 to 50m(0.15ft to 164ft)	0.05 to 65m(0.15ft to 213.2ft)
Measuring accuracy(2σ)	Typically: ±1.5mm(±0.06 in)	Typically: ±1.5 mm(± 0.06 in)	Typically: ±1.5 mm(± 0.06 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	20	20	20
Keyboard Type	Super Soft-Touch (Long life)	Soft-Touch Keypad	Soft-Touch Keypad
Operating Temperature	0°C to 40°C(32°F to 104°F)	0°C to 40°C(32°F to 104°F)	0°C to 40°C(32°F to 104°F)
Storage Temperature	-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)
Battery Life	Up to 4,000 measurements	Up to 4,000 measurements	Up to 5,000 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 instrument switch-off	after 3 min	after 3 min	after 3 min

**Size(HxWxD):** 115mm x 48mm x 28mm  
**Weight:** 135g  
**Accessories:**  
2 x 1.5V AAA batteries and gift box with carrying case.



Model LDM-100

Model LDM-35

Accurate measurement up to 65m (LDM-65)

Model LDM-65

# Pen-Shaped Laser Distance Meter

LDM-30 Pen-Shaped 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 is difficult.



EMC  
EN: 61326  
EN: 60825-1



Model LDM-30

### Features

- Unit selectable (m, ft, in)
- Reference level selectable
- Water and dust proof
- Display illumination and 2-line display.
- Buzzer indication

### Specifications

Measuring Range	0.05 to 30m(0.15ft to 98ft)
Measuring accuracy(2σ)	Typically: ±1.5mm(±0.06in)
Smallest unit displayed	1mm
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-iLDM Software for Laser Distance Meter

## Amazing features and built-in apps.

The Meterbox-iLDM software can support our Laser Distance Meter product transferring 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.



More Applications...

Worldwide Patent:  
PCT/CN2012/081593



EMC  
EN: 61326  
EN: 60825-1



The professional Laser Distance Meter is designed to give special users a high accuracy, one person distance measuring and estimating tool to measure remote and difficult reaching places. 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 20 measurements are also stored.

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

### Features

- Area, Volume Calculations
- Indirect measurement using Pythagoras
- Indirect measurement using tilt sensor
- Angle measurement using tilt sensor(± 65°)
- Addition/Subtraction
- Continuous Measurement
- Min/Max Distance Tracking
- Timer (self-triggering)
- Laser continuous
- Stake out function
- Display illumination and multi-line display
- Multifunctional endpiece
- Tripod thread
- Beep indication
- Bluetooth with Apple iPod/iPhone support
- Bluetooth with SPP support
- Meterbox iLDM & cloud service

### Specifications

Measuring Range	0.05 to 70 m(0.15 ft to 229 ft)
Measuring accuracy(2σ)	Typically: ±1.5 mm(± 0.06 in)
Measuring units	m,in,ft
Laser Class	Class II 635 nm, < 1mW
Smallest unit displayed	1mm
Tilt sensor Measuring range	± 65°
Range of bluetooth	10m
Dust Protect/Splash proof	IP 54
History measurement records	20
Keyboard Type	Super Soft-Touch (Long life)
Operating Temperature	0°C to 40°C(32°F to 104°F)
Storage Temperature	-10°C to 60°C(14°F to 140°F)
Battery Life	Up to 8,000 measurements
Batteries	Type AA 2 x 1.5V
Auto laser switch-off	after 30 seconds
Auto instrument switch-off	after 3 min

Size(HxWxD): 135mm x 58mm x 33mm  
Weight: 203g

Accessories:  
2 x 1.5V AA batteries and gift box with carrying case.



Made for  
iPod iPhone iPad



Model LDM-160



Model iLDM-150





EMC  
EN: 61326

Model 1010B

### Features

Zoom function for more accurate locating, minimising drilling mistakes  
Locates not only metal but also wooden substructures as well as live and non-live cables  
Indicates the voltage via a high-resolution 5-segment display  
Unambiguous drilling recommendation by means of red / green LED  
Easy marking of the drilling position with the integrated marker  
Extremely easy operation with automatic calibration

### Specifications

Detectable materials: Reinforcing steel, steel, non-ferrous metals, wooden substructures, and (non) live cables  
Detection depth, steel, max.: 100 mm  
Detection depth, copper, max.: 80 mm  
Automatic deactivation facility, approx.: 5 min

**Size(HxWxD):** 205mm x 82mm x 35mm  
**Weight:** 180g

## 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 a 9 Volt battery

**Size(HxWxD):** 180mm x 67mm x 38mm  
**Weight:** 180g



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Model 1010

## DM-01 Ultrasonic Distance Meter

Model DM-01



EMC  
EN: 61326

- Measures in imperial/metric
- Start point selection
- Data store/recall
- Computes 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)
Accuracy	+/-0.4 within 6m (20 feet) and +/-0.8 above 6m
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: Quicksan detection, Quicksan 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

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: Quicksan detection, Quicksan 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: ±10 mm; >100 mm: ±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 150 mm
- 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

**Size(HxWxD):** 280mm x 130mm x 180mm  
**Weight:** 2.3kg

**Accessories:** 3.7V Li battery, power adaptor, gift box with carrying case.



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Model 1500



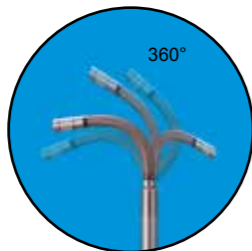
# High Definition Video Borescope



Meterbox  
iScope  
Wi-Fi



WT-70S



360°



EMC  
EN: 61326

Inspection Camera with Wireless Handset & 6mm Semi-Rigid Cable, Articulating (360°) Probe (1m)

High definition 7" Color TFT LCD, supporting 5MP 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. Contact or WIFI 6mm 360° rotation image cables are optional.



Φ17mm 5Mega Pixels Camera Probe



EMC  
EN: 61326

**Features:**

- Includes wireless handset with nondetachable 6mm semi-rigid probe (1m) with macro lens
- Wireless transmitter allows to transmit video up to 100ft (30m) from the measurement point to your monitor
- Articulating probe tip adjusts up to 320° viewing angle
- 7" 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
- Glare-free close-up field of view
- SD memory card 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
- Includes SD card, 3.7V rechargeable Li-Polymer battery, patch cable, AC adaptor, USB and AV cables, camera probe, and hard carrying case
- Contact or WIFI 6mm 360° rotation image cables are optional.

**Specifications**

Digital screen	7" 800x600 TFT LCD
Picture format	JPG(640x480/2592x1944)
Video format (MP4)	1080P @ 30fps 640x480 @ 30fps
Gooseneck length	1m(39")
Camera diameter	17mm(0.66")
Viewing distance	5cm to 15cm
Viewing direction	Viewing angle 0 and 180°
Zoom and Rotation	8x Image Zoom in 1080P, 90° rotation
SD card	2GB/Max 8GB/HCS D 32G (Class4)
Working voltage	Li Battery 3.7V/1800mA
Language	Support English, French, German, Spanish
Output	AV-out/ USB-CAM/HDMI

**Specifications**

	WT-70S	WT-70
Camera diameter	5.5mm(0.217")	5.5mm(0.217")
Camera Pixels	640x480	640x480
Max number of frames(FPS)	30fps/s	30fps/s
Camera diameter	5.5mm(0.217")	5.5mm(0.217")
Gooseneck length	1m(39")	1m(39")
Viewing distance	5cm	5cm
Viewing angle	55°	55°
Wireless frequency	2.4 GHz ISM	
Communication distance	30m(100ft)	
Working channel	4 Band selection	
Working voltage	Li Battery 3.7V/1400mA	Li Battery 3.7V/1400mA
Wired connections	Yes	Yes

**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.



HD-17  
Φ17mm 5Mega Pixels Camera Probe



Features a 7" (177.8mm) high definition color LCD monitor



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.



Φ17mm 5Mega Pixels Camera Probe



EMC  
EN: 61326

Wi-Fi Connectivity



3.5" 3.5" Color TFT LCD

Flexible gooseneck imager head with waterproof and Easily perform visual inspections in hard to reach areas

Camera and Video function

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 extension

Menu with multinational language

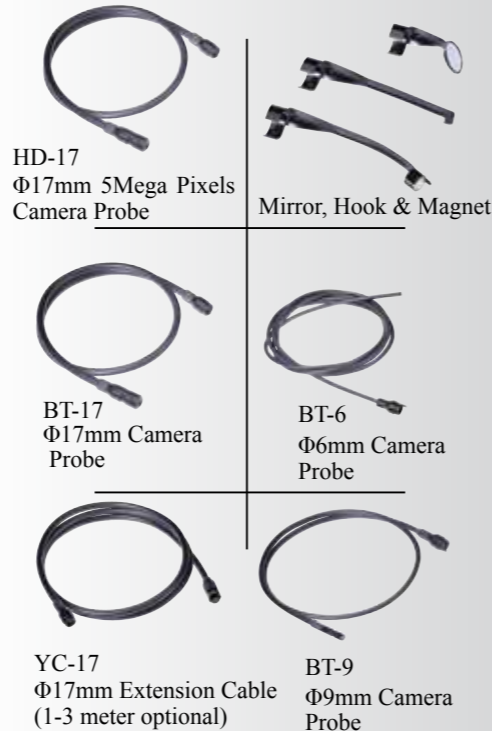
**Specifications**

	BS-280	BS-280W
LCD screen type		3.5" TFT
LCD Pixels		320x240
The max number of frames(FPS)		30FPS/S
Picture format from the camera	JPG(1280x1024/640x480/1024x768)	JPG(640x480/2592x1944)
Camera video format	MP4/AVI (640x480)	MP4/AVI(640x480/720p)
Gooseneck length		1m(39")
Camera diameter		17mm(0.66")
Viewing distance		5cm to 15cm
Viewing angle		68°
Zoom and Rotation	3xZoom, 5°/15°/30°/90° rotation	2xZoom, 90° rotation
Wi-Fi Protocol/Standard		IEEE 802.11b/g/n
Wi-Fi Frequency range		2.400 ~ 2.4835GHz
Wi-Fi Modulation mode		802.11b/g/n
Wi-Fi Support system		iOS, Android
Wi-Fi Distance		10m(Indoor)
Bluetooth specification		Bluetooth V2.0+EDR
Support Bluetooth protocol		AGHFP, AGHSP
Bluetooth Distance		5m(Indoor)
SD card		2GB/Max 32GB
Working voltage		Li Battery 3.7V/1800mA
Language		Support English, French, German, Spanish

Size(HxWxD): 240mm x 160mm x 100mm  
Weight: 584g

Accessories:  
3.7V Li battery, power adaptor, mirror, hook, magnet, gift box with carrying case.

Accessories:



HD-17  
Φ17mm 5Mega Pixels Camera Probe

Mirror, Hook & Magnet

BT-17  
Φ17mm Camera Probe

BT-6  
Φ6mm Camera Probe

YC-17  
Φ17mm Extension Cable (1-3 meter optional)

BT-9  
Φ9mm Camera Probe

3.2" 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). Waterproof(IP67) flexible gooseneck retains configured shape.



EMC  
EN: 61326



**Specifications**

	BS-150	BS-151
LCD screen type	3.2" TFT	3.5" TFT
LCD Pixels	320x240	
The max number of frames(FPS)	30FPS/S	
Picture format from the camera	JPG(320x240)	JPG(640x480)
Camera video format	3GP	MP4(640x480)
Gooseneck length	1m(39")	
Camera diameter	17mm(0.66")	
Viewing distance	5cm to 15cm	
Viewing angle	68°	
Zoom		2.0X
Rotation		90°
SD card	Max 8GB	2GB/Max 8GB
Working voltage	Li Battery 3.7V/1800mA	
TV-OUT	PAL/NTSC system	
Language	Support English, French, German, Spanish	

**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

**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

**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

**Specifications**

LCD screen type	3.0" TFT
LCD Pixels	960x240
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/1800mA
TV-OUT	PAL/NTSC system



Size(HxWxD): 240mm x 160mm x 100mm  
Weight: 584g  
Accessories:  
3.7V Li battery, power adaptor, USB cable, mirror, hook, magnet, gift box with carrying case.

Model 151

Model 150



Size(HxWxD): 240mm x 160mm x 100mm  
Weight: 584g  
Accessories:  
3.7V Li battery, power adaptor, mirror, hook, magnet, gift box with carrying case.

Model 101



Size(HxWxD): 240mm x 160mm x 100mm  
Weight: 584g  
Accessories:  
3.7V Li battery, power adaptor, mirror, hook, magnet, gift box with carrying case.

Model 100



3.5" Color TFT LCD Wireless Monitor with a SD memory card for capturing images(JPEG) or VIDEO(AVI) for viewing on your PC. Detachable wireless color display can be viewed from a remote location up to 10m from the measurement point. Waterproof(IP67) flexible gooseneck retains configured shape.



- 3.5" Color TFT LCD
- Flexible gooseneck imager head with waterproof and Easily perform visual inspections in hard to reach areas
- Camera and Video function
- 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 extension
- Menu with multinational language

Specifications	
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	MP4(640x480)
Gooseneck length	1m(39")
Camera diameter	17mm(0.66")
Viewing distance	5cm to 15cm
Viewing angle	68°
Zoom and Rotation	3xZoom, 90° rotation
SD card	2GB/Max 32GB
Wireless range	10m
Wireless frequency	2.4GHz
Working voltage	Li Battery 3.7V/1800mA
TV-OUT	PAL/NTSC system
Language	Support English,French,German, Spanish

**Size(HxWxD):** 240mm x 160mm x 100mm  
**Weight:** 584g  
**Accessories:** 3.7V Li battery, power adaptor, mirror, hook, magnet, gift box with carrying case.



Model 181

Detachable wireless 3.5" color TFT LCD display can be viewed from a remote location up to 10m from the measurement point.

**BS-182W/183W Video Borescope**



Model 183W

Model 182W

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.

**KEY FEATURES**

- Generates ad hoc WiFi network (without Internet access) for transmitting transmit probe video to app-enabled iPhone/iPad or Android-based smartphone or tablet
- Flexible gooseneck imager head with waterproof and Easily perform visual inspections in hard to reach areas
- 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
- Meterbox iScope software allows adjustment of video attributes (brightness, contrast, hue, saturation)

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

2.4" Color TFT LCD, supporting real-time live view and multi-languages. 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.



Model BS-060

CE  
EMC  
EN: 61326

**BS-128 Video Borescope**

Features	
Support real-time live view	
Highlighted with LED to support the operation in the dark	
4 x AA battery	
Standby function to support the charge	
Support rotating the image 180° from top to bottom	
Flexible gooseneck imager head with waterproof	
2.4" Color TFT LCD	

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.



Model BS-128

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**BS-050 Video 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°	*	*



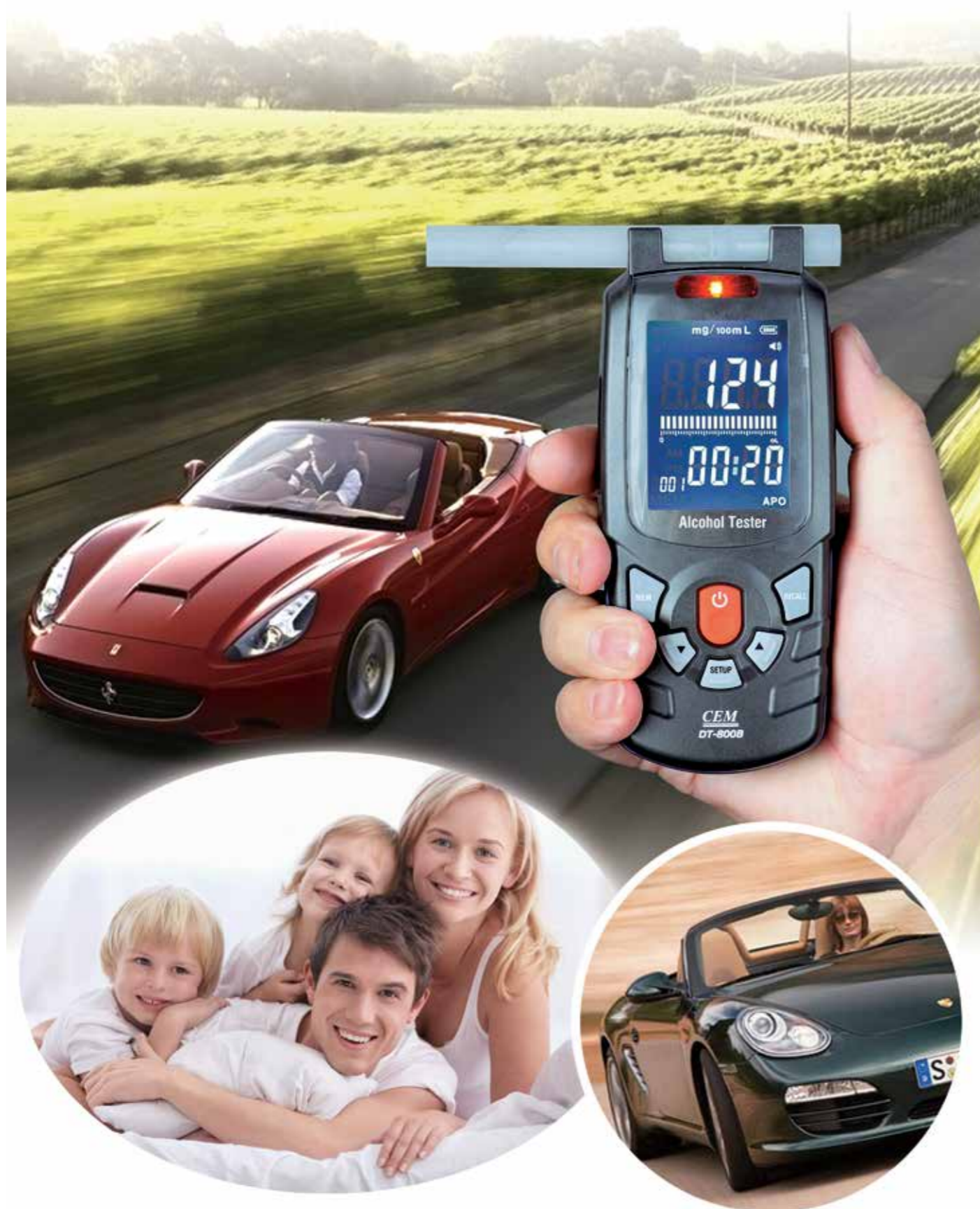
**Size(HxWxD):** 135mm x 68mm x 30mm  
**Weight:** 173g

**Accessories:** 3.7V 1400mAh Li battery, gift box with carrying case.

CE  
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EN: 61326

Model CT-050

## 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 alcohol.

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 adjustable	*	*
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	*	*

## Specifications

Detection range	0.000mg/L ~1.500mg/L
Resolution	0.001mg/L
Accuracy	C<0.400 : ±0.020mg/L 0.400≤C<1.000 : ±5% C≥1.000 : ±20%
Repeatability	C<0.400 : 0.007mg/L 0.400≤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)

**Size(HxWxD):** 240mm x 160mm x 100mm

**Weight:** 584g

**Accessories:**

3.7V Li battery, power adaptor, gift box with carrying case.



Model 800A

CE

EMC  
EN: 61326

Model 800B