

Features:

- 3½ Digits
- 4000 Counts
- True RMS
- NCV & Line

DC VOLTAGE

Range	Resolution	Accuracy
400mV	0.1mV	±(0.5% +3) Impedance Approx 10MΩ
4V	0.001V	
40V	0.01V	
400V	0.1V	
600V	1V	

AC VOLTAGE

Range	Resolution	Accuracy
4V	0.001V	±(0.8% +3) Impedance Approx 10MΩ Frequency Response 40Hz~1KHz:TRMS
40V	0.01V	
400V	0.1V	
600V	1V	

- Standard Accessories : Test Lead, Manual, Carry Case
- Dimension : 127(H) x 66(W) x19 (D)mm

RESISTANCE

Range	Resolution	Accuracy
400Ω	0.1Ω	±(1.0% +5)
4kΩ	0.001kΩ	
40kΩ	0.01kΩ	
400kΩ	0.1kΩ	
4MΩ	0.001MΩ	
40MΩ	0.01MΩ	

Continuity

<Approx 50Ω Buzzer will sound and the indicator light will be on

11S



Features:

- 3¾ Digit
- 6,000 Count
- Color Display
- True RMS
- Input Jack Indication
- Fuse Burn Indication

DC VOLTAGE

Range	Resolution	Accuracy
600mV	0.1mV	±0.5% + 3 Impedance Approx.10MΩ
6V	0.001V	
60V	0.01V	
600V	1V	

A/C DC CURRENT

Range	Resolution	Accuracy
600mA	0.1mA	±1.2% of rdg + 3 digits
6A	0.001A	
10A	0.01A	

A/C DC CURRENT

Range	Resolution	Accuracy
200μA	0.1μA	±1% of rdg + 2 digits
2mA	1μA	
20mA	10μA	
200mA	100μA	±1.5% of rdg + 2 digits
10A	10mA	±3% of rdg + 2 digits

Overload Protection : F10A/250V fuse
Frequency Response: 40Hz~1kHz; TRMS

Capacitance

Range	Resolution	Accuracy
6nF	0.001nF	±4.0% of rdg + 2 digits
60nF	0.01nF	
600nF	0.1nF	
6μF	0.0001μF	
60μF	0.01μF	
600μF	0.1μF	±5.0% of rdg + 5 digits
6mF	0.001mF	
60mF	0.01mF	

Overload Protection : 250V

AC VOLTAGE

Range	Resolution	Accuracy
6V	0.001V	±0.8% of rdg + 3 digits
60	0.01V	
600V	1V	
Impedance : Approx. 10M Frequency Response : 40Hz~1kHz, TRMS		

RESISTANCE

Range	Resolution	Accuracy
600Ω	0.1Ω	±1.0% of rdg + 5 digits
6kΩ	0.001KΩ	
60kΩ	0.01KΩ	
600kΩ	0.1KΩ	
6MΩ	0.001MΩ	±1.5% of rdg + 10 digits
60MΩ	0.01MΩ	

FREQUENCY/DUTY

Range	Resolution	Accuracy
6Hz	0.001Hz	±1.0% of rdg + 3 digits
60Hz	0.01Hz	
600Hz	0.1Hz	
6KHz	0.001KHz	
60KHz	0.01KHz	
600KHz	0.1KHz	
6MHz	0.001MHz	
10MHz	0.01MHz	±1.0% of rdg + 3 digits
1.0~99.0%	0.1%	

Diode/Continuity

- ➔ Display diode voltage drop
- o)) Approx. 50, Buzzer will sound and the indicator light will be on

Temperature

Range	Accuracy
'C'	-40°C~0°C ±3°C
	0°C~1000°C ±2.0% or ±2°C
'F'	-40°F~32°F ±6°F
	32°F~1832°F ±2.0% or ±4°C

Resolution : 1°C/1°F

Note : use K-type thermocouple probe

- Standard Accessories : Test Lead, Manual, Carry Case
- Dimension : 146(H) x 73(W) x 26(D)mm

15S



Features:

- Analog Multimeter with Mirror Scale
- Inbuilt Buzzer and LED
- 0Ω Adjustable with x 100 Range
- Transistor Test, hFE with Diode

DC VOLTAGE

Range	Resolution	Accuracy
0.1mV~1000V	20KΩ/V	3; for 1000V ; 5

DC CURRENT

Range	Resolution	Accuracy
50μA~10A	-	3; for 10V ; 5

AC VOLTAGE

Range	Resolution	Accuracy
10V~1000V	9KΩ/V	4; for 1000V ; 5

POWER

AA 1.5V x 2
9V (6F22) x 1

Special Function

Diode Test	✓	Function Protection	✓
Transistor Testing	✓	Continuity Buzzer	About 100Ω

- Standard Accessories : Test Lead, Manual
- Dimension : 148(H) x 100(W) x 35(D)mm

YX-360 TRE-B



Features:

- 3½ Digit Manual Multimeter
- Live Wire Recognition
- Live Remote Control Testing
- Full Overload Protection
- 1,999 Count
- True RMS

DC VOLTAGE

Range	Resolution	Accuracy
200mV	0.1mV	±1.2% of rdg 5 digits
2V	1mV	
20V	10mV	
200V	100mV	±1.5% of rdg 5 digits
1000V	1V	

DC CURRENT

Range	Resolution	Accuracy
20mA	10μA	±1.5% of rdg 5 digits
200mA	100μA	±2% of rdg 5 digits
10A	10mA	±3% of rdg 5 digits

AC VOLTAGE

Range	Resolution	Accuracy
20V	10mV	±1.5% of rdg 5 digits
200V	100mV	
750V	1V	±2% of rdg 7 digits

AC CURRENT

Range	Resolution	Accuracy
20mA	10μA	±2.5% of rdg 5 digits
200mA	100μA	
10A	10mA	±3% of rdg 7 digits

TRANSISTOR hFE TEST (0-1000)

Range	Description Display:	Measuring Condition
hFE	0~1000β	I _{bo} ≈10μA V _{ce} ≈2.8V

RESISTANCE

Range	Resolution	Accuracy
200Ω	0.1Ω	±1.5% of rdg 5 digits
2KΩ	1Ω	
20KΩ	10Ω	
200KΩ	100Ω	
2MΩ	1KΩ	±2% of rdg 5 digits
20MΩ	10KΩ	
200MΩ	100KΩ	±5% of rdg 10 digits

CAPACITANCE

Range	Resolution	Accuracy
20nF	10p	±4% of rdg 25 digits
200nF	100pF	
2μF	1nF	±4% of rdg 15 digits
200μF	10nF	

FREQUENCY

Range	Resolution	Accuracy
2kHz	0.001kHz	±1.5% of rdg 10 digits
200kHz	0.1kHz	

Special Function

Diode Test	✓	Continuity Buzzer	Approx. < 50Ω
Transistor Testing	✓	Auto Power OFF	Approx. 15min.
Power	AA1.5V x 2		

- Standard Accessories : Test Lead, Manual
- Dimension : 175(H) x 83(W) x 31(D)mm

DM-81



DM - 830L



Features:

- 3 ½ Digit Manual Multimeter with Backlight
- 1,999 Count
- Data Hold
- Transistor & Diode Test
- Overload Protection
- Low Battery Indication
- CAT II 600V

DC VOLTAGE

Range	Resolution	Accuracy
200mV	100μV	±0.5% of rdg + 2 digits
2V	1mV	
20V	10mV	
200V	100mV	±0.8% of rdg + 2 digits
600V	1V	

POWER

9V (6F22) x 1

DC CURRENT

Range	Resolution	Accuracy
200μA	0.1μA	±1% of rdg + 2 digits
2mA	1μA	
20mA	10μA	
200mA	100μA	±1.5% of rdg + 2 digits
10A	10mA	±3% of rdg + 2 digits

AC VOLTAGE

Range	Resolution	Accuracy
200V	100mV	±1.2% of rdg + 10 digits
600V	1V	

RESISTANCE

Range	Resolution	Accuracy
200Ω	0.1Ω	±0.8% of rdg + 3 digits
2kΩ	1Ω	
20kΩ	10Ω	
200kΩ	100Ω	±1.0% of rdg + 2 digits
2MΩ	1KΩ	

TRANSISTOR hFE TEST (0-1000)

Range	Test Range	Test Current	Test Voltage
NPN & PNP	0-1000	1b=10μA	Vce=3V

- Standard Accessories : Manual, Test lead
- Dimension : 69(H) x 138(W) x 31(D)mm

DM-830LN



Features:

- 3½ Digit Manual Multimeter
- Count 2000
- Battery Test
- Max / Min Hold
- Data Hold
- Auto Power Off (APO)
- True RMS

DC VOLTAGE

Range	Resolution	Accuracy
200mV	0.1mV	±0.5% of rdg + 3 digits
2V	0.001V	
20V	0.01V	
200V	0.1V	
600V	1V	

DC CURRENT

Range	Resolution	Accuracy
20mA	0.01mA	±1.2% or rdg + 3 digits
200mA	0.1mA	
10A	0.01A	

AC VOLTAGE

Range	Resolution	Accuracy
200V	0.1V	±1.2% of rdg + 5 digits
600V	1V	

RESISTANCE

Range	Resolution	Accuracy
200Ω	0.1Ω	±1.0% of rdg + 3 digits
2kΩ	0.001Ω	
20kΩ	0.01Ω	
200kΩ	0.1Ω	
2MΩ	0.001Ω	±1.5% of rdg + 3 digits
20MΩ	0.01Ω	

Special Function:

Diode Test	✓
Continuity	✓
Power	AAA 1.5V x 2

- Standard Accessories : Test Lead, Manual
- Dimension : 151(H) x 75(W) x 45(D) mm

DM-830L+



Features:

- 3½ Digit Manual Multimeter with Backlight
- 1,999 Count
- Data Hold
- True RMS
- NCV

DC VOLTAGE

Range	Resolution	Accuracy
200mV	100μV	±0.5% of rdg + 4 digits
2000mV	1mV	
20V	10mV	
200V	100mV	
600V	1V	

DC CURRENT

Range	Resolution	Accuracy
20μA	10nA	±1.0% of rdg + 5 digits
2mA	10μA	
200mA	100μA	±1.0% of rdg + 5 digits
10A	10mA	

AC VOLTAGE

Range	Resolution	Accuracy
200V	100mV	±1.0% of rdg + 5 digits
600V	1V	

RESISTANCE

Range	Resolution	Accuracy
200Ω	0.1Ω	±0.8% of rdg + 5 digits
2kΩ	1Ω	
20kΩ	10Ω	±0.8% of rdg + 1 digits
2MΩ	1kΩ	
200MΩ	100kΩ	±1.2% of rdg + 5 digits

TRANSISTOR hFE TEST (0-1000)

Range	Test Range	Test Current	Test Voltage
NPN & PNP	0-1000	1b=15μA	Vce=1.2V

Special Function

hFE test

Overload Protection

Low Battery Indication

CAT II 600V

Power : AAA 1.5V x 2

- Standard Accessories : Manual, Test Lead
- Dimension : 140(H) x 72(W) x 37(D) mm



DM-86

Features:

- 3½ Digit Multimeter with Backlight
- 1,999 Count
- Non Contact Voltage (NCV)
- Auto Power Off (APO) under natural operation
- True RMS



DC VOLTAGE

Range	Resolution	Accuracy
200mV	0.1mV	±0.5% of rdg + 4 digits
2V	1mV	
20V	10mV	
200V	100mV	
1000V	1V	±1.0% of rdg + 4 digits

DC CURRENT

Range	Resolution	Accuracy
200µA	0.1µA	±1.0% of rdg + 5 digits
2000µA	1µA	
20mA	10µA	
200mA	100µA	
2A	1mA	±2.0% of rdg + 5 digits
20A	10mA	

AC VOLTAGE

Range	Resolution	Accuracy
200mV	0.1mV	±1.5% of rdg + 15 digits
2V	1mV	±0.8% of rdg + 6 digits
20V	10mV	
200V	100mV	
750V	1V	±1.0% of rdg + 6 digits

AC CURRENT

Range	Resolution	Accuracy
200µA	0.1µA	±1.5% of rdg + 5 digits
2000µA	1µA	
20mA	10µA	
200mA	100µA	
2A	1mA	±2.0% of rdg + 10 digits
20A	10mA	

RESISTANCE

Range	Resolution	Accuracy
200Ω	0.1Ω	±0.8% of rdg + 5 digits
2kΩ	1Ω	±0.8% of rdg + 1 digits
20kΩ	10Ω	
200kΩ	100Ω	
2MΩ	1KΩ	
20MΩ	10KΩ	±1.2% of rdg + 5 digits

TRANSISTOR hFE TEST

Range	Test Range	Test Current/Voltage
NPN or PNP	0-1000	Base current is approximate 15µA Vce is about 4.5V

Special Function

Diode Test	✓	NCV	
Transistor Testing	✓	Input impedance	10MΩ
Continuity Buzzer	Approx. < 30 +10	Sampling Rate	3 times per second
Low Battery Display	Approx. < 7.5V	AC Frequency Response	40-400Hz
Auto Power OFF	Approx. 30 min.	Power	9V (6F22) x 1

- Standard Accessories : Test Lead, Manual
- Dimension : 225(H) x 38(W) x 26(D)mm

DM-88

Features:

- 3¾ Digit Multimeter with Backlight
- 3,999 Count
- COMS, TTL Logic Test
- Auto Power Off (APO) under natural operation
- True RMS



DC VOLTAGE

Range	Resolution	Accuracy
400mV	0.1mV	±0.5% of rdg + 4 digits
4V	1mV	
40V	10mV	
400V	100mV	
1000V	1V	±1.0% of rdg + 4 digits

DC CURRENT

Range	Resolution	Accuracy
400µA	0.1µA	±1.0% of rdg + 5 digits
4000µA	1µA	
40mA	10µA	
400mA	100µA	
4A	1mA	±2.0% of rdg + 5 digits
20A	10mA	

AC VOLTAGE

Range	Resolution	Accuracy
400mV	0.1mV	±1.5% of rdg + 15 digits
4V	1mV	±0.8% of rdg + 6 digits
40V	10mV	
400V	100mV	
750V	1V	±1.0% of rdg + 6 digits

AC CURRENT

Range	Resolution	Accuracy
400µA	0.1µA	±1.5% of rdg + 5 digits
4000µA	1µA	
40mA	10µA	
400mA	100µA	
4A	1mA	±2.0% of rdg + 10 digits
20A	10mA	

RESISTANCE

Range	Resolution	Accuracy
400Ω	0.1Ω	±0.8% of rdg + 5 digits
4KΩ	1Ω	±0.8% of rdg + 1 digits
40KΩ	10Ω	
400KΩ	100Ω	
4MΩ	1KΩ	
40MΩ	10KΩ	±1.2% of rdg + 5 digits

CAPACITANCE

Range	Resolution	Accuracy
4nF	1pF	±5.0% of rdg + 8 digits
40nF	10pF	±3.5% of rdg + 8 digits
400nF	100pF	
4µF	1nF	
40µF	10nF	
200µF	100nF	±5.0% of rdg + 8 digits

FREQUENCY

Range	Resolution	Accuracy
10Hz	0.001Hz	±0.5% of rdg + 4 digits
100Hz	0.01Hz	
1000Hz	0.1Hz	
10kHz	1Hz	
100kHz	10Hz	
1MHz	100Hz	
30MHz	1kHz	

LOGIC TEST

Range	Resolution	Accuracy
TTL	▲	>2.5V ± 0.8V
Logic	▼	<0.8V ± 0.5V
CMOS	▲	>4.0V ± 1.0V
Logic	▼	<2.0V ± 0.5V

TEMPERATURE

Range	Resolution	Accuracy
(-40-1000)°C	<400°C ± 1.0% of rdg + 5 digits ≥400°C ± 1.5% of rdg + 15 digits	1°C

Special Function

Diode and hFE test	✓	Function Protection	✓
Diode and hFE test	✓	Input impedance	10MΩ
Transistor testing	✓	Sampling Rate	3 times per second
Continuity Buzzer	Approx. < 30 +10	AC Frequency Response	40-400Hz
Low Battery Display	Lower 2.4V	Power	AAA 1.5V X 2
Auto Power OFF	Approx. 30 min		

- Standard Accessories : Test Lead, Manual, TP 04 Temperature Probe
- Dimension : 170(H) x 86(W) x 35(D)mm

DM-91

Features:

- 3½ Digit Manual Multimeter with Backlight
- 1,999 Count
- Auto Power Off (APO) under natural operation
- Terminal Shutter Interlock Mechanism



DC VOLTAGE

Range	Resolution	Accuracy
200mV	0.1mV	±0.5% of rdg + 1 digits
2V	1mV	±0.5% of rdg + 3 digits
20V	10mV	
200V	100mV	
1000V	1V	±0.8% of rdg + 3 digits

DC CURRENT

Range	Resolution	Accuracy
20μA	10nA	±1.2% of rdg + 3 digits
2mA	1μA	±1.0% of rdg + 3 digits
200mA	100μA	±1.5% of rdg + 5 digits
10A	10mA	±2.0% of rdg + 10 digits

AC VOLTAGE

Range	Resolution	Accuracy
2V	1mV	± 1.0% of rdg + 5 digits
20V	10mV	
200V	100mV	
700V	1V	± 1.2% of rdg + 5 digits

AC CURRENT

Range	Resolution	Accuracy
20mA	10μA	±1.2% of rdg + 5 digits
200mA	100μA	±2.0% of rdg + 5 digits
10A	10mA	±3.0% of rdg + 10 digits

RESISTANCE

Range	Resolution	Accuracy
200Ω	0.1Ω	±1.0% of rdg + 10 digits
2kΩ	1Ω	±1.0% of rdg + 1 digits
20kΩ	10Ω	
200kΩ	100Ω	
20MΩ	10KΩ	±1.0% of rdg + 5 digits
200MΩ	100KΩ	±5.0% of rdg - 10 digits + 20 digits

CAPACITANCE

Range	Resolution	Accuracy
2nF	1pF	±4.0% of rdg + 3 digits
200nF	0.1nF	
2μF	1nF	±5.0% of rdg + 3 digits
200μF	100nF	

TRANSISTOR hFE TEST

Range	Test Range	Test Current/Voltage
NPN or PNP	0-1000	I _b =10μA/V _{ce} =3A

FREQUENCY

Range	Resolution	Accuracy
200KHz	100Hz	±1.5% of rdg + 10 digits

TEMPERATURE

Range	Resolution	Accuracy
-20~0°C	1°C	±5.0% of rdg + 5 digits
0~400°C		±1.0% of rdg + 3 digits
400~1000°C		±2.0% of rdg + 3 digits

Special Function

Diode Test	✓	Anti Shock Protect	✓
Transistor Testing	✓	Input impedance	10MΩ
Continuity Buzzer	Approx. < 30Ω+10Ω	Sampling Rate	3 times per second
Low Battery Display	Approx. < 7.5V	AC Frequency Response	40-400Hz
Auto Power OFF	Approx. 30 min.	Power	9V (6F22) X 1

- Standard Accessories : Test Lead, Manual
- Dimension : 185(H) x 93(W) x 35(D)mm

DM-92

Features:

- 3½ Digit Manual Multimeter with Backlight
- 1,999 Count
- Auto Power Off (APO) under natural operation
- Full protection in All Ranges.



DC VOLTAGE

Range	Resolution	Accuracy
200mV	0.1mV	±0.5% of rdg + 3 digits
2V	1mV	
20V	10mV	
200V	100mV	±1.0% of rdg + 3 digits
1000V	1V	

DC CURRENT

Range	Resolution	Accuracy
200μA	0.1μA	±0.8% of rdg + 3 digits
2mA	1μA	
20mA	10μA	
200mA	100μA	±1.2% of rdg + 4 digits
20A	10mA	±2.0% of rdg + 5 digits

AC VOLTAGE

Range	Resolution	Accuracy
2V	1mV	± 0.8% of rdg + 5 digits
20V	10mV	
200V	100mV	
750V	1V	± 1.2% of rdg + 5 digits

AC CURRENT

Range	Resolution	Accuracy
20mA	10μA	±1.0% of rdg + 5 digits
200mA	100μA	±2.0% of rdg + 5 digits
20A	10mA	±3.0% of rdg + 10 digits

RESISTANCE

Range	Resolution	Accuracy
200Ω	0.1Ω	±0.8% of rdg + 5 digits
2kΩ	1Ω	±0.8% of rdg + 3 digits
20kΩ	10Ω	
200kΩ	100Ω	
2MΩ	1KΩ	±1.0% of rdg + 15 digits
20MΩ	10KΩ	
200MΩ	100KΩ	±5.0% of rdg - 10 digits + 20 digits

CAPACITANCE

Range	Resolution	Accuracy
20nF	10pF	±2.0% of rdg + 20 digits
200nF	100pF	
2μF	1nF	±2.5% of rdg + 20 digits
200μF	100nF	

TRANSISTOR hFE TEST

Range	Test Range	Test Current/Voltage
NPN or PNP	0-1000	Base DC current is approx. 10μA, V _{ce} is approx. 3V

Special Function

Diode Test	✓	Anti Shock Protect	✓
Transistor Testing	✓	Input impedance	10MΩ
Continuity Buzzer	Approx. < 30Ω+10Ω	Sampling Rate	3 times per second
Low Battery Display	Approx. < 7.5V	AC Frequency Response	40-400Hz
Auto Power OFF	Approx. 30 min.	Power	9V (6F22) X 1

- Standard Accessories : Test Lead, Manual
- Dimension : 185(H) x 93(W) x 35(D)mm



Features: DM-97

- 3¾ Digit Multimeter with Backlight
- 3,999 Count
- Auto Power Off (APO) under natural operation
- Data Hold, Max./Min.
- NCV
- True RMS



DC VOLTAGE

Range	Resolution	Accuracy
400mV	0.1mV	±0.5% of rdg + 5 digits
4V	1mV	
40V	10mV	
400V	100mV	
1000V	1V	±1.0% of rdg + 5 digits

DC CURRENT

Range	Resolution	Accuracy
400µA	0.1µA	±1.0% of rdg + 5 digits
4000µA	1µA	
40mA	100µA	
400mA	100µA	
4A	1mA	±2.0% of rdg + 5 digits
20A	10mA	

AC VOLTAGE

Range	Resolution	Accuracy
400mV	0.1mV	± 1.5% of rdg + 10 digits
4V	1mV	± 0.8% of rdg + 10 digits
40V	10mV	
400V	100mV	
750V	1V	± 1.0% of rdg + 10 digits

AC CURRENT

Range	Resolution	Accuracy
400µA	0.1µA	±1.5% of rdg + 10 digits
4000µA	1µA	
40mA	10µA	
400mA	100µA	
4A	1mA	±2.0% of rdg + 10 digits
20A	10mA	

RESISTANCE

Range	Resolution	Accuracy
400Ω	0.1Ω	±0.8% of rdg + 5 digits
4kΩ	1Ω	±0.8% of rdg + 2 digits
40kΩ	10Ω	
400kΩ	100Ω	
4MΩ	1KΩ	
40MΩ	10KΩ	±1.2% of rdg + 5 digits

FREQUENCY

Range	Resolution	Accuracy
10Hz	0.001Hz	±0.5% of rdg + 4 digits
100Hz	0.01Hz	
1000Hz	0.1Hz	
10kHz	1Hz	
100kHz	10Hz	
1MHz	100Hz	
10MHz	1kHz	

Special Function

Diode Test	✓	Function Protection	✓
Transistor Testing	✓	Input impedance	10MΩ
Continuity Buzzer	Lower 30Ω+10Ω	Sampling Rate	3 times per second
Low Battery Display	Lower 2.4V	AC Frequency Response	40-400Hz
Auto Power OFF	Approx. 30 min.	Power	AAA 1.5V X 2

- Standard Accessories : Test Lead, Manual, TP 01 Temperature Probe Bead type
- Dimension : 185(H) x 93(W) x 35(D)mm

Features: DM-56

- 4½ Digit Multimeter with Backlight
- 19,999 Count
- Auto Power Off (APO) under natural operation
- Conductance, Capacitance, Frequency



DC VOLTAGE

Range	Resolution	Accuracy
200mV	10µV	±0.1% of rdg + 5 digits
2V	100µV	
20V	1mV	
200V	10mV	
1000V	100mV	±0.2% of rdg + 5 digits

DC CURRENT

Range	Resolution	Accuracy
200µA	0.01µA	±0.5% of rdg + 4 digits
2mA	0.1µA	
20mA	1µA	±0.8% of rdg + 6 digits
200mA	10µA	
20A	1mA	±2.0% of rdg + 15 digits

AC VOLTAGE

Range	Resolution	Accuracy
2V	100µA	± 0.8% of rdg + 25 digits
20V	1mV	
200V	10mV	
750V	100mV	± 1.0% of rdg + 25 digits

AC CURRENT

Range	Resolution	Accuracy
200mA	10µA	±1.5% of rdg + 25 digits
20A	1mA	±2.5% of rdg + 35 digits

RESISTANCE

Range	Resolution	Accuracy
200Ω	0.01Ω	±0.2% of rdg + 10 digits
2kΩ	0.1Ω	±0.2% of rdg + 5 digits
20kΩ	1Ω	
200kΩ	10Ω	
2MΩ	100Ω	
20MΩ	1KΩ	±0.8% of rdg + 5 digits

CAPACITANCE

Range	Resolution	Accuracy
2nF	0.1pF	±3.5% of rdg + 10 digits
20nF	1pF	
2µF	100pF	±3.8% of rdg + 20 digits
200µF	10nF	

FREQUENCY

Range	Resolution	Accuracy
2kHz	0.1Hz	±3.0% of rdg + 15 digits
200kHz	0.01Hz	

TRANSISTOR hFE TEST

Range	Test Range	Test Current/Voltage
NPN or PNP	0-1000	Base DC current is approx 10µA, Vce is approx. 3V

Special Function

Diode Test	✓	Anti Shock Protect	✓
hFE test	✓	Input impedance	10MΩ
Continuity Buzzer	Approx. < 30Ω+10Ω	Sampling Rate	3 times per second
Low Battery Display	Approx. < 7.5V	AC Frequency Response	40-400Hz
Auto Power OFF	Approx. 30 min.	Power	9V (6F22) X 1
Function Protection	✓		

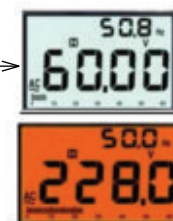
- Standard Accessories : Test Lead, Manual
- Dimension : 185(H) x 93(W) x 35(D)mm

DM-98



Features :

- 3¹/₂ Digit
- 6000 Count
- Dual LCD with Bargraph
- Live test (sound and light alarm)
- NCV
- True RMS
- Double color backlight
- Torch



DC VOLTAGE

Range	Resolution	Accuracy
600mV	0.1mV	±0.5% of rdg + 3 digits
6V	0.001V	
60V	0.01V	
600V	0.1V	
1000V	1V	

DC CURRENT

Range	Resolution	Accuracy
600uA	0.1uA	±1.2% of rdg + 3digits
6000uA	1uA	
60mA	0.01mA	
600mA	0.1mA	
10A	0.01A	

RESISTANCE

Range	Resolution	Accuracy
600Ω	0.1Ω	±1.0% of rdg + 3digits
6kΩ	0.001kΩ	
60kΩ	0.01kΩ	
600kΩ	0.1kΩ	±1.5% of rdg + 3digits
6MΩ	0.001MΩ	
60MΩ	0.01MΩ	

TEMPERATURE

Range	Resolution	Accuracy
-20~0°C	1°C	±5% of rdg + 3digits
0~400°C		±1.0% of rdg + 2digits
400~1000°C		±2.0% of rdg
-4~32°F	1°F	±5.0% of rdg + 6digits
32~752°F		±1.0% of rdg + 4digits
752~1832°F		±2.0% of rdg

AC VOLTAGE

Range	Resolution	Accuracy
600mV	0.1mV	±0.8% of rdg + 5digits
6V	0.001V	
60V	0.01V	
600V	0.1V	
750V	1V	

AC CURRENT

Range	Resolution	Accuracy
600uA	0.1uA	±1.5% of rdg + 3digits
6000uA	1uA	
60mA	0.01mA	
600mA	0.1mA	
10A	0.01A	

CAPACITANCE

Range	Resolution	Accuracy
10nF	0.001nF	±4.0% of rdg + 5digits
100nF	0.01nF	
10μF	0.1nF	
10mF	0.001μF	
100μF	0.01μF	±5.0% of rdg + 5digits
100mF	0.1μF	
1000mF	0.001mF	
1000μF	0.01mF	

FREQUENCY / DUTY

Range	Resolution	Accuracy
10Hz	0.1Hz	±1.0% of rdg + 3digits
100Hz	0.001kHz	
1kHz	0.01kHz	
10kHz	0.1kHz	
100kHz		
1MHz	0.001MHz	
10MHz		

Range	Resolution	Accuracy
1%~99%	0.1%	±3% of rdg + 3digits

Special Function :

Diode test	✓
Continuity Buzzer	✓
Power	AA1.5V X 2

- Standard Accessories : Manual, Test Lead
- Dimension : 188(H) x 88(W) x 58(D) mm



INPUT JACK LED INDICATOR



Features:

- 4½ Digit Multimeter with Backlight • 19,999 Count
- Meter is designed according to IEC 1010 standard
- Auto Power Off (APO) under natural operation

DM-23



DC VOLTAGE

Range	Resolution	Accuracy
200mV	10μV	±0.05% of rdg + 3 digits
2V	100μV	
20V	1mV	
200V	10mV	±0.1% of rdg + 5 digits
1000V	100mV	

DC CURRENT

Range	Resolution	Accuracy
20μA	0.01μA	±0.5% of rdg + 4 digits
2mA	0.1μA	
20mA	1μA	
200mA	10μA	±0.8% of rdg + 6 digits
20A	1mA	±2.0% of rdg + 15 digits

AC VOLTAGE

Range	Resolution	Accuracy
2V	10μA	± 0.8% of rdg + 25 digits
20V	1mV	
200V	10mV	
750V	100mV	± 1.0% of rdg + 25 digits

FREQUENCY

Range	Resolution	Accuracy
200kHz	10Hz	±3.0% of rdg + 15 digits

TRANSISTOR hFE TEST

Range	Resolution	Accuracy
NPN or PNP	0-1000	Base DC current is approx 10μA Vce is approx. 3V

AC CURRENT

Range	Resolution	Accuracy
200mA	10μA	±1.5% of rdg + 25 digits
20A	1mA	±2.5% of rdg + 35 digits

RESISTANCE

Range	Resolution	Accuracy
200Ω	0.01Ω	±0.2% of rdg + 10 digits
2kΩ	0.1Ω	
20kΩ	1Ω	
200kΩ	10Ω	±0.2% of rdg + 5 digits
2MΩ	100Ω	
200MΩ	10KΩ	±5% of rdg - 10 digits + 10 digits

CAPACITANCE

Range	Resolution	Accuracy
2nF	0.1pF	±3.5% of rdg + 10 digits
20nF	1pF	
200nF	10pF	
2μF	100pF	±3.8% of rdg + 20 digits
200μF	10nF	

Special Function

Diode Test	✓	Anti Shock Protect	✓
hFE test	✓	Input impedance	10MΩ
Continuity Buzzer	Approx. < 30Ω+10Ω	Sampling Rate	3 times per second
Low Battery Display	Approx. < 7.5V	AC Frequency Response	40-400Hz
Auto Power OFF	Approx. 30 min.	Power	9V (6F22) X 1
Function Protection	✓		

- Standard Accessories : Test Lead, Manual
- Dimension : 175(H) x 83(W) x 31(D)mm

DM-87



VARIABLE FREQUENCY VOLTAGE TRUE RMS (VSD-V TRUE RMS)

Range	Resolution	Accuracy
		30Hz-60Hz 60Hz-200Hz
6V	1mV	±2.0% of rdg + 10 digits ±5.0% of rdg + 10 digits
60V	10mV	
600V	100mV	±3.0% of rdg + 10 digits -
750V	1V	

- Standard Accessories : Test Lead, Manual, TP 01 Temperature Probe, Crocodile Clip
- Dimension : 185(H) x 93(W) x 35(D)mm

Features:

- 3¾ Digit Multimeter with Backlight
- 5,999 Count • VSD & True RMS • Data Hold, Max./Min. Value Hold
- Auto Power Off (APO) under natural operation
- Capacitance, Frequency / Duty Cycle, Temperature and Transistor Test
- Temp-40~1000°C Resolution 1°C

DC VOLTAGE

Range	Resolution	Accuracy
600mV	0.01mV	±1.0% of rdg + 5 digits
6V	1mV	
60V	10mV	±0.5% of rdg + 3 digits
600V	100mV	
1000V	1mV	±1.0% of rdg + 3 digits

DC CURRENT

Range	Resolution	Accuracy
600μA	0.1μA	±1.0% of rdg + 3 digits
6000μA	1μA	
60mA	10μA	
600mA	100μA	±2.0% of rdg + 5 digits
6A	1mA	
20A	10mA	

AC VOLTAGE (TRUE RMS)

Range	Resolution	Accuracy
6V	1mV	50Hz-5kHz ± 1.0% of rdg + 10 digits
60V	10mV	5kHz-20kHz ± 1.5% of rdg + 10 digits
600V	100mV	<200V 50Hz-5kHz & 200V 50Hz-1kHz ± 1.0% of rdg + 10 digits
750V	1V	50Hz-1kHz ± 1.0% of rdg + 10 digits

Special Function

VSD-V	750 V (± 2 % + 10)	True RMS	✓
Diode and hFE test	✓	Function Protection	✓
Transistor testing	✓	Input impedance	10MΩ
Continuity Buzzer	Lower 30Ω+10Ω	Sampling Rate	3 times per second
Low Battery Display	Lower 5.5V	AC Frequency Response	30Hz-60Hz or 60Hz-200Hz
Auto Power OFF	Approx. 15 min.	Power	9V (6F22) X 1

AC CURRENT (TRUE RMS)

Range	Resolution	Accuracy
600μA	0.1μA	±1.2% of rdg + 20 digits / (40Hz-5kHz)
6000μA	1μA	
60mA	10μA	
600mA	100μA	±1.5% of rdg + 20 digits / (40Hz-400Hz)
6A	1mA	
20A	10mA	±2.5% of rdg + 20 digits / (40Hz-400Hz)

RESISTANCE

Range	Resolution	Accuracy
600Ω	0.1Ω	±0.8% of rdg + 5 digits
6kΩ	1Ω	
60kΩ	10Ω	
600kΩ	100Ω	±0.8% of rdg + 3 digits
6MΩ	1KΩ	
30MΩ	10KΩ	±1.2% of rdg - 10 digits + 5 digits

CAPACITANCE

Range	Resolution	Accuracy
40nF	10pF	±2.5% of rdg + 10 digits
400nF	100pF	
4μF	1nF	
40μF	10nF	±2.5% of rdg + 5 digits
400μF	100nF	
2000μF	1μF	±5.0% of rdg + 10 digits

TRANSISTOR hFE TEST

Range	Test Range	Test Current/Voltage
NPN or PNP	0-1000	Base current is approximate 15μA, Vce is approx 4.5V

DM-83T



Features :

- 3½ Digit Multimeter with Backlight
- 1999 Count
- Torch Function
- NCV
- True RMS
- hFE test

DC VOLTAGE

Range	Resolution	Accuracy
200mV	0.1mV	±1.0% of rdg + 4 digits
2V	1mV	
20V	10mV	
200V	100mV	
600V	1V	±1.0% of rdg + 4 digits

AC VOLTAGE

Range	Resolution	Accuracy
2V	1mV	±0.8% of rdg + 6 digits
20V		
200V	10mV	±1.0% of rdg + 6 digits
600V		

DC CURRENT

Range	Resolution	Accuracy
200uA	0.1uA	±1.0% of rdg + 5 digits
2000uA	1uA	
20mA	10uA	
200mA	100uA	
2A	1mA	±2.0% of rdg + 5 digits
10A	10mA	

AC CURRENT

Range	Resolution	Accuracy
200uA	0.1uA	±1.5% of rdg + 5 digits
2000uA	1uA	
20mA	10uA	
200mA	100uA	
2A	1mA	±2.0% of rdg + 10 digits
10A	10mA	

RESISTANCE

Range	Resolution	Accuracy
200Ω	0.1Ω	±0.8% of rdg + 1 digits
2KΩ	1Ω	
20KΩ	10Ω	
200KΩ	100Ω	
2MΩ	1KΩ	±1.2% of rdg + 5 digits
20MΩ	10KΩ	

TEMPERATURE

Range	Resolution	Accuracy
-40~1000°C	1°C	<400°C ±1.0% of rdg + 5 digits ≥400°C ±1.5% of rdg + 15 digits
0~1832°F	1°F	<750°F ±1.0% of rdg + 5 digits ≥750°F ±1.5% of rdg + 15 digits

Power AAA 1.5V X 2

- Standard Accessories : Manual, Test Lead
- Dimension : 140(H) x 72(W) x 37(D) mm

Features :

- 3½ Digit Multimeter with Backlight
- 6000 Count
- Torch Function
- NCV
- True RMS
- Duty cycle test

DM-85T



DC VOLTAGE

Range	Resolution	Accuracy
600mV	0.1mV	±1.0% of rdg + 4 digits
6V	1mV	
60V	10mV	
600V	100mV	±1.0% of rdg + 4 digits

AC VOLTAGE

Range	Resolution	Accuracy
6V	1mV	±0.8% of rdg + 6 digits
60V	10mV	
600V	100mV	±1.0% of rdg + 6 digits

DC CURRENT

Range	Resolution	Accuracy
600uA	0.1uA	±1.0% of rdg + 5 digits
6000uA	1uA	
60mA	10uA	
600mA	100uA	
6A	1mA	±2.0% of rdg + 10 digits
10A	10mA	

AC CURRENT

Range	Resolution	Accuracy
600uA	0.1uA	±1.5% of rdg + 5 digits
6000uA	1uA	
60mA	10uA	
600mA	100uA	
6A	1mA	±2.0% of rdg + 10 digits
10A	10mA	

RESISTANCE

Range	Resolution	Accuracy
600Ω	0.1Ω	±0.8% of rdg + 5 digits
6KΩ	1Ω	
60KΩ	10Ω	
600KΩ	100Ω	
6MΩ	1KΩ	±1.2% of rdg + 5 digits
60MΩ	10KΩ	

CAPACITANCE

Range	Resolution	Accuracy
60nF	10pF	±2.5% of rdg + 6 digits
600nF	100pF	
6μF	1pF	±2.5% of rdg + 5 digits
60μF	10nF	
600μF	100nF	±5.0% of rdg + 8 digits
6mF	1μF	
60mF	10μF	

FREQUENCY

Range	Resolution	Accuracy
10Hz	0.01Hz	±0.5% of rdg + 4 digits
100Hz	0.001Hz	
1KHz	1Hz	
10KHz	10Hz	
100KHz	100Hz	
1mHz	1kHz	
10mHz	10kHz	

TEMPERATURE

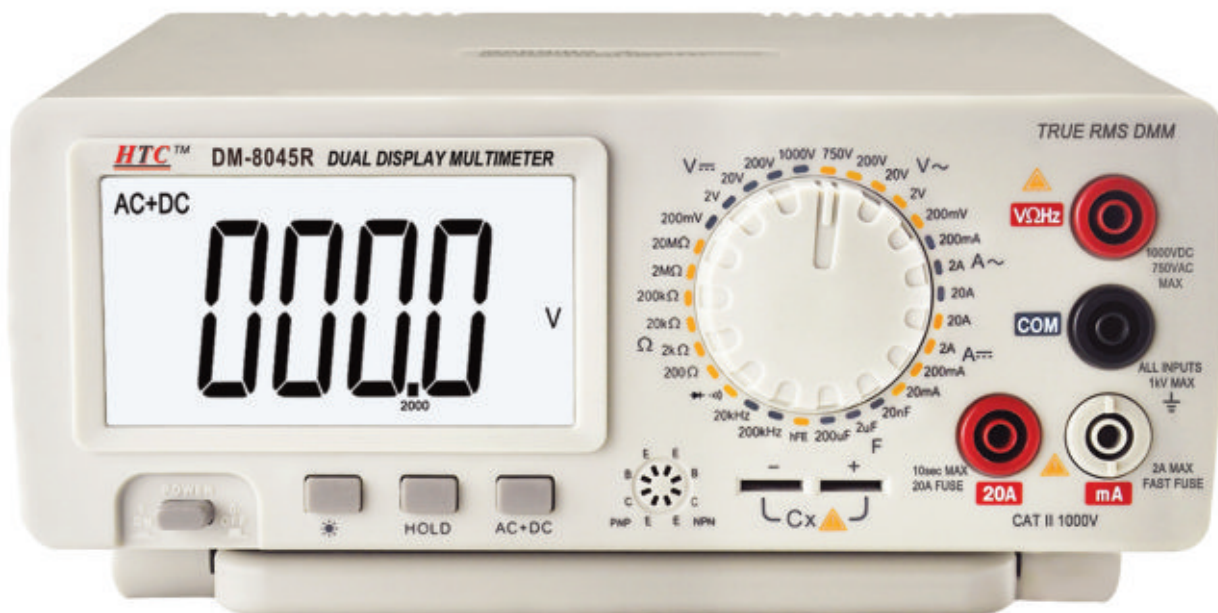
Range	Resolution	Accuracy
-40~1000°C	1°C	<7°C ±1.0% of rdg + 5 digits ≥7°C ±1.5% of rdg + 15 digits
0~1832°F	1°F	<750°F ±1.0% of rdg + 5 digits ≥750°F ±1.5% of rdg + 15 digits

Power AAA 1.5V X 2

- Standard Accessories : Manual, Test Lead
- Dimension : 140(H) x 72(W) x 37(D) mm



DM-8045R



Features:

- 4½ Digit True RMS with Backlight
- 19,999 Count
- Auto Power Off (APO)
- Data Hold

DC VOLTAGE

Range	Resolution	Accuracy
200mV	10μV	±0.05% of rdg + 1 digits
2V	100μV	
20V	1mV	
200V	10mV	
1000V	100mV	±0.1% of rdg + 5 digits

DC CURRENT

Range	Resolution	Accuracy
20mA	1μA	±0.35% of rdg + 10 digits
200mA	10μA	
2A	100μA	±1.2% of rdg + 20 digits
20A	1mA	

AC VOLTAGE

Range	Resolution	Accuracy	Input Frequency
200mV	10μA	±0.8% of rdg + 80 digits	50Hz-20kHz
2V	100μA		
20V	1mV		
200V	10mV	±1.0% of rdg + 50 digits	50Hz-5kHz
750V	100mV		50Hz-400kHz

AC CURRENT

Range	Resolution	Accuracy	Input Frequency
200mA	10μA	±0.8% of rdg + 80 digits	50Hz-5kHz
2A	100μA	±1.5% of rdg + 50 digits	50Hz-400Hz
20A	1mA		

- Standard Accessories : Test Lead, Power Cord, Manual
- Dimension : 245(H) x 220(W) x 82(D)mm

RESISTANCE

Range	Resolution	Accuracy
200Ω	0.01Ω	±0.1% of rdg + 10 digits
2kΩ	0.1Ω	±0.1% of rdg + 5 digits
20kΩ	1Ω	
200kΩ	10Ω	
2MΩ	100Ω	
20MΩ	1KΩ	±0.6% of rdg + 5 digits

CAPACITANCE

Range	Resolution	Accuracy
20nF	1pF	±3.5% of rdg + 20 digits
2μF	100pF	
200μF	10nF	±5.0% of rdg + 30 digits

FREQUENCY

Range	Resolution	Accuracy
20kHz	1Hz	±1.0% of rdg + 20 digits
200kHz	10Hz	

TRANSISTOR hFE TEST

Range	Test Range	Test Current/Voltage
NPN or PNP	0-1000	Base current is approximate 10μA, Vce is approx 3V

Special Function

Diode Test	✓	Overload Protection	✓
hFE test	✓	Function Protection	✓
True RMS	✓	Anti Shock Protect	✓
Continuity Buzzer	Approx. < 30Ω+10Ω	Input Impedance	10MΩ
Low Battery Display	Approx. < 7.5V	Sampling Rate	3 times per second
Auto Power OFF	Approx. 30 min.	AC Frequency Response	40-400Hz

CM-2000

Features:

- 3½ Digit
- 2000 Count
- Non Contact Voltage (NCV)
- Clamp Torch
- Jaw Open: 28mm
- Auto Power Off (APO)
- True RMS



DC VOLTAGE

Range	Resolution	Accuracy
200mV	0.1mV	±0.5% of rdg + 5 digits
2V	1mV	
20V	10mV	
200V	100mV	
600V	1V	±1.0% of rdg + 5 digits

AC VOLTAGE

Range	Resolution	Accuracy
200mV	0.1mV	± 1.5% of rdg + 10 digits
2V	1mV	
20V	10mV	± 1.0% of rdg + 5 digits
200V	100mV	
600V	1V	± 1.2% of rdg + 5 digits

AC CURRENT

Range	Resolution	Accuracy
2A	1mA	±3.0% of rdg + 5 digits
20A	10mA	
200A	100mA	±2% of rdg + 5 digits
600A	1A	

RESISTANCE

Range	Resolution	Accuracy
200Ω	0.1Ω	±0.8% of rdg + 5 digits
2kΩ	1Ω	
20kΩ	10Ω	±0.8% of rdg + 1 digits
200kΩ	100Ω	
2MΩ	1KΩ	±1.2% of rdg + 5 digits
20MΩ	10KΩ	

TEMPERATURE

Range	Resolution	Accuracy
(-40~750)°C	1°C	<400°C ±1.0% of rdg + 5 digits
		≥400°C ±1.5% of rdg + 15 digits

POWER

AAA1.5V X 2

- Standard Accessories : Test Lead, Manual, Soft Carrying Case
- Dimension : 230(H) x 80(W) x 37(D)mm

CM-2007

Features:

- 3¾ Digit
- Non Contact Voltage (NCV)
- Clamp Torch
- Jaw Open : 28mm
- Frequency, CAP, Temperature
- True RMS



DC VOLTAGE (DCV)

Range	Resolution	Accuracy
400mV	0.1mV	(1.0% reading+5)
4V	1mV	
40V	10mV	
400V	100mV	
600V	1V	

AC VOLTAGE (ACV)

Range	Resolution	Accuracy
4V	1mV	(1.0% reading+5)
40V	10mV	
400V	100mV	
600V	1V	

AC CURRENT (ACA)

Range	Resolution	Accuracy
4A	1mA	(3.0% reading+5)
40A	10mA	
400A	100mA	(2.0% reading+5)
800A	1A	

RESISTANCE

Range	Resolution	Accuracy
400	0.1	(0.8% reading+5)
4k	1	
40k	10	(0.8% reading+3)
400k	100	
4M	1k	(1.0% reading+5)
40M	10k	

CAPACITANCE

Range	Resolution	Accuracy
4nF	1pF	(5.0% reading+10)
40nF	10pF	
400nF	100pF	(2.5%reading+5)
4uF	1nF	
40uF	10nF	(5.0%reading+10)
400uF	100nF	
4mF	1uF	
40mF	10uF	

FREQUENCY

Range	Resolution	Accuracy
10Hz	0.01Hz	(0.5% reading+4)
100Hz	0.1Hz	
1kHz	1Hz	
10kHz	10Hz	
100kHz	100Hz	
1MHz	1kHz	
10MHz	10kHz	

TEMPERATURE*

Range	Resolution	Accuracy
(-40~1000) C	1 C	<400 C: (1.0%+5) ≥ 400 C: (1.5%+15)
(-40~1832) F	1 F	
		<750 F: (1.0% + 5) ≥ 750 F: (1.5% + 15)

POWER

*TP -04 Temperature Probe Optional

Resolution	Accuracy
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Standard Accessories : Test lead, Manual, Soft Carrying Case

Dimension : 270 (H) x 123 (W) x 35 (D)



Features:

- 3½ Digit Clamp Meter with Backlight Manual Range
- 1999 Count
- Fully Protected in all RANGE
- Jaw Open: 52mm

- Clamp Torch
- True RMS
- NCV

AC VOLTAGE

Range	Resolution	Accuracy
20V	10mV	±1.0% of rdg + 5 digits
750V	1V	±1.2% of rdg + 5 digits

DC VOLTAGE

Range	Resolution	Accuracy
200mV	0.1mV	±0.5% of rdg + 5 digits
20V	10mV	
1000V	1V	±1.0% of rdg + 5 digits

TEMPERATURE

Range	Resolution	Accuracy
(-40~1000)°C	1°C	±1.0% of rdg + 5 digits

AC CURRENT

Range	Resolution	Accuracy
200A	0.1A	±2.0% of rdg + 5 digits
1000A	1A	

POWER

AAA1.5V x 2

RESISTANCE

Range	Resolution	Accuracy
200Ω	0.1Ω	±0.8% of rdg + 5 digits
2kΩ	1Ω	
20kΩ	10Ω	±0.8% of rdg + 1 digit
200kΩ	100Ω	
2mΩ	1kΩ	
20mΩ	10kΩ	±1.2% of rdg + 5 digits
200mΩ	100Ω	

Special Function

Diode Test	✓
Continuity Test	✓
Function Protection	✓
Sampling Rate	2 or 3 times/sec
Input Impedance	10MΩ

- Standard Accessories :
Soft Carrying Case, Manual, Test Lead
- Dimension :
123(H) x 270(W) x 35(D)mm

CM-2030

CM-2070C

Features:

- 3 ½ Digit Clamp Meter with Backlight
- 2000 Count
- Full Function Protection, Strong anti-interferential Performance
- Temperature & Non Contact Voltage (NCV)
- Jawa Open : 52mm • Clamp Torch

DC VOLTAGE

Range	Resolution	Accuracy
200mV	0.1mV	±1.0% of rdg + 5 digits
2V	1mV	
20V	10mV	±0.5% of rdg + 5 digits
200V	100mV	
1000V	1V	±1.0% of rdg + 5 digits

AC VOLTAGE

Range	Resolution	Accuracy
200mV	0.1mV	±1.5% of rdg + 5 digits
2V	1mV	
20V	10mV	±1.0% of rdg + 5 digits
200V	100mV	
750V	1V	±1.5% of rdg + 5 digits

AC CURRENT

Range	Resolution	Accuracy
200A	100mA	±2.0% of rdg + 5 digits
1000A	1A	

RESISTANCE

Range	Resolution	Accuracy
200Ω	0.1Ω	±0.8% of rdg + 5 digits
2kΩ	1Ω	
20kΩ	10Ω	±0.8% of rdg + 3 digits
200kΩ	100kΩ	
2MΩ	1KΩ	
20MΩ	10KΩ	±1.2% of rdg + 5 digits

TEMPERATURE

Range	Resolution	Accuracy
(-40~1000)°C	1°C	<400°C ±1.0% of rdg + 5 digits >400°C ±1.5% of rdg + 5 digits
(0~1832)°F	1°F	<750°C ±1.0% of rdg + 5 digits ≥750°C ±1.5% of rdg + 5 digits

POWER

9V (6F22) X 1

- Standard Accessories :
Test lead, Manual, Soft Carrying Case
TP04 Temperature probe
- Dimension :
123(H) x 270(W) x 35(D)mm

Features:

- 3¾ Digit Clamp Meter with Backlight
- 4000 Count
- Full Function Protection, Strong anti-interferential Performance
- Temperature & Non Contact Voltage (NCV) • Frequency Test • True RMS
- Clamp Torch • Jaw Open : 52mm

DC VOLTAGE

Range	Resolution	Accuracy
400mV	0.1mV	±1.0% of rdg + 5 digits
4V	1mV	
40V	10mV	±0.5% of rdg + 5 digits
400V	100mV	
1000V	1V	±1.0% of rdg + 5 digits

AC VOLTAGE

Range	Resolution	Accuracy
4V	1mV	
40V	10mV	±0.8% of rdg + 5 digits
400V	100mV	
750V	1V	±1.0% of rdg + 5 digits

AC CURRENT

Range	Resolution	Accuracy
4A	1mA	
40A	10mA	
400A	100mA	±2.0% of rdg + 5 digits
1000A	1A	

CAPACITANCE

Range	Resolution	Accuracy
4nF	1pF	±5.0% of rdg + 10 digits
40nF	10pF	
400nF	100pF	±2.5% of rdg + 5 digits
4μF	1nF	
40μF	10nF	
400μF	100nF	
4mF	1μF	±5% of rdg + 10 digits
40mF	10μF	

FREQUENCY

Range	Resolution	Accuracy
10Hz	0.01Hz	
100Hz	0.1Hz	
1kHz	1Hz	
10kHz	10Hz	±0.5% of rdg + 4 digits
100kHz	100Hz	
1MHz	1kHz	
10MHz	10kHz	

POWER

AAA 1.5Vx2

RESISTANCE

Range	Resolution	Accuracy
400Ω	0.1Ω	±0.8% of rdg + 5 digits
4kΩ	1Ω	
40kΩ	10Ω	±0.8% of rdg + 1 digit
400kΩ	100Ω	
4MΩ	1KΩ	
40MΩ	10KΩ	±1.0% of rdg + 5 digits

TEMPERATURE

Range	Resolution	Accuracy
(-40~1000)°C	1°C	<400°C ±1.0% of rdg + 5 digits ≥400°C ±1.5% of rdg + 15 digits

- Standard Accessories :
Test lead, Manual, Soft Carrying Case
TP04 Temperature probe
- Dimension :
123(H) x 270(W) x 35(D)mm

CM-2070FT


CM-2090

Features:

- 3000 A • 5,999 Count
- SMART AC Digital Flexible Clamp.
- Ø 75mm.
- Clamp Torch with Blacklight.

DC VOLTAGE

Range	Resolution	Accuracy
6V	0.001V	±0.8% of rdg + 3 digits
60V	0.01V	
600V	0.1V	

AC VOLTAGE

Range	Resolution	Accuracy	
		45~65Hz	40~2000Hz
6V	0.001V	± 1.2% of rdg + 3 digits	± 2.0% of rdg + 5 digits
60V	0.01V		
600V	0.1V		

FREQUENCY

Range	Resolution	Accuracy
40 - 1000Hz	0.1Hz	±0.5% of rdg + 2 digits
1kHz - 10KHz	1Hz	

AC CURRENT

Range	Resolution	Accuracy		
		40~65Hz	65~400Hz	400~1000Hz
60A	0.01A	± 3.0% of rdg + 5 digits	± 3.0% of rdg + 5 digits	-
600A	0.1A		± 3.0% of rdg + 5 digits	
3000A	1A		<1000A ± 3.0% of rdg + 5 digits	

- Standard Accessories : Soft Carrying Case, Test Lead, Manual
- Dimension : 324(H) x 178(W) x 30(D)mm



RESISTANCE

Range	Resolution	Accuracy
6kΩ	0.001kΩ	±1.0% of rdg + 3 digits
60kΩ	0.01kΩ	
600kΩ	0.1kΩ	
6MΩ	0.001MΩ	

POWER AAA 1.5V X 3

CL-2054

Features:

- 3¾ Digit Manual Range
- 3,999 Count
- 10uA high Resolution
- Auto Power Off (APO)
- Shielded Transformer Jaw Open to 1.2"

AC VOLTAGE

Range	Resolution	Accuracy	
		50/60 Hz	40-1KHz
400V	0.1V	± 1.5% of rdg ± 2 digits	± 2.0% of rdg ± 4 digits

AC CURRENT

Range	Resolution	Accuracy	
		50/60 Hz	Wide (400-1KHz)
40mA	10μA	± 1.0% of rdg ± 0.5mA digits	± 4.5% of rdg ± 0.5mA digits
400mA	100μA	± 3.0% of rdg ± 5.0mA digits	± 3.0% of rdg ± 5.0mA digits
4A	1mA	± 4.0% of rdg ± 0.1A digits	± 4.0% of rdg ± 0.1A digits
40A	10mA	± 4.0% of rdg ± 1.0A digits	± 4.0% of rdg ± 1.0A digits
80A	100mA	± 2.5% of rdg ± 1.0A digits	± 3.0% of rdg ± 1.5A digits
80-100A		± 5.0% of rdg ± 1.0A digits	± 5.0% of rdg ± 1.5A digits

RESISTANCE

Range	Resolution	Accuracy
40-400Ω	0.1Ω	±1.0% of rdg ± 2 digits

CONTINUITY TEST Threshold 40Ω, Continuity Beeper 2.5KHz

POWER 9V (6F22) X 1

- Standard Accessories : Hard Carrying Case, Test Lead, Manual
- Dimension : 209(H) x 43(W) x 30(D)mm



CM-2016



Features:

- 3^{5/6} Digit Clamp Meter with Backlight
- 5,999 Count & Polarity Display
- Clamp Torch
- Jaw Open : 28mm
- Non Contact Voltage (NCV) 5 Ranges
- True RMS
- Auto Power Off (APO)
- Duty Cycle / REL & Data Hold

DC VOLTAGE (DCV)

Range	Resolution	Accuracy
600mV	0.1mV	(1.0% reading+5)
6V	1mV	(0.5% reading+5)
60V	10mV	
600V	100mV	

AC VOLTAGE (ACV)

Range	Resolution	Accuracy
6V	1mV	(0.8% reading+5)
60V	10mV	
600V	100mV	

DV CURRENT (DCA)

Range	Resolution	Accuracy
60A	0.01A	(1.5% reading+5)
600A	0.1A	
800A	1A	

AC CURRENT (ACA)

Range	Resolution	Accuracy
60A	0.01A	(1.5% reading+5)
600A	0.1A	
800A	1A	

RESISTANCE

Range	Resolution	Accuracy
600	0.1	(1.5% reading+5)
6k	1	(0.8% +1)
60k	10	
600k	100	
6M	1k	(1.0% +5)
60M	10k	

CAPACITANCE

Range	Resolution	Accuracy
6nF	1pF	(5.0% +10)
60nF	10pF	(2.5%reading+5)
600nF	100pF	
6uF	1nF	
60uF	10nF	(2.5%reading+5)
600uF	100nF	
6mF	1uF	

FREQUENCY

Range	Resolution	Accuracy
10Hz	0.01Hz	(0.5% reading+4)
100Hz	0.1Hz	
1kHz	1Hz	
10kHz	10Hz	
100kHz	100Hz	
1MHz	1kHz	
10MHz	10kHz	

TEMPERATURE

Range	Resolution	Accuracy
(-40~1000) °C	1 °C	<400 °C: (1.0%+5) ≥ 400 °C: (1.5%+15)
(-40~1832) °F	1 °F	<750 °F: (1.0% + 5) ≥ 750 °F: (1.5% + 15)

Special Function

Diode Test	✓
Continuity Buzzer	> 50Ω+10Ω
Low Battery Display	Approx. > 2.6V
Auto Power OFF	15 min.
Function Protection	✓
Input impedance	10MΩ
Sampling Rate	3 times / sec.
AC Frequency Response	50-400Hz
Power	AAA 1.5V X 2

- Standard Accessories : Soft Carrying Case, Manual Test Lead, TP-04 Temperature Probe.
- Dimension : 35(H) x 123(W) x 270(D)mm

CM-2018

Features:

- 3^{5/6} Digit Clamp Meter with Backlight
- 5,999 Count & Polarity Display
- Clamp Torch
- Jaw Open : 28mm
- Non Contact Voltage (NCV) 5 Ranges
- True RMS
- LPF & LoZ V

DC VOLTAGE (DCV)

Range	Resolution	Accuracy
600mV	0.1mV	± (1.0% reading + 5)
6V	0.001V	± (0.5% reading + 5)
60V	0.01V	
600V	0.1V	
LoZ 0V-600V	0.1V	± (2.0% reading + 10)

AC VOLTAGE (ACV)

Range	Resolution	Accuracy
6V	0.001V	± (0.8% reading+5)
60V	0.01V	
600V	0.1V	
LPF 0V-600V	0.1V	± (4.0% reading+5)
LoZ 0V-600V	0.1V	± (2.0% reading+10)

DV CURRENT (DCA)

Range	Resolution	Accuracy
60A	10mA	± (1.5% reading+5)
600A	100mA	
800A	1A	

AC CURRENT (ACA)

Range	Resolution	Accuracy
60A	10mA	± (1.5% reading+5)
600A	100mA	
800A	1A	

RESISTANCE

Range	Resolution	Accuracy
600Ω	0.1Ω	± (0.8% of reading +5)
6 kΩ	1Ω	± (0.8% of reading +1)
60kΩ	10Ω	
600kΩ	100Ω	
6 MΩ	1kΩ	± (1.0% of reading +5)
60MΩ	10kΩ	

CAPACITANCE

Range	Resolution	Accuracy
6nF	1pF	± (5.0% reading + 10)
60nF	10pF	± (2.5% reading + 5)
600nF	100pF	
6uF	1nF	
60uF	10nF	± (5.0% reading + 10)
600uF	100nF	
6mF	1uF	
60mF	10uF	

FREQUENCY

Range	Resolution	Accuracy
10Hz~10MHz	0.001Hz~1kHz	± (0.5% reading + 4)

TEMPERATURE

Range	Resolution	Accuracy
(-40~1000)°C	1°C	<400°C: ± (1.0% of reading +5) ≥ 400°C: ± (1.5% of reading +15)
(-40~1832)°C	1°F	<750°F: ± (1.0% of reading +5) ≥ 750°F: ± (1.5% of reading +15)

Special Function

Diode Test	✓
Continuity Buzzer	> 50Ω+10Ω
Low Battery Display	Approx. > 2.6V
Auto Power OFF	15 min.
Function Protection	✓
Input impedance	10MΩ
Sampling Rate	3 times / sec.
AC Frequency Response	50-400Hz
Power	AAA 1.5V X 2

- Standard Accessories : Soft Carrying Case, Manual Test Lead, TP-04 Temperature Probe.
- Dimension : 35(H) x 123(W) x 270(D)mm



Features:

- 3½ Digit Clamp Meter with Backlight
- 2000 Count
- Clamp Torch
- Jaw Open : 52mm
- Auto Power Off (APO)
- True RMS

CM-2046

DC VOLTAGE

Range	Resolution	Accuracy
200mV	0.1mV	±1.0% of rdg + 5 digits
2V	1mV	
20V	10mV	
200V	100mV	±0.5% of rdg + 5 digits
1000V	1V	

DC CURRENT

Range	Resolution	Accuracy
200A	100mA	±2.0% of rdg + 5 digits
1000A	1A	

AC VOLTAGE

Range	Resolution	Accuracy
200mV	0.1mV	± 1.5% of rdg + 5 digits
2V	1mV	
20V	10mV	± 1.0% of rdg + 5 digits
200V	100mV	
750V	1V	± 1.5% of rdg + 5 digits

AC CURRENT

Range	Resolution	Accuracy
200A	100mA	±2.0% of rdg + 5 digits
1000A	1A	

RESISTANCE

Range	Resolution	Accuracy
200Ω	0.1Ω	±0.8% of rdg + 5 digits
2kΩ	1Ω	
20kΩ	10Ω	
200kΩ	100Ω	±0.8% of rdg + 3 digits
2MΩ	1KΩ	
20MΩ	10KΩ	±1.2% of rdg + 5 digits

CAPACITANCE

Range	Resolution	Accuracy
400μF	100mF	±5.0% of rdg + 10 digits
4μF	1μF	
40μF	10μF	

POWER
9V (6F22) X 1

- Standard Accessories : Soft Carrying Case, Manual, Test Lead
- Dimension : 270(H) x 123(W) x 35(D)mm

Features:

- 3¾ Digit Clamp Meter with Backlight
- 4000 Count
- Clamp Torch
- Jaw Open : 52mm
- Non Contact Voltage (NCV)
- Duty Cycle : 1-99%
- Frequency / Temperature
- Auto Power Off (APO)
- True RMS

CM-2056

DC VOLTAGE

Range	Resolution	Accuracy
400mV	0.1mV	±1.0% of rdg + 5 digits
4V	1mV	
40V	10mV	
400V	100mV	±0.5% of rdg + 5 digits
1000V	1V	

DC CURRENT

Range	Resolution	Accuracy
40A	0.01A	±1.5% of rdg + 5 digits
400A	0.1A	
1000A	1A	

AC VOLTAGE

Range	Resolution	Accuracy
4V	1mV	± 1.5% of rdg + 5 digits
40V	10mV	
400V	100mV	
750V	1V	± 1.0% of rdg + 5 digits

AC CURRENT

Range	Resolution	Accuracy
40A	0.01A	±1.5% of rdg + 5 digits
400A	0.1A	
1000A	1A	

RESISTANCE

Range	Resolution	Accuracy
400Ω	0.1Ω	±0.8% of rdg + 5 digits
4kΩ	1Ω	
40kΩ	10Ω	
400kΩ	100Ω	±0.8% of rdg + 1 digits
4MΩ	1KΩ	
40MΩ	10KΩ	±1.0% of rdg + 10 digits

CAPACITANCE

Range	Resolution	Accuracy
4nF	1pF	±5.0% of rdg + 10 digits
40nF	10pF	
400nF	100pF	
4μF	1nF	±2.5% of rdg + 5 digits
40μF	10nF	
400μF	100nF	±5.0% of rdg + 10 digits
4mF	1μF	
40mF	10μF	

FREQUENCY

Range	Resolution	Accuracy
10Hz	0.01Hz	±0.5% of rdg + 4 digits
100Hz	0.1Hz	
1kHz	1Hz	
10kHz	10Hz	
100kHz	100Hz	
1MHz	1KHz	
10MHz	10Hz	

TEMPERATURE

Range	Resolution	Accuracy
(-40~1000)°C	1°C	<400°C ±1.0% of rdg + 5 digits ≥400°C ±1.5% of rdg + 15 digits

POWER
AAA1.5Vx2

- Standard Accessories : Soft Carrying Case, Manual, TP-04 Temperature Probe, Test Lead
- Dimension : 270(H) x 123(W) x 35(D)mm



CM-2055



Features:

- 4 Digit LCD Display
- 9999 Count
- Sample Rate : 2 times / sec
- Peak Hold
- Low Power Indication
- Auto Power Off (APO)

DC VOLTAGE

Range	Resolution	Accuracy
600V	0.1V	±1.0% of rdg + 2 digits

DC CURRENT

Range	Resolution	Accuracy
10A	1mA	±2.5% of rdg + 10 digits
80A	10mA	
80~100A	10mA	±4.5% of rdg + 10 digits

AC VOLTAGE

Range	Resolution	Accuracy
600V	0.1V	±1.5% of rdg + 5 digits

AC CURRENT

Range	Resolution	Accuracy
10A	1mA	±2.0% of rdg + 10 digits
80A	10mA	
80~100A	10mA	±3.5% of rdg + 10 digits

RESISTANCE

Range	Resolution	Accuracy
10kΩ	1Ω	±1.0% of rdg + 3 digits

POWER

AAA 1.5V X 2

Special Function

Continuity Buzzer	<100 Ohm
MAX Test Voltage	3V DC
Overall Protection	600V rms

- Standard Accessories : Manual, Carrying Case, Test Lead
- Dimension : 202(H) x 70(W) x 30(D) mm

DET-99



Features:

- 3½ Digit
- 1,999 count
- Low battery Indicator
- 4 Terminals

Earth Resistance Range	Resolution	Accuracy
0~10 Ohms	0.01 Ohms	± (2%rdg + 5dgt) or ± 0.1Ω, which is greater
0~1000 Ohms	1 Ohms	

14500 rechargeable battery X 4 pcs

- Standard Accessories : Soft carrying case, Solder-free female plugs, 14500 rechargeable battery X 4 pcs, 15V adaptor, Instruction manual
- Dimension : 163 (H) x 99 (W) x 54 (D) mm

CE-8200/CE8202/CE-8203



Features:

- 4 Digit LCD Display with Black Screen
- 9,999 Count
- Auto Power Off (APO)
- Conductor Size: 55mm x 32mm
- Data Logging System 300 groups memory
- Measure 2 times / sec.
- Double Insulation Protection Level
- Spare 1 & 10 Test Ring, to detect Self Precision

MODEL	RESISTANCE RANGE	CURRENT RANGE
CE-8200	0-1000Ω	NA
CE-8202	0-1200Ω	0.00mA-20A
CE-8203	0-200Ω	NA

RESISTANCE

Range	Resolution	Accuracy
0.010~0.099Ω	0.001Ω	±1% of rdg + 0.1Ω digits
0.10~0.99Ω	0.01Ω	
1.0~49.9Ω	0.1Ω	
50.0~99.5Ω	0.50Ω	±1.5% of rdg + 0.5Ω digits
100~199Ω	1Ω	±2% of rdg + 1Ω digits
200~395Ω	5Ω	±5% of rdg + 5Ω digits
400~590Ω	10Ω	±10% of rdg + 10Ω digits
600~1000Ω	20Ω	±20% of rdg + 20Ω digits
*900~1200Ω	30Ω	± (25% + 30Ω)

*For CE - 8202

CURRENT (For CE - 8202)

Range	Resolution	Accuracy
0.00mA - 9.95mA	0.1mA	±(2.5% + 1mA)
10.0mA - 99.0mA	0.1mA	±(2.5% + 5mA)
100mA - 300mA	1mA	±(2.5% + 10mA)
0.30A-2.99A	0.01A	±(2.5% + 0.1A)
3.0A-9.9A	0.1A	±(2.5% + 0.3A)
10.0A-20.0A	0.1A	±(2.5% + 0.5A)

POWER

AA 1.5V X 4

- Standard Accessories : Hard Carrying Case, Test Loop, Manual
- Dimension : 285(H) x 85(W) x 58(D)mm



CE-8201

Features:

- Ground resistance test, loop resistance test, AC current test, AC voltage test
- Clamp Size 68mm
- Display 2.4 inches color LCD screen
- Measure Time 1 time/sec
- Data Storage Maximum 500 groups of data, display "FULL" symbol to indicate that the storage is full
- Auto Power Off (APO)
- Spare 1 & 10 Test Ring to detect Self Protection



RESISTANCE

Range	Resolution	Accuracy
0.02Ω~9.99Ω	0.01Ω	± 2% of rdg ± 0.1Ω digits
10.0Ω~99.9Ω	0.5Ω	± 3% of rdg ± 0.5Ω digits
100Ω~199Ω	1Ω	± 5% of rdg ± 1Ω digits
200Ω~299Ω	5Ω	± 10% of rdg ± 5Ω digits
300Ω~699Ω	10Ω	± 15% of rdg ± 10Ω digits
700Ω~999Ω	20Ω	± 20% of rdg ± 20Ω digits
1.00KΩ~1.19KΩ	30Ω	± 25% of rdg ± 30Ω digits
1.20KΩ~2.00KΩ	50Ω	± 35% of rdg ± 50Ω digits

CURRENT

Range	Resolution	Accuracy
0.100mA~0.999mA	0.001mA	± 2.5% of rdg ± 0.1mA digits
1.00mA~9.99mA	0.01mA	± 2.5% of rdg ± 0.5mA digits
10.0A~99.9A	0.1mA	± 2.5% of rdg ± 1mA digits
0.100A~0.999A	0.001A	± 2.5% of rdg ± 0.1A digits
1.00A~9.99A	0.01A	± 2.5% of rdg ± 0.5A digits
10.0A~60.0A	0.1A	± 2.5% of rdg ± 1 digits

GROUND VOLTAGE

Range	Resolution	Accuracy
1.00V~9.99V	0.01V	± 2.5% of rdg ± 0.1V digits
10.0V~99.9V	0.1V	± 2.5% of rdg ± 1V digits
100V~600V	1V	± 2.5% of rdg ± 5V digits

SOIL RESISTIVITY

Range	Resolution	Accuracy
0.00Ωm~99.99Ωm	0.01Ωm	p=2naR (note1)
100.0Ωm~999.9Ωm	0.1Ωm	
1000Ωm~9999Ωm	1Ωm	
10.00kΩm~99.99kΩm	10Ωm	
100.0kΩm~999.9kΩm	100Ωm	
1000kΩm~9999kΩm	1kΩm	

POWER

3.7V Lithium X 1

- Standard Accessories : Test line 4 pcs, Single test time 2 pcs Hard Carrying, Manual, Test loop
- Dimension : 273(H) x 106(W) x 53(D)mm



PC-170A



Features:

- True RMS Value (Voltage/Current)
- 9999 Count
- Large LCD Display with Backlight
- USB interface
- True Power/Apparent power/Power factor measurement
- Jaw Open : 55mm

AC VOLTAGE (TRUE RMS)

Range	Resolution	Accuracy
100V	0.1V	50Hz-200 Hz: $\pm 1.2\%$ of rdg + 5 digits
400V		
750V		

AC CURRENT (TRUE RMS)

Range	Resolution	Accuracy
40A	0.1V	50Hz-60 Hz: $\pm 2\%$ of rdg + 5 digits
100A		
400A		
1000A	1A	

POWER FACTOR

Range	Resolution	Accuracy
0.3 - 1	0.001	$\pm 0.022\%$ of rdg

PHASE ANGLE

Range	Resolution	Accuracy
0° - 90°	1°	$\pm 2\%$ of rdg

ACTIVE ENERGY

Range	Resolution	Accuracy
1-9999kWh	0.001kWh	$\pm 3\%$ of rdg + 2 digits

ACTIVE POWER

Current/ Voltage	Voltages Range			Accuracy	Resolution
	100V	400V	750V		
Range	40A	4.00KW	16.00KW	30.00KW	$\pm 3\%$ of rdg + 5 digits
	100A	10.00KW	40.00KW	75.00KW	
	400A	40.00KW	160.0KW	300.0KW	
	1000A	100.0KW	400.0KW	750.0KW	

APPARENT POWER

Current/ Voltage	Voltages Range			Accuracy	Resolution
	100V	400V	750V		
Range	40A	4.00KVA	16.00KVA	30.00KVA	$\pm 3\%$ of rdg + 5 digits
	100A	10.00KVA	40.00KVA	75.00KVA	
	400A	40.00KVA	160.0KVA	300.0KVA	
	1000A	100.0KVA	400.0KVA	750.0KVA	

REACTIVE POWER

Current/ Voltage	Voltages Range			Accuracy	Resolution
	100V	400V	750V		
Range	40A	4.00KVar	16.00KVar	30.00KVar	$\pm 3\%$ of rdg + 5 digits
	100A	10.00KVar	40.00KVar	75.00KVar	
	400A	40.00KVar	160.0KVar	300.0KVar	
	1000A	100.0KVar	400.0KVar	750.0KVar	

POWER

- Standard Accessories : Test Lead, Soft Carrying Case, USB cable & Software, Manual
- Dimension : 295(H) x 100(W) x 46(D)mm

PA-172



Features:

- 1Ø/3Ø Power Measurement
- RS-232 Interface
- Jaw Open : 50mm

AC VOLTAGE RMS

Range	Resolution	Accuracy
80V	0.1V	± 1.0% of rdg + 5 digits
180V		
400V	1V	
600V		

AC CURRENT RMS

Range	Resolution	Accuracy
20A	0.01A	± 2.0%of rdg + 5 digits
40A		
100A	0.1A	
200A		
450A	1A	
1000A		

SINGLE-PHASE ACTIVE POWER

SINGLE PHASE AC POWER		
Range	Resolution	Accuracy
30kW	0.01kW	± 3 %of rdg + 5 digits
60kW		
120kW	0.1kW	
150kW		
300kW		
600kW		

THREE-PHASE ACTIVE POWER

Range	Resolution	Accuracy
3kVA	0.001kVA	± 3 %of rdg + 5 digits
12kVA	0.01kVA	
30kVA		
120kVA		
150kVA	0.1kVA	
600kVA		

POWER FACTOR

Range	Resolution	Accuracy
0.3 - 1 Capacitive	0.001	$\pm 0.02\%$ of rdg + 2 digits
0.3 - 1 Inductive		

PASSIVE POWER

Range	Resolution	Accuracy
3kVAr	0.001kVAr	± 3 %of rdg + 5 digits
12kVAr	0.01kVAr	
30kVAr		
120kVAr		
150kVAr	0.1kVAr	
600kVAr		

FREQUENCY

Range	Resolution	Accuracy
30Hz - 1kHz	0.1Hz	$\pm 0.5\%$ of rdg + 1 digits

POWER

- Standard Accessories : Test Lead, Soft Carrying Case, USB cable & Software, Manual
- Dimension : 300(H) x 103(W) x 51(D)mm



PM-01



Features:

- Smart Three Pin Socket
- Dual Large LCD Display with Backlight
- Memory Retention (KWh, min)
- CO2 Display ON 9999kg

Specifications

- Accumulative Charges = 0~9999*\$
- Power Supply : 3V, Button Cell (CR2032) x 1
- Input : 220V, 50Hz, 6A
- Working temperature : 0°C~45°C
- Dimension : 132(H) x 67(W) x 37(D)mm
- Weight : 155g
- Standard packing : Gift box, manual

POWER

Range	Resolution	Accuracy
0.5 - 1 W	-	±1%
1 - 5 W		±1%
5 - 2380 W		±1%

CURRENT

Range	Resolution	Accuracy
0.000~10.00	-	±1%

VOLTAGE

Range	Resolution	Accuracy
100.0 ~ 260.0V	-	±1%

POWER FACTOR

Range	Resolution	Accuracy
0.00 ~ 1.00	-	±2%

FREQUENCY

Range	Resolution	Accuracy
50Hz	-	±1%

TOTAL USAGE TIME

Range	Resolution	Accuracy
0 Min. ~ 9999 Day	-	±1%

TOTAL USED ENERGY

Range	Resolution	Accuracy
0.010 ~ 9999 kWh	-	±1%

DIT-90



Features:

- 3½ Digit
- Optional Power Adaptor
- 5 Models with Various Voltage and Mohm Range
- Single Person Push Button Operation

Model	Rated Voltage	Range	Resolution	Accuracy	Max no. load Voltage
DIT-90A	1000 V	2000 MΩ	1 MΩ	<2 mA ± 3% of rdg + 2 digits	± 25% of rated voltage
DIT-90B	1000 V	200 MΩ	0.1 MΩ		
DIT-90C	500 V	1000 MΩ	1 MΩ		
DIT-90D	500 V	200 MΩ	0.1 MΩ		
DIT-90E	100 V	200 MΩ	0.1 MΩ		

POWER

AA 1.5V X 6

- Standard Accessories : Soft Carrying Case, Test Lead, Manual
- Dimension : 139(H) x 99(W) x 54(D)mm

6250IN



Features:

- 3½ Digit Insulation Tester with Backlight
- 1,999 Count
- Data Hold
- Auto Ranging
- 3 in 1 Insulation Resistance Phase Testing / Voltage Testing & Adaptor

Testing Voltage	1000/2500/5000V
Out Voltage	90~110% of the test voltage
Range	0.1MΩ~200GΩ
Resolution	0.01MΩ
Accuracy	0.1~200MΩ ± 3% of rdg + 5 digits
	200MΩ~10GΩ ± 5% of rdg + 5 digits
	10~200GΩ ± 10% of rdg + 5 digits

AC VOLTAGE

Range	Resolution	Accuracy
0 - 600V	1V	2.0% of rdg + 5 digits

POWER

AA 1.5V X 8 (Rechargeable Battery)

- Standard Accessories : Hard Carrying Case, Test Lead, Manual, Power Adaptor, AA 1.5V X 8 Rechargeable Battery
- Dimension : 190(H) x 155 (W) x 75(D) mm

6350IN



Features:

- 3½ Digital Insulation Tester with Backlight
- 1,999 Count
- Data Hold
- Test Range 100 V to 5000 V

Testing Voltage	100 / 250 / 500 / 1000 / 2500 / 5000 V
Out Voltage	90%-110% of the test voltage
Range	0.1 M - 20G for 100 / 250 / 500 V 0.1 M - 200 G for 1000 / 2500 / 5000V
Resolution	0.01 MΩ
Accuracy	0.1 MΩ - 200 MΩ ± (3% rdg + 5 dgt)
	200 MΩ- 10 GΩ ± (5% rdg + 10 dgt)

10 GΩ - 200GΩ ± (10% rdg + 5 dgt)

POWER

AA 1.5V X 8 (Rechargeable Battery)

- Standard Accessories : Soft Carry Case, Test Lead, Manual, Power Adaptor, AA 1.5V X 8 Rechargeable Battery
- Dimension : 190(H) x 155 (W) x 75(D) mm



7250IN

Features:

- Polarization Index (PI)
- Dielectric Absorption (DAR)
- USB Interface
- Over Range Warning
- High Voltage Indication



DC VOLTAGE		
Range	Resolution	Accuracy
±30~± 600V	1V	±2.0% of rdg + 3 digits

AC VOLTAGE		
Range	Resolution	Accuracy
30~600V (50/60Hz)	1V	±2.0% of rdg + 3 digits

INSULATION RESISTANCE MEASUREMENT					
Output Voltage	Display Range	Open Circuit Voltage	Test Current	Accuracy	Short Circuit
500V	0.0MΩ~20GΩ	DC 500V 0% - +20%	1mA-1.2mA @ 500KΩ	0.0~99.9MΩ ± 3% of rdg + 5 digits	Maximum than 2.0mA
				100MΩ~9.99GΩ ± 5% of rdg + 5 digits	
				10.0~20.0GΩ ± 10% of rdg + 5 digits	
1000V	0.0MΩ~40GΩ	DC 1000V 0% - +20%	1mA-1.2mA @ 1MΩ	0.0~99.9MΩ ± 3% of rdg + 5 digits	
				100MΩ~9.99GΩ ± 5% of rdg + 5 digits	
				10.0~40.0GΩ ± 10% of rdg + 5 digits	
2500V	0.0MΩ~100GΩ	DC 2500V 0% - +20%	1mA-1.2mA @ 2.5MΩ	0.0~99.9MΩ ± 3% of rdg + 5 digits	
				100MΩ~9.99GΩ ± 5% of rdg + 5 digits	
				10.0~100GΩ ± 10% of rdg + 5 digits	
5000V	0.0MΩ~1000GΩ	DC 5000V 0% - +20%	1mA-1.2mA @ 5MΩ	0.0~99.9MΩ ± 3% of rdg + 5 digits	
				100MΩ~9.99GΩ ± 5% of rdg + 5 digits	
				10.0~99.9GΩ ± 10% of rdg + 5 digits	

POWER	
AA 1.5V X 8	

- Standard Accessories : Test Lead, USB Cable & Software, Power Adaptor
- Dimension : 505(H) x 345(W) x 345(D)mm



AC-II



Features:

- Display LED (flashing) acoustic Sound Signal
- Auto Power Off (APO 5 minutes)
- Bright White LED Flash Light.

Technical Data :

Basic Functions	Volt Detect AC-II
Voltage Range	90~1000 VAC
IP- Protection	IP40
Overvoltage Category	CAT IV, 1000V

POWER

AAA 1.5V X 2

- Dimension : 145(H) x 25(W) x 21(D)mm
- Weight : Approx 42g

ST-852



Features:

- Operational Voltage : 200~480V (3 Phase AC)
- Withstand Voltage : 4000V for 1 minute
- Measuring Frequency Range : 20~400Hz
- Time Limit for Continuous measurement :
Less than 60 minutes at 200 VAC
Less than 40 minutes at 400 VAC

Technical Data :

Mesuring Result	Open Phase Check by LED	Phase order check by LED	Buzzer
Current Phase (CW)	All 3 Orange LED are Lit	Green LED is Lit	Intermittent beep
Reverse Phase (CCW)	All 3 Orange LED are Lit	Red LED is Lit	Continuous beep
Open Phase (One Phase Only)	Orange LED for Open Phase are off	Both Green & red LED are off	-

- Standard Accessories : Test Lead (attached to meter), Alligator Clips, Carrying Case, Manual
- Dimension : 85(H) x 64(W) x 23(D)mm

AC IV



Features:

- Display LCD with Bargraph
- Backlight Red & Green Double Colour
- Signal Intensity four level
- Flash Light No operation sensing signal will shutdown
- Auto Power Off (APO 3 minutes)

Technical Data :

Basic Functions	Volt Detect AC IV
Voltage Range (Sensitivity)	High 12 ~ 1000 V / Low 48 ~ 1000 V
IP- Protection	IP 40
Overvoltage Category	CAT III 1000 V

POWER

AAA 1.5V X 2

- Dimension : 157(H) x 27(W) x 23(D) mm
- Weight : Approx 32 g

PSD II



Features :

- Compact, easy-to-wear and convenient to use.
- Indoor and outdoor use
- Equipped with self-testing functions.
- Audio indications.
- Able to sense a wide variety of AC high voltage systems.
- Low power consumption.

Specification :

Initial Warning Distance :
 • 220V~380V : 0.1m~0.4m
 • 10kV : 0.7m~1.2m
 • 35kV : 1m~2m
 Frequency : 50 / 60 HZ
 Volume : 75 dB at 1 m
 Battery Life : 50 Hrs. of Cont. Use
 Dimension : 52(W), 60(H), 21mm thick
 Power : AAA 1.5V x 2
 Safety Standards : EN 61326 - 1
 Manual Instruction



(OPTIONAL)



HP-500



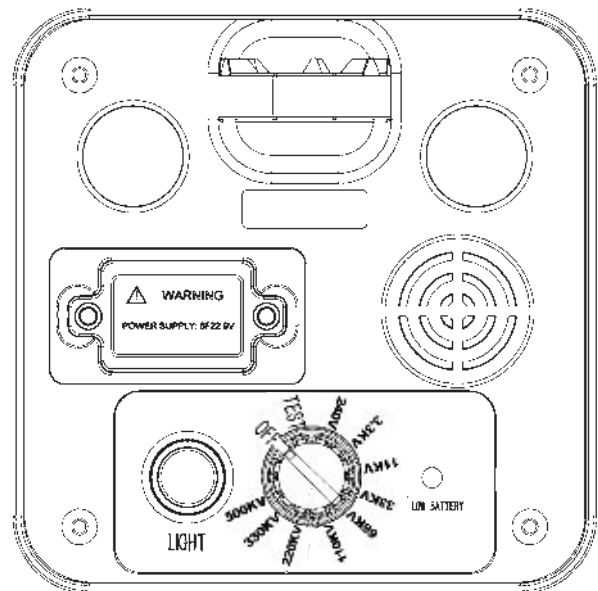
Technical Data :

Basic Functions	Range
Frequency Range	40 ~ 70 Hz
Voltage Ranges	240V, 3.3kV, 11kV, 33kV, 66kV, 110kV, 220kV, 330kV, 500kV
OFF TEST	240V-69kV-115kV-138kV-230kV-500kV
POWER	9V (6F22) X 1
Standard Accessories	Manual & warranty card
Dimension	115 (D) X 115 (W) X 169 (H) mm

Features :

- 9 Voltage Settings
- Bright LED Visual INDICATION with Buzzer
- Protection class IP65
- Non-Contact Test Detection by Proximity
- Light Weight, Robust and Compact
- The Max Detection Range Can be 500 kV
- The measuring wire is Horizontal with the lighting lamp placed vertical to it.

V. Instrument structure



- ★ The reminding distance is about 5cm when testing 240V voltage
- ★ The corresponding voltage reminder distance for other range tests is about 20cm
- ★ The closer the instrument is to the wire, the lower the voltage will be



CM-1500/CM-1501



Features:

- 3½ Digit Large LCD Display
- 1,999 Count
- Full Protection function, capacitor with the function of Self discharge
- Auto Power Off (APO)

CAPACITANCE

Range	Resolution	Accuracy	Test Frequency	Max Display
200pF	0.1pF	± 0.5% of rdg + 1 digits	800Hz	199.9pF
2nF	1pF			1.999nF
20nF	10pF			19.99nF
200nF	100pF			199.9nF
2μF	1000pF		1.999μF	
20μF	0.01μF		80Hz	19.99μF
200μF	0.1μF	± 2.0% of rdg + 1 digits	8Hz	199.9μF
2000μF	1μF			1999μF
20mF	10μF			19.99μF
Only for CM-1501				
200mF	100μF	± 5.0% of rdg + 10 digits	8Hz	199.9mF

Special Function

Low Battery Indication	Approx. < 7.5V	Sampling Rate	3 times per second
Capacitance discharge protection	✓	Power	9V (6F22) X 1

- Standard Accessories : Test Lead, Manual
- Dimension : 185(H) x 93(W) x 35(D)mm

LCR-4070



Features:

- 3½ Digit Display
- 1,999 Count
- Full Protection function, capacitor with the function of Self discharge
- Auto Power Off (APO)

CAPACITANCE

Range	Resolution	Accuracy
200pF	0.1pF	± 2.5% of rdg + 5 digits
2nF	1pF	
20nF	10pF	
200nF	100pF	
2μF	1nF	
20μF	10nF	
200μF	100nF	± 5.0% of rdg + 5 digits
2000μF	1μF	

INDUCTANCE

Range	Resolution	Accuracy
200μH	0.1μH	± 3.0% of rdg + 5 digits
2mH	1μH	± 2.0% of rdg + 5 digits
20mH	10μH	
200mH	100μH	
2H	1mH	
20H	10mH	± 5.0% of rdg + 5 digits

RESISTANCE

Range	Resolution	Accuracy
20Ω	0.01Ω	± 1.0% of rdg + 5 digits
200Ω	0.1Ω	± 0.8% of rdg + 2 digits
2KΩ	1Ω	
20KΩ	10Ω	
200KΩ	100Ω	
20MΩ	10KΩ	± 2.0% of rdg + 5 digits

Special Function

Low Battery Indication	Approx. < 7.5V	Sampling Rate	3 times per second
Capacitance discharge protection	✓	Power	9V (6F22) X 1

- Standard Accessories : Soft Carrying Case, Test Lead, Manual
- Dimension : 185(H) x 93(W) x 35(D)mm



LCR-4080Q

INDUCTANCE GEAR (L) & Ls/Lp

	Display Range	Min. resolution	Accuracy : $\pm(a\% \text{ of rdg} + b \text{ dgts})$ (under 18 ~ 28°C)
100Hz/120Hz	20.000mH	1μH	$\pm(1.0\%+5)$
	200.00mH	0.01mH	$\pm(0.5\%+5)$
	2000.0mH	0.01mH	$\pm(0.5\%+5)$
	20.000H	1mH	$\pm(0.5\%+5)$
	200.0H	0.01H	$\pm(1.0\%+5)$
1KHz	2000.0H	0.1H	$\pm(1.0\%+5)$
	2000.0μH	0.1μH	$\pm(1.0\%+5)$
	20.000mH	1μH	$\pm(0.5\%+5)$
	2000.00mH	0.01mH	$\pm(0.5\%+5)$
	2000.00mH	0.1mH	$\pm(1.0\%+5)$
100KHz	20.000H	1mH	$\pm(1.0\%+5)$
	200.00H	0.01H	$\pm(2.0\%+5)$
	200.000H	0.01μH	$\pm(1.0\%+5)$
	200.00μH	0.01μH	$\pm(1.0\%+5)$
	2000.0μH	0.1μH	$\pm(0.5\%+5)$
100KHz	20.00mH	1μH	$\pm(0.5\%+5)$
	20.000μH	0.001μH	$\pm(2.0\%+5)$
	200.00μH	0.01μH	$\pm(2.0\%+5)$
	2000.0μH	0.1μH	$\pm(2.0\%+5)$



CAPACITANCE CAP GEAR (C) & Cs/Cp

	Display Range	Min. resolution	Accuracy : $\pm(a\% \text{ of rdg} + b \text{ dgts})$ (under 18 ~ 28°C)
100Hz/120Hz	20.000nF	1pF	$\pm(2.0\%+5)$
	200.00nF	0.01nF	$\pm(0.5\%+5)$
	2000.0nF	0.1nF	$\pm(0.5\%+5)$
	20.000μF	1nF	$\pm(0.5\%+5)$
	200.00μF	0.01μF	$\pm(1.0\%+5)$
1KHz	2000.0μF	0.1μF	$\pm(2.0\%+5)$
	20.00mF	0.1mF	$\pm(2.0\%+5)$
	2000.0pF	0.1pF	$\pm(1.0\%+5)$
	20.000nF	1pF	$\pm(1.0\%+5)$
	200.00nF	0.01nF	$\pm(0.5\%+5)$
10KHz	200.00nF	0.1nF	$\pm(0.5\%+5)$
	20.000μF	1nF	$\pm(0.5\%+5)$
	200.00μF	0.01μF	$\pm(1.0\%+5)$
	2000.0μF	0.1μF	$\pm(1.0\%+5)$
	2000.0pF	0.1pF	$\pm(1.0\%+5)$
100KHz	20.000nF	1pF	$\pm(1.0\%+5)$
	200.00nF	0.01nF	$\pm(1.5\%+5)$
	2000.0nF	0.1nF	$\pm(2.0\%+5)$
	2000.0pF	0.1pF	$\pm(2.0\%+5)$
	20.000nF	1pF	$\pm(2.0\%+5)$
	200.00nF	0.01nF	$\pm(5.0\%+5)$

Features:

- Main display: 19,999 Count, Secondary display: 1999 Count
- Measurement frequency : 100Hz/120Hz/1KHz/10KHz/100KHz
- Measurement voltage : 0.6Vrms
- Output impedance : 120Ω
- LCR automatic identification/manual measurement
- Open/short calibration
- Power : 9V (6F22) X 1

RESISTANCE GEAR (R) & Rs/Rp

	Display Range	Min. resolution	Accuracy : $\pm(a\% \text{ of rdg} + b \text{ dgts})$ (under 18 ~ 28°C)
100Hz/120Hz	200.00Ω	0.01kΩ	$\pm(1.0\%+5)$
	2.0000kΩ	0.1Ω	$\pm(0.3\%+5)$
	20.000kΩ	1Ω	$\pm(0.3\%+5)$
	200.00kΩ	0.01kΩ	$\pm(0.5\%+5)$
	2.0000MΩ	0.1kΩ	$\pm(1.0\%+5)$
1KHz	20.000MΩ	1kΩ	$\pm(2.0\%+5)$
	20.000Ω	0.001Ω	$\pm(1.0\%+5)$
	200.00Ω	0.01Ω	$\pm(1.0\%+5)$
	2.0000kΩ	1Ω	$\pm(0.3\%+5)$
	20.000kΩ	0.1kΩ	$\pm(0.3\%+5)$
10KHz	200.00kΩ	1kΩ	$\pm(0.5\%+5)$
	2.0000MΩ	0.01kΩ	$\pm(1.0\%+5)$
	20.000MΩ	0.1kΩ	$\pm(2.0\%+5)$
	20.000Ω	0.001Ω	$\pm(1.0\%+5)$
	2.0000kΩ	0.01Ω	$\pm(0.3\%+5)$
100KHz	20.000kΩ	0.1Ω	$\pm(0.5\%+5)$
	200.00kΩ	1Ω	$\pm(1.0\%+5)$
	2.0000MΩ	0.01kΩ	$\pm(2.0\%+5)$
	20.000Ω	0.1kΩ	$\pm(2.0\%+5)$
	200.00Ω	0.001Ω	$\pm(2.0\%+5)$
	2.0000kΩ	0.01Ω	$\pm(1.0\%+5)$
	20.000kΩ	0.1Ω	$\pm(2.0\%+5)$
	200.00Ω	0.01Ω	$\pm(1.0\%+5)$

Features:

- Large LCD Display for easy reading
- 4 wire testing, capable of testing extreme low resistance
- Accurate measurement of conductor, electric heading elements & solder point
- High measurement range of 0.01mΩ~2kΩ at 6 ranges
- Strong anti-magnetic & anti-jamming functions
- Full function Protection



MO-5000

TECHNICAL DATA

Range	Resolution	Accuracy	Measuring Current
20mΩ	0.01mΩ	$\pm 1.5\% \text{ of rdg} \pm 3 \text{ digits}$	Approx. 1000mA
200mΩ	0.1mΩ	$\pm 0.5\% \text{ of rdg} \pm 3 \text{ digits}$	Approx. 500mA
2Ω	1mΩ		
20Ω	10mΩ		
200Ω	100mΩ		
2kΩ	1Ω		

- Standard Accessories : 4-Wire Test Lead, Shoulder Strap, Manual
- Dimension : 176(H) x 116(W) x 63(D)mm

SPECIAL FUNCTION

Low battery indication	Less than approx. 7.5V
Functional protection	✓
Sampling rate	3 times/sec.
Operation mode	Manual range
Max. display	1,999
LCD size	75 x 52 mm
Power Source	AA 1.5V x 6 or external DC 9V power Source
Power consumption	Quiescent current approx. 50mA

Re-Calibrated SMD Components Identifier in a Set of Tweezers

SMD TESTER

Features:

- Diode Test
- Auto Power Off (APO)
- Low battery indication

CAPACITANCE

Range	Resolution	Accuracy
3nF	1pF	± 2.5% of rdg + 3 digits
30nF		
300nF		
3μF		
30μF		
300μF		
3mF	± 3% of rdg + 3 digits	± 3% of rdg + 3 digits
30mF		

RESISTANCE

Range	Resolution	Accuracy
300Ω	0.1Ω	± 1% of rdg + 2 digits
3KΩ		
30KΩ		
300KΩ		
3MΩ		
30MΩ		
		± 1.2% of rdg + 3 digits

- Standard Accessories : Hard Box, Manual
- Dimension : 170(H) x 31(W) x 17(D)mm



Special Function

Diode Check

Open Voltage : 2.8V

Testing Current : 2mA

Continuity Check

When the resistance is less than 30Ω, the buzzer is sounded

POWER

CR 2032 (3V X 1)

TT-825

Features:

- 3½ Digit LCD Display
- 1,999 Count
- Data Hold Function
- Auto Range
- Measuring forward voltage, reverse voltage, forward saturation voltage drop, amplification factor, reverse leakage current of various crystal diode, audios, silicon controlled rectifier (SCR), field effect transistor (FET)
- Measuring rated working voltage of chemical capacitor, ethylene capacitor, a capacitor, leaded multilayer ceramic capacitor, high voltage locker.
- Measuring protection voltage of varistor.
- Measuring starting voltage of neon bulb, neon lamp
- Measuring constant voltage value of 78, 79 series three-pole circuit.

TECHNICAL DATA

Basic Functions	Range	Accuracy
V(BR)	1000V	Breakdown of Current <1mA
Vcc(set)	200V	Breakdown of Current <1mA
	2A(Ic)	Ic approx 2000mA, Ib approx 200mA
HFE	800mA(Ic)	Ic approx 800mA, Ib approx 80mA
	100mA(Ic)	Ic approx 100mA, Ib approx 100A
	10mA(Ic)	Ic approx 10mA, Ib approx 1mA
	10mA(Ib)	Ib approx 10mA
Iceo	10mA(Ib)	Ib approx 1mA
	10mμ(Ib)	Ib approx 0.01mA
	2000μA	Vcc approx 27V
Voltage of Thread-end	78xx/79xx	Ui approx 27V



- Standard Accessories : Hard Case (Meter Enclosed), Manual

- Dimension : 150(H) x 100(W) x 70(D)mm

POWER

AA 1.5V X 4



LX-101A/LX-102A



Features:

- Data Hold
- Auto Power Off (APO)
- Peak Hold (LX-102A)

LX-103



Features:

- Large Range upto 1,00,000 Lux
- Large LCD Display with Backlight & Bar Graph
- Auto Power Off (APO)
- Data Hold & Max./Min.

LX-104



Features:

- 3,999 Count with Bar graph
- User selectable FC/Lux
- USB Computer Interface (Advanced software program for all windows)
- Capacity of Data Logging 99

LX-107



Features:

- 3½ Digits (1999 Digits)
- Select either Watts per Square Meter (W/m^2) or BTU.
- Max./Min. Peak Hold functions.
- Data Hold.
- Compass functions, easy to know the direction.

Technical Data

Basic Functions	LX-101A	LX-102A	LX-103	LX-104	LX-107
Range	Lux	0~2,00,000 LUX	0~2,00,000 LUX	0~1,00,000 LUX	4,00,000 LUX
	FC	-	0~20,000 FC	-	2000 W/m^2
Resolution	0.1 Lux		1 Lux/1 FC	0.1 Lux / 0.01FC	634BTU/(ft2 x h)
Accuracy	+ 5% of reading $\pm$ 10% FS.		$\pm$ (3%+5 Lux)	$\pm$ 5% of rdg $\pm$ 10 digits (<10,000 Lux) $\pm$ 10% of rdg $\pm$ 10 digits (<10,000 Lux)	1W/m ² /1BTU $\pm$ 10W/m ² or $\pm$ 5% $\pm$ BTU/(ft2 x h) or $\pm$ 5%
Receiving Light	Silicon photo electricty diode		Silicon photo - diode & Spectral response fitter	Silicon photo electricty diode	-
Power	9V (6F22) X 1		AAA 1.5V X 3	9V (6F22) X 1	9V (6F22) X 1
Standard Accessories	Soft Carrying Case, Manual		Soft Carrying Case, Manual	Soft Carrying Case, Manual, Photo Detector and USB Cable & Software	Soft Carrying Case, Manual
Dimension	Photo Detector : 100(H) x 60(W) x 27(D)mm 130(H) x 95(W) X 30(D)mm		184(H) x 60(W) x 29(D)mm	Photo Detector : 115(H) x 60(W) x 27(D)mm 203(H) x 75(W) x 50(D)mm	130(H) x 95(W) x 30(D)mm

SL-1350



Features:

- DC Output : 0~1.3V 10mV/dB
- 'A', 'C' or 'Flat' weighing with Slow / Fast response
- 94dB in Full calibration at (1KHz)
- Optional RS-232 Communication (Advanced Software program for all windows)
- Alarm Volume o/p : 30~130dB
- Alarm Volume o/p : LED Optional Relay output

Measurement:

- LP : Current Sound pressure Level
- Leq : Equivalent continuous A sound pressure level (i.e. Arithmetically mean value in a period of time set)
- LN : Statistic analysis i.e. % of all measured values which is Greater than or equal to the alarm value (Alarm set by user)

Technical Data :

Frequency	Measurement		Resolution	Accuracy
31.5Hz~8kHz	LP	30~130dB (A)	0.1dB	1dB
		35~130dB (C)		
		35~130dB (F)		
	Leq	30~130dB		
		10Sec/1min/5min/10min		
		15min/30min/1hr/8hr/24hr		
LN	0~100%			

Special Function :

Memory	Max. Value(30 groups)	Power	AAA 1.5V x 4
Alarm	Electron		

- Standard Accessories : Hard Carrying Case, Wind Screen Ball, Manual
- Optical Accessories : HTC Software with RS-232 USB Cable
- Dimension : 236(H) x 63(W) x 26(D)mm

SL-1352



Features:

- Max./Min. Measurement
- Over Range Display / Under range display
- A & C Weighing
- FAST & SLOW response
- Adjustable Alarm Levels
- Backlight / Data Logging
- USB Computer Interface (advanced Software program for all Windows)

Technical Data :

Basic Functions	Range
Accuracy	± 1.4dB
Resolution	0.1dB
Frequency Range	31.5~8kHz
Dynamic Range	50dB
Level Range	Low:30~80dB Medium:50~100dB High:80~130dB Auto: 30~130dB
Time Weighing	FAST (125ms), SLOW (1s)
Sensor	1/2" electric condenser microphone
Display Update	2 times/sec
Analog Output	AC/DC outputs, AC=1Vrms, DC=10mV/dB

POWER

9V (6F22) X 1

- Standard Accessories : Gift Box with Hard Carrying Case, Manual, Audio Plug, Windscreen Ball, & DC 9V power supply, USB Cable & Software
- Dimension : 252(H) x 66(W) x 33(D)mm

CAL-900



Standards	GB/T15173, IEC942
Sound Pressure	94 dB and 114 dB
Accuracy	0.3 dB
Frequency	1000±0.01% Hz allows calibration with A,B,C or D weighting networks or linear.
Application	Calibration of 1" and 1/2" microphones
Temperature Coefficient	0 to 0.01 dB/oC
Altitude Effects	Approximately 0.1dB decrease for each2000 feet increase in altitude from sea level to 12,000 feet elevation, or comparable atmospheric pressure change (approximately every 50mm of Hg decrease)
Temperature	-10 to = 50°C (operating)
Range	-40 to =65°C (storage with batteries removed)
Power	AAA 1.5V X 4 (UM - 4)
Dimension	137 x 51 x 51mm
Weight	200g



AVM-06



Features:

- Used for ambient temperature, humidity, dew point temperature, wet bulb temperature, wind speed & air volume
- Data Hold
- Auto Power Off (APO)
- USB real time data uploading functions
- Backlight LCD

Technical Data :

Air Velocity			
Basic Functions	Range	Resolution	Accuracy
m/s (Meters/second)	0.40~30.00 m/s	0,01 m/s	±2.0% of rdg + 0.5m/s
Km/h (Kilometers/hour)	1.40~108.0 Km/h	0.01~0.1 Km/h	±2.0% of rdg + 1.8Km/h
ft/s (feet/second)	1.30~98.50 ft/s	0.01 ft/s	±2.0% of rdg + 1.6 ft/s
knots (Nautical miles / hour)	0.80~58.30 knots	0.01 knots	±2.0% of rdg + 1.0knots
(Nautical miles / hour)	0.90~67.10 miles/h	0.01 miles/h	±2.0% of rdg + 1miles/h
ft/m (Feet/minute)	78~5900 ft/m	0.01~1 ft/m	±2.0% of rdg + 10ft/m
Air Volume Unit			
Basic Functions	Range	Resolution	
CFM	0~9999	0.01~1	
CMM			
CMS	0~9999		
POWER			
AAA 1.5V X 3			
• Standard Accessories : Soft Carrying Case, Manual, USB Cable & Software			
• Dimension : 165(H) x 85(W) x 38(D)mm			

AVM-07



Features:

- 0.5" (13mm) 4Digit Display
- Data Hold
- Data Memory : 24 groups
- Auto Power Off (APO)
- Optional RS-232 Communication (Advanced Software Program for all windows)
- Backlight LCD

Technical Data :

Air Velocity			
Basic Functions	Range	Resolution	Accuracy
m/s (Meters/second)	0.40~45.0 m/s	0.1m/s	± 2% of rdg +0.1m/s digits
Km/h (Kilometers/hour)	1.4~162.0 Km/hr	0.1Km/hr	± 2% of rdg +0.1km/hr digits
ft/min (Feet/minute)	80~8860 ft/min	0.1ft/min	± 2% of rdg +0.1ft/min digits
knots(Nautical MPH)	0.8~88.0 knots	0.1 knots	± 2% of rdg +0.1knots digits
Air Flow			
Basic Functions	Range	Resolution	Accuracy
CMM(m³/min)	0~9999 m³/min	0.001~1	-
CFM(ft³/min)	0~9999 ft³/min	0.001~1	-
Beaufort Scale	0~12	0.1	±0.5
Wave Height	0~14	0.1	±0.1
Air Temperature	-10~60°C	0.1°C	0.5°C
	14~140°F	0.1°F	0.9°F

Special Function :

Data Memorized	24 Groups	Operating Temp.	0~50°C(32~122°F)
Air Velocity/ Flow Sensor	Conventional angled	Operating Humidity	Max. 80% RH
	Vane arm with low-Friction ball bearing	Power Supply	4x 1.5 AAA size
Temperature Sensor	Precision thermistor	Auto Power Off	0~9 minutes set by users

POWER

AAA 1.5V X 4

- Standard Accessories: Sensor Probe, Hard Carrying Case, Manual
- Optional Accessories :HTC Software with RS-232 USB Cable
- Dimension :156(H) x 67(W) x 28(D)mm Sensor Head -72mm Dia

AVM-08

Features:

- °C / °F Function
- Super large LCD display with backlight
- Reading the Air Velocity & Temperature same Time
- Thermistor sensor for Temperature measurement, Fast response time.

Electrical Specifications

Air Velocity

Basic Function	Range	Resolution	Accuracy
m/s (Meters/second)	0.1~25.0 m/s	0.01 m/s	± 5% of rdg + 1 digits
Km/h (Kilometers/hour)	0.3~90.0 km/h	0.1 km/h	
ft/min (Feet/minute)	20~4925 ft/min	1ft/min	
MPH	0.2~55.8 MPH	0.1 MPH	
knots	0.2~48.5 Knots	0.1 Knots	± 1°C / 1.8°F
Temperature	0~50°C (32°F to 122°F)	0.1°C/0.1°F	

POWER

9V (6F22) X 1

Standard Accessories : Anemo Probe, Carrying Case, Manual, Power Adaptor
Dimension : 210(H) x 75(W) x 50(D)mm

Features:

- Measure Accelerator / Velocity / Displacement with RPM & Frequency
- Metric / Imperial Measurement
- AC output socket for headphones and recording
- Optional Headphones for use as electronic stethoscope
- Optional RS-232 Communication
(Advanced Software Program for all windows)

VB-8205

Technical Data :

Basic Functions		Metric	Imperial
Acceleration	10Hz~1KHz (Mode1)	0.1~400.0 m/s ²	0.3~1312 ft/s ²
	10Hz~10KHz (Mode10)		
Velocity	10Hz~1KHz	0.01~400.0 mm/s True RMS	0.000~16.00 inch/s
Displacement	10Hz~1KHz	0.001~4.000mm	0.04~160.0 mil
Revolution/min RPM	60~99,990r/min (rdg. should be multiplied by 10 if the display show 10)		
Frequency	1~20 KHz		

POWER

AAA 1.5V X 4

Standard Accessories : Magnet, Accelerometer, Stinger Probe (Cone), Stinger Probe (Ball), Hard Carrying Case, Manual

Optional Accessories : HTC Software with RS-232 USB Cable
Dimension : 124(H) x 62(W) x 30(D)mm



HD-303 MINI HYGROMETER



Features :

- Data Hold
- Max/Min
- Back Light
- Dew Point
- Auto Power Off (APO 30 Min)

Technical Data

Basic Function		Range	Resolution	Accuracy
Humidity		0.0% ~ 99.9 % RH	0.1%RH	20%~80% $\pm 3.0\%$ RH others $\pm 4.0\%$ RH
Temperature	°C	-20.0°~60.0°C	0.1°C	0.0°C ~ 45.0°C $\pm 1.5^\circ\text{C}$ others $\pm 1.5^\circ\text{C}$
	°F	-4.0°~140.0°F	1°F	32°F ~ 113°F $\pm 2.0^\circ\text{F}$ others $\pm 3.0^\circ\text{F}$
WET BULB Temperature	°C	-20.0°~60.0°C	0.1°C	0.0°C ~ 45.0°C $\pm 1.0^\circ\text{C}$ others $\pm 1.5^\circ\text{C}$
	°F	-4.0°~140.0°F	1°F	32°F ~ 113°F $\pm 2.0^\circ\text{F}$ others $\pm 3.0^\circ\text{F}$
DEW Point Temperature	°C	-50.0°~60.0°C	0.1°C	0.0°C ~ 45.0°C $\pm 1.0^\circ\text{C}$ others $\pm 1.5^\circ\text{C}$
	°F	-58.0°~140.0°F	1°F	32°F ~ 113°F $\pm 2.0^\circ\text{F}$ others $\pm 3.0^\circ\text{F}$

POWER AAA 1.5 V X 3

- Standard Accessories : Manual, Soft Carry Case
- Dimension : 138 (H)X 56(W) X 25(D) mm

Features :

- Data Hold
- Max/Min
- Back Light
- Temp and Humidity
- Auto Power Off (APO 10 Min)

Technical Data

Basic Function		Range	Resolution	Accuracy
Wind Speed		0.70~30.00 m/s	0.01	< 1.00 m/s ± 0.7 m/s 1.00~30.00 m/s $\pm (2\% + 0.5 \text{ m/s})$
		2.50~108.0 km/h	0.01~0.1	
		2.30~98.50 ft/s	0.01	
		137.0~5900 ft/m	0.1~1	
		1.30~58.30 Knots	0.01	
		1.50~67.10 mil/h	0.01	
Temperature	°C	-20.0~60.0°C	0.1°C	0.0°C ~ 45.0°C $\pm 1.0^\circ\text{C}$ others $\pm 1.5^\circ\text{C}$
	°F	-4.0~140.0°F	1°F	32°F ~ 113°F $\pm 2.0^\circ\text{F}$ others $\pm 3.0^\circ\text{F}$
Humidity		0.0% ~ 99.9 % RH	0.1%RH	20%~80% $\pm 5.0\%$ RH others $\pm 6.0\%$ RH

POWER AAA 1.5 V X 3

- Standard Accessories : Manual, Soft Carry Case
- Dimension : 138 (H)X 56(W) X 25(D) mm

AVM-03

MINI ANEMOMETER



LX-10A MINI LUX METER



Features :

- Data Hold
- Max/Min
- Back Light
- Lux / FC Measurement
- Spectral range 320 ~ 730nm
- Auto Power Off (APO 10 Min)

Technical Data

Basic Function		Range	Resolution	Accuracy
Illumination	LUX	1000, 10000, 200000	10 Lux	(3.0% + 5 dgts) at 2854 K incandescent lamp
	FC	100, 1000, 20000	1 FC	Cosine angle deviation 30 $\pm 2\%$, 60 $\pm 6\%$, 80 $\pm 25\%$
Sensor Type		Silicon Photo-diode and Spectral response filter		
Temperature	°C	-20.0~60.0°C	0.1°C	0.0°C ~ 45.0°C $\pm 1.0^\circ\text{C}$ others $\pm 1.5^\circ\text{C}$
	°F	-4.0~140.0°C	1°F	32°F ~ 113°F $\pm 2.0^\circ\text{F}$ others $\pm 3.0^\circ\text{F}$
Humidity		0.0% ~ 99.9% RH	0.1%RH	20%~80% $\pm 5.0\%$ RH others $\pm 6.0\%$ RH

POWER AAA 1.5 V X 3

- Standard Accessories : Manual, Soft Carry Case
- Dimension : 138 (H) X 56(W) X 25(D) mm

SL-13A MINI SOUND LEVEL METER



Features :

- Data Hold
- Max/Min
- Back Light
- Fast / Slow weighting
- Auto Power Off (APO 10 Min)

Technical Data

Basic Function		Range	Resolution	Accuracy
Sound Level	dB	30~130dBA	0.1dBA	$\pm 1.5\text{dB}(94\text{dB}@1\text{KHz}) \pm 5\text{dB}(94\text{dB}@8\text{KHz})$
Sampling Rate		FAST 125ms / Slow 1s		
Frequency		30Hz ~8KHz		
Sensor Type		1/2 Inch Condensor Micro Phone		
Temperature	°C	-20.0~60.0°C	0.1°C	0.0°C ~ 45.0°C $\pm 1.0^\circ\text{C}$ others $\pm 1.5^\circ\text{C}$
	°F	-4.0~140.0°F	1°F	32°F ~ 113°F $\pm 2.0^\circ\text{F}$ others $\pm 3.0^\circ\text{F}$
Humidity		0.0% ~ 99.9% RH	0.1%RH	20%~80% $\pm 5.0\%$ RH others $\pm 6.0\%$ RH

POWER AAA 1.5 V X 3

- Standard Accessories : Manual, Soft Carry Case
- Dimension : 142 (H)X 58(W) X 28(D) mm

Features :

- 3 Selectable Sensitivity (High/ Medium / Low)
- Buzzer Alarm
- Auto Power Off (APO 5 Min)

Technical Data

Basic Function		Range	Resolution	Accuracy
Sensor Type		Gas-Sensitive Semi-Conductor		
Response Range		about 50 PPM~1000 PPM (Methane)		
Sensitivity		>50 PPM (Methane)		
Test Gas		Acetone, Acetylene, Alcohol, Ammonia, benzene, butane, ethanol, oxirane, gasoline, hexane, hydrogen, methane, naphtha, natural gas, paint thinners, propane, solvents, etc		
Warm up time		About 30 Sec		
Response Range		About 50ppm~1000ppm (Methane)		
Temperature	°C	-20.0~60.0 C	0.1°C	0.0°C ~ 45.0°C $\pm 1.0^\circ\text{C}$ others $\pm 1.5^\circ\text{C}$
	°F	-4.0~140.0 F	1°F	32°F ~ 113°F $\pm 2.0^\circ\text{F}$ others $\pm 3.0^\circ\text{F}$
Humidity		0.0% ~ 99.9 % RH	0.1%RH	20%~80% $\pm 5.0\%$ RH others $\pm 6.0\%$ RH

POWER AAA 1.5 V X 3

- Standard Accessories : Manual, Soft Carry Case
- Dimension : 142 (H)X 58(W) X 28(D) mm

GD-03 MINI GAS LEAK DETECTOR



MS-02 MINI MOISTURE METER



Features :

- Data Hold
- Max/Min
- Red, Orange, Green Tricolor Back Light
- Auto Power Off (APO 5 Min)

Technical Data

Basic Function		Range		Accuracy
Moisture		Material A : 9.0%~57.0%±2.0%		±2.0%
		Material B : 7.0%~52.0%±2.0%		
		Material C : 0.9%~23.0%±2.0%		
		Material D : 0.0%~12.0%±2.0%		
		Material E : 0.7%~9.0%±2.0%		
		Material F : 0.5%~10.0%±2.0%		
	Material G : 0.0%~17.0%±2.0%			
Temperature	°C	-20.0~60.0°C	0.1°C	0.0°C ~ 45.0°C ±1.0°C others ± 1.5°C
	°F	-4.0~140.0°F	1°F	32°F ~ 113°F ±2.0°F others ± 3.0°F
Humidity		0.0% ~ 99.9 % RH	0.1%RH	20%~80% ±5.0% RH others ± 6.0% RH

POWER AAA 1.5 V X 3

- Standard Accessories : Manual, Soft Carry Case
- Dimension : 138 (H) X 56(W) X 25(D) mm



Features:

- Digit 10mm LCD Display
- Ranges: H,M,L
(High, Medium, Low)
- Flash Adjust:
Coarse adjustment,
Fine adjustment
X2 and ÷2 for fast Check
- Triggering Mode: Interior/Exterior

DT-2229



Technical Data :

Basic Functions	Range	Resolution	Accuracy
Flashes Per Minute (FPM)	50~20,000 FPM	0.1 FPM (50~999.9 FPM) 1FPM (Over 1000 FPM)	± 0.05% of rdg + 1 digits

Special Function :

Sampling Time	0.3 Second	Power	AC 220V
Flash Tube Lifetime	Million Times		

- Standard Accessories : Manual, Spare Flash Tube, Power Cord
- Dimension : 220(H) x 125(W) x 125(D)mm



EASY LOG

Features:

- Memory for 32,700 readings
- LCD to show logging information easily
- Free selectable measurement cycle from 1sec to 24hrs.
- Battery life: more than 3 years (Under Ideal condition at 22°C)
- Display all status for Alarm and Record through 2 LED's.
- Alarm display if user-defined max/min values are exceeded
- Analysis software used to view graphically or Text mode For logging data.
- USB Computer Interface (Advanced Software Program for all windows)
- Power 3.6V ER 14250 X 1

Technical Data :

Basic Functions	Relative Humidity		Temperature			
Measuring Range	0~100%RH		-40℃~70℃		-40℉~158℉	
Accuracy	0~35% & 80~100% RH	<±5% RH	-40℃~40℃	±1.0 ℃	-40℉~104℉	±1.8 ℉
	35%~80% RH	±3.0% RH	40℃~70℃	±2.0 ℃	104℉~158℉	±3.6 ℉
Resolution	0.1%RH		0.1℃			
Memory	32,000 (16,000 each for Temperature & Humidity)					
Measuring Rate	1sec. to 24hrs					
Response Time	< 30 S					

- Standard Accessories : Hard Carrying Case, Safety Lock USB Cable & Software
- Dimension : 94.8(H) x 51.4(W) x 29.5(D)mm

PDF LOG

Humidity & Temperature Data Logger With PDF Report

Technical Data :

Basic Functions	Relative Humidity		Temperature			
Measuring Range	0~100%RH		-40℃~70℃		-40℉~158℉	
Accuracy	45~75%RH	±3.0% RH	-40℃~70℃	±1.0 ℃	-40℉~158℉	±1.8 ℉
	Others±5% RH		-10~50℃		14℉~122℉	
			Others±2.0℃ / ±3.6 ℉			
Memory	25000 each Temperature & Humidity					
Resolution	0.1%RH		0.1℃			
File Format	PDF					

- Standard Accessories : Manual, CR2032 battery 3.0 V
- Dimension : 97(H) x 44(W) x 13(D)mm
- Option : Lock



103-CTH

Big Display Thermo / Hygrometer with Clock large 2 line LCD display.

- Temperature Range : -50°C ~ 70°C (-58°F ~ 158°F)
- Temperature Accuracy : $\pm 1.0^{\circ}\text{C}$ or $\pm 1.8^{\circ}\text{F}$
- Humidity Range : 10% ~ 99% RH
- Humidity Accuracy : $\pm 5\%$ (35% ~ 75%) & else $\pm 10\%$
- Time / Temperature / Humidity indicate.
- Temperature Reading for °F & °C.
- MAX./MIN. Temperature & Humidity Memory.
- Calendar with Alarm Clock.
- Power : AAA 1.5V X 1



288-CTH

Big Display Thermo / Hygrometer with Clock large 3 line LCD display.

- Temperature Comfort Display : COMFORT, WET, DRY
- Temperature Range : -50°C ~ 70°C (-58°F ~ 158°F)
- Temperature Accuracy : $\pm 1.0^{\circ}\text{C}$ or $\pm 1.8^{\circ}\text{F}$
- Humidity Range : 10% ~ 99% RH
- Humidity Accuracy : $\pm 5\%$ (35% ~ 75%) or else $\pm 10\%$
- Time / Temperature / Humidity indicate.
- Temperature Reading for °F & °C.
- MAX./MIN. Temperature & Humidity Memory.
- Calendar with Alarm Clock.
- Power : AAA 1.5V X 1



288-ATH

Big Display Indoor-Outdoor Thermo / Hygrometer with Clock large 3 Line LCD display

- Environment Comfort Display : COMFORT, WET, DRY
- Temperature Range: (IN/OUT)-50°C ~ 70°C (-58°F ~ 158°F)
- Temperature Accuracy : $\pm 1.0^{\circ}\text{C}$ or $\pm 1.8^{\circ}\text{F}$
- Humidity Range: (10% ~ 99%)
- Humidity Accuracy : $\pm 5\%$ (35% ~ 75%) or else $\pm 10\%$
- Time / Temperature / Humidity indicate
- Temperature reading for °F & °C
- MAX./MIN. Temperature & Humidity
- 12/24 hours system clock.
- Sensor Length : 3Meters.
- Power : AAA 1.5V X 1



HT-306



Features:

- Large Dual Display
- Sampling Rate 2.5 sample per second
- Dual Display Temperature & Humidity
- Type K Temperature
- Backlight LCD

Technical Data :

Basic Functions	Range & Resolution	Accuracy
Humidity	5.0~98.0% RH	± 3.5% RH
Temperature (K-type)	-20.0~199.9°C	± 3.0% of rdg + 4°C digits
	-20~1000°C	
	-4.0~391°F	± 3.0% of rdg + 7°F digits
	-4~1832°F	

POWER

9V (6F22) X 1

- Standard Accessories : Hard Carrying Case, Manual, TP-01 Temperature Probe
- Dimension : 225(H) x 45(W) x 34(D)mm

HD-304



Features:

- Ambient temperature, Dew point temperature & Wet bulb temperature Fast Response Time
- Large-screen LCD and backlight
- Auto Power Off (APO)
- 99 groups Data Logging.

Technical Data :

Basic Functions	Range	Resolution	Accuracy
Ambient Temperature	-20~60°C (-4~140°F)	0.1 °C / °F	±1.0°C (0~45°C) ±1.5°C(-20~0°C, 45 to 60°C)
RH	0~100%RH	0.1%	±2.0% RH(20%~90%) ±4.0% RH(0~10%,80~100%)
WB (Wet bulb Temperature)	-20~60°C (-4~140°F)	0.1 °C / °F	±1.0°C (0~45°C) ±1.5°C(-20~0°C, 45~60°C)
DP (Dew point Temperature)	-50~60°C (-58~140°F)	0.1 °C / °F	±1.0°C (0 to 45°C) ±1.5°C(-50~0°C, 45~60°C)

POWER

AA 1.5V X 3

- Standard Accessories : Hard Carrying Case, Manual
- Dimension : 184(H) x 60(W) x 29(D)mm

DT-1



- Measuring range : -50~330°C -58~662°F (DT-1)
50~300°C -58~626°F (DT-2)
- Accuracy : $\pm 0.5\%$ $\pm 1^\circ\text{C}/1.8^\circ\text{F}$
- Resolution : $0.1^\circ\text{C}/0.1^\circ\text{F}$
- Probe Length : 145MM
- °C and °F selection
- Auto Power Off (APO)
- Water - Resistant
- Water Proof Level IP-54 (Only for DT-1)
- Power : 3 V "CR 1225" Button Cell (DT-1)
- Power : 1.5 V "AG 13" (DT-2)

DT-2



DT-302-1/DT-302-2



Features:

- Large LCD display makes reading clear
- Data Hold Function
- High Resolution
 $0.1^\circ\text{C}/^\circ\text{F}$ (DT-302-1/2)
- High Stability, high accuracy
 0.2% (DT-302-1)
 0.5% (DT-302-2)

Technical Data :

Basic Functions	Range	Accuracy	
		DT-302-1	DT-302-2
Temperature Range	-50~199.9°C	$\pm 0.2\%$ of rdg + 1 digits	$\pm 0.3\%$ of rdg + 1 digits
	-50~1000°C	$\pm 0.3\%$ of rdg + 1 digits	
	1000~1300°C	$\pm 0.5\%$ of rdg + 1 digits	$\pm 0.5\%$ of rdg + 1 digits
	-58~391°F	$\pm 0.3\%$ of rdg + 2 digits	
	-58~2372°F	$\pm 0.5\%$ of rdg + 2 digits	$\pm 0.3\%$ of rdg + 2 digits
	T1-T2	-	$\pm 0.3\%$ (T1-T2) of rdg + 2 digits

POWER

9V (6F22) X 1

Standard Accessories : Manual, TP01 Temperature Probe
Dimension : 130(H) x 95(W) x 28(D)mm



MTX - 1

Features:

- °C or °F Selection
- Circular Laser
- Auto Power Off (APO)
- Colour LED Display
- High Alarm Indicators

Technical Data :

Basic Functions	MTX1
Temperature Range	-50 ~ 550°C/-58~1022°F
Accuracy	-30°C-0°C(-22°F-32°F), ±3°C 0°C-55°C(-22°F-1022°F), ±(1.5%+2°C)
Distance Spot Ratio	12:1
Emissivity	adjustable 0.1~1.0
Resolution	0.1°C / 0.1°F

POWER
AAA 1.5V x 2

- Standard Accessories : Manual
- Dimension : 43(H) x 155(W) x 160(D)mm



LCD Alarm Indicator


MTX-2

Features:

- °C or °F Selection
- Circular Laser
- Auto Power Off (APO)
- Colour LCD Display
- LCD Alarm Indicator

Technical Data :

Basic Functions	MTX2
Temperature Range	-50°C ~ 580°C/ -58~1076°F
Accuracy	50~0°C / -58~32°F; ±4°C/7.2°F 0-550°C / 32~1022°F; ±2%(±2°C/3.6°F)
Distance Spot Ratio	13:1
Emissivity	adjustable 0.1~1.0
Resolution	0.1°C / 0.1°F

POWER
9V (6F22) X 1

- Standard Accessories : Soft Carrying Case Manual
- Dimension : 155(H) x 99(W) x 28(D)mm


MT4

Features:

- °C or °F Selection Circular
- Circular Laser
- Auto Power Off (APO)
- Data Hold Function
- Colour LCD Display

Technical Data :

Basic Functions	MT4
Temperature Range	-50 to 550°C / -58°F to 1022°F
Accuracy	-20°C to 0°C/-4°F to 32:4°C/7°F Above 0°C/32°F:±2%of reading±2°C/3.6°F
Distance Spot Ratio	12:1
Emissivity	adjustable 0.1 ~ 1.0
Spectral Response	8 ~ 14um
Resolution	0.1°C / 0.1°F

POWER
9V (6F22) X 1

- Standard Accessories : Soft Carrying Case, Manual
- Dimension : 132(H) x 55(W) x 168(D)mm


MT6

Features:

- °C or °F Selection Circular
- Circular Laser
- Auto Power Off (APO)
- Data Hold Function
- Colour LCD Display

Technical Data :

Basic Functions	MT6
Temperature Range	-50 ~ 750°C / -4~1382°F
Accuracy	± 2.0% of rdg+2°C digits
Distance Spot Ratio	12:1
Emissivity	adjustable 0.1~1.0
Spectral Response	(8~14)um
Resolution	0.1°C / 0.1°F

POWER
9V (6F22) X 1

- Standard Accessories : Soft Carrying Case, Manual
- Dimension : 132(H) x 55(W) x 168(D)mm


MT8
Features:

- °C or °F Selection
- Colour LCD
- Auto Power Off (APO)
- Circular Laser
- Data Hold Function


Technical Data :

Basic Functions	MT-8
Temperature Range	-50~800°C/-58 ~1472°F
Accuracy	±1.5%
Relative Humidity	0~99%RH
Accuracy	±5%RH
Distance Spot Ratio	12:1
Emissivity	adjustable 0.10~1.00
Spectral Response	8~14um
Resolution	0.1°C / 0.1°F

POWER
AAA 1.5V X 2

- Standard Accessories : Manual
- Dimension : 148(H) x 102(W) x 46 (D)mm



Features:

- °C/°F Selection
- Automatic Data Hold Function
- Over range indication
- Max./Min. Difference & Average record
- Trigger Lock
- Auto Power Off (APO)
- Type K temperature measurements
- Colour LCD Display with Backlight

MTX-4/IRX-63/64/65/66



Technical Data :

Model		MTX-4	IRX-63	IRX-64	IRX-65	IRX-66
Range	IR	-50~500°C	-50~850°C	-50~1050°C	-50~1250°C	-50~1550°C
		-58~932°F	-58~1472°F	-58~1922°F	-58~2282°F	-58~2822°F
	Contact	-50~1370°C				
		-58~2498°F				
Response Time		< 250 ms				
IR Temp. Resolution		0.1°C / °F				
Basic Accuracy		+1.5% of reading				
Emissivity		Adjustable 0.10~1.0				
Optical Resolution (Distance Spot)		13:1	30:01			
Laser Pointer		Round				

POWER 9V (6F22) X 1

- Standard Accessories : Soft Carrying Case, Manual, TP-01 Temperature Probe, Carry Hook
- Dimension : 192(H) x 83(W) x 95(D)mm

IRX-67/68/69



Features:

Professional High Temperature Infrared Thermometer

- User Selectable °C or °F
- Circular Laser Targeting
- Automatic Data Hold
- Over Range Indication
- Trigger Lock
- Type K Input
- USB interface
- Colour LCD Display with Backlight
- Auto Power Off (APO)

Technical Data :

Basic Functions	IRX-67	IRX-68	IRX-69
Range	-50~1380°C -58~2516°F	-50~1980°C -58~3596°F	-50~2280°C -58~4136°F
Response Time	< 250 ms		
Resolution	0.1°C upto 1000°C Above 1°C		
Basic Accuracy(IR)	± 1.5% of reading		
Optical Resolution (Distance Spot)	50 : 1		
Emissivity	Adjustable 0.10~1.0		
Type K Temp. Range	-50~1370°C / -58~2498°F		
Basic Accuracy (TK)	± 1.5% of reading		
Reading memories	99		

POWER 9V (6F22) X 1

- Standard Accessories : USB Cable & software, Tripod, TP-01 Temperature Probe, Hard Carrying Case, Manual
- Dimension : 192(H) x 120(W) x 59(D) mm



VT-100



Features:

- TFT Coloure lcd display
- Adjustable emissivity and reflected background compensation improves measurement accuracy on semi-reflective surface
- Hot and Cold spot temperature markers that guide the user to the hottest and coldest regions in the infrared heat map
- Select Coloure palette
- Visual and heat map image alignment
- Image capture and save it in SD Card

Specification :

Display	2.5"colour LCD
IR solution	60x60 (3600 pixels)
Visible light image	300,000 pixels
Resolution	20x20°
Field of view	0.15°C/0.27°F
Thermal sensitivity	-20~300°C/-4~572°F
Temperature range	±2% or reading±2°C/3.6°F
Accuracy	Adjustable 0.1~1.0
Emissivity	6Hz
Image frequency	8-14um
Spectral band	fixed
Focus mode	Ironbow, Rainbow, Rainbow High Contrast, Grayscale (white hot) and Grayscale (black hot)
Coloure palette	Blending of the visual and the infrared from full infrared to full visual in 25 % steps
View options	File format
File format	Image storage
Image storage	Memory view
Memory view	Power save
Power save	Working temperature
Working temperature	Storage temperature
Storage temperature	Relative humidity
Relative humidity	Electromagnetic Compatibility
Electromagnetic Compatibility	Power
Power	Battery life
Battery life	Weight
Weight	Dimension
Dimension	

VT-110



Features:

- TFT full view color screen display
- Dual MCU processors, refresh faster
- Hot and cold point temperature markers can guide users to the areas with the highest and lowest temperature in the thermal image.
- Selectable palette
- Hybrid imaging of visual and infrared images
- Images capture saved in SD card
- Connect USB with other power supply and meter, US an power supply to meter directly

Specification :

IR Resolution	33x33 (1089 pixels)
Display Resolution	240*320 pixels
Visual Image Resolution	300,000 pixels
Field Angle	32 X 32°
Infrared Temperature Range	-20~380°C/-4~716°F
Accuracy	>0°C, ±2% or reading ±2°C/3.6°F <0°C, ±3°C/5.4°F Note: Accuracy is measured in an enviroment of 18-28 degree
Dew Point Temperature Range	-30~100°C/-22~212°F
Accuracy	±1.0°C/1.8°F (25°C/77°F,35~70%RH)
Wet Bulb Temperature Range	-30~100°C/-22~212°F
Accuracy	±1.0°C/1.8°F (25°C/77°F,35~70%RH)
Thermal Sensitivity	0.15°C/0.27°F
Emissivity	Adjustable 0.1-1.0
Image Frequency	9HZ
Wavelength Range	8-14um
Focus Mode	Fixed
Palette	Ink colour, black and white, rainbow colour, ocean blue, iron red
View Options	Bleeding of the visual and the infrared from full infrared to full visual in 25% steps
File Format	BMP
Storage	8GB Micro SD Card
Memory View	Scroll all saved images and view them on the screen
USB function	Connect USB cable with PC, meter works as U Disk, stored data in SD card can be download to other power supply and meter. USB can power supply to the meter directly and meter works as usual during this time.
Auto Power Off	3 minutes, 5 minutes, 10 minutes are optional
Working Temperature	-5~40°C/23~104°F
Storage Temperature Range	-20~55°C/-4~131°F
Relative Humidity	10~80%RH
Power	AA 1.5V X 4 & USB Power Supply



- Features:**
- Thermocouple Calibrator
 - Accuracy $\pm 0.02\%$
 - Power : 9V (6F22) X 1

Technical Data:

Output	Range	Output Range	Resolution	Accuracy	Explanation
Voltage	mV	-10~75mV	-0.01mV		
Thermo-couple	J	-200~1200°C -328~2192°F	0.1°C OR °F	$\pm 0.02\% + 2\text{DGT}$	NIST 175 Adopt the ITS-90 Temperature standard
	K	-200~1370°C -328~2498°F	0.1°C OR °F		
	T	-200~400°C/-328~752°F	0.1°C OR °F		
	E	-200~950°C -328~1742°F	0.1°C OR °F		
	R	-20~1750°C/-4~3182°F	1°C OR °F		
	S	-20~1750°C/-4~3182°F	1°C OR °F		
	B	600 ~1800°C/1112~3272°F	1°C OR °F		
	N	-250~1300°C -418~2372	0.1°C OR °F		

- Standard Accessories : Temperature Probe, TP-01, Briefcase, Manual
- Dimension : 190(H) x 89(W) x 42(D)mm

CC-01



- Features:**
- RTD Calibrator
 - Accuracy $\pm 0.02\%$
 - Power : 9V (6F22) X 1

OHM Measurement :

Output	INPUT ACCURACY $\pm \Omega$	
Range	4 Wire	2 Wire & 3 Wire
0.00 Ω -400.00 Ω	0.1	0.15
400.0 Ω -1500.0 Ω	0.5	1
1500.0 Ω -3200.0 Ω	1.0	1.5

OHM Simulate :

Range	Output accuracy $\pm \Omega$	Allow Excitation(mA)
0.00 Ω -400.00 Ω	0.1	0.1~3.0
400.0 Ω -1500.0 Ω	0.5	0.05~0.8
1500.0 Ω -3200.0 Ω	1.0	0.05~0.4

RTD Specification :

RTD Type	Range °C(°F)	Accuracy (°C)			Allowable Excitation(mA)
		Input		Output	
		4W	2W/3W5		
PT10(385)	-200.0~800.0 (-328.0~1472.0)	1.5	1.5	1.5	0.1~3.0
PT50(385)	-200.0~800.0 (-328.0~1472.0)	0.3	0.5	0.5	0.1~3.0
PT100(385)	-200.0~800.0 (-328.0~1472.0)	0.3	0.4	0.4	0.1~3.0
PT200(385)	-200.0~630.0 (-328.0~1166.0)	0.2	0.4	0.4	0.1~3.0
PT500(385)	-200.0~630.0 (-328.0~1166.0)	0.2	0.4	0.4	0.05~0.8
PT100(385)	-200.0~630.0 (-328.0~1166.0)	0.2	0.4	0.4	0.05~0.4
PT100(385)J IS	-200.0~800.0 (-328.0~1472.0)	0.3	0.4	0.4	0.1~3.0

CC-02



- Standard Accessories : Test Lead, Briefcase, Manual
- Dimension : 190(H) x 89(W) x 42(H)mm

Features:

- VOLT/mA Calibrator
- Accuracy $\pm 0.05\%$

Technical Data:

Output	Range	Resolution	Accuracy	Input Impedance
Measure	0 ~ 10v	1mV	$\pm (0.02\% \text{ of reading} + 4 \text{ digits})$	1M Ω
	0 ~ 100mV	0.01mV	$\pm (0.02\% \text{ of reading} + 4 \text{ digits})$	1M Ω
	0 ~ 24mA	1 μ A	$\pm (0.02\% \text{ of reading} + 4 \text{ digits})$	10 Ω
Source	0 ~ 24mA	1 μ A	$\pm (0.02\% \text{ of reading} + 4 \text{ digits})$	
	0 ~ 10mV	0.001V	$\pm (0.02\% \text{ of reading} + 4 \text{ digits})$	
	0 ~ 100mV	0.01mV	$\pm (0.02\% \text{ of reading} + 4 \text{ digits})$	

- Standard Accessories : Soft Carrying Case, Battery Charger, Test Lead, Manual
- Dimension : 195(L) x 95(W) x 45(H)mm

CC-04



CC-09



Features:

- 5½ Digit LED
- Calibration of AC Volt, Amp Frequency Meters
- Calibration of DC Volt, Amp Meters
- Calibration of Resistance Meters, Clamp & Multi Meters

Technical Data:

Output	Range	Accuracy	Turns Ratio	100 / 1	100 / 1
Voltage	250mV, 1V, 2.5V, 5V, 10V, 25V, 50V, 100V, 250V, 500V, 1000V	DCV: $\pm(0.02\%$ of reading + 0.01% FS) ACV: $\pm(0.05\%$ of reading + 0.02% FS)	Input Max.	5A	10A
			Current	500A	1000A
Current	100μA, 500μA, 2.5mA, 10mA, 25mA, 100mA, 250mA, 1A, 2.5A, 10A, 50A	DCI: $\pm(0.03\%$ of reading + 0.02% FS) ACI: $\pm(0.05\%$ of reading + 0.03% FS)	Clamp Jaw	> 20mm	> 28mm
			DC Impedence	0.7Ω	0.9Ω
Frequency	50Hz, 60Hz, 400Hz, 1kHz	<0.1%	DC Burden	5A / 3.5V	10A / 2.5 V
			AC Burden	5A / 6V	10A / 5V
Resistance	10, 24, 50, 100, 240, 500(Ω) 1, 2, 4, 5, 10, 25 (kΩ) 10x1k, 24x1k, 50x1k 100x1k, 240x1k, 500x1k, 1kx1k, 2.4kx1k, 5kx1k, 10kx1k, 24kx1k	$\pm(0.2\%$ of reading + 20mΩ)	Frequencies	DC to 60Hz	DC to 60Hz
			Accuracy	$\pm 0.3\%$ rdg	$\pm 0.3\%$ rdg

Special Function :

Stability	DC : <0.01%FS / 3 min. AC : <0.02%FS / 3 min.
Ripple	<0.2%
Power Supply	230V AC, 50 (60) Hz
Distortion	<0.5%

- Standard Accessories : Key Adjuster, Power Cod, Pair of Output Leads 50A, Briefcase, Optional Accessories Standard Current Coil
- Dimension : 190(L) x 480(W) x 545(H)mm

FG - 5Kg/FG - 20Kg/FG - 100Kg



Features:

- Dual Display

MODEL	FG - 5Kg	FG - 20Kg	FG - 100Kg
Force Range	$\pm 5\text{kgf}$	$\pm 20\text{kgf}$	$\pm 100\text{kgf}$
	$\pm 5000\text{gf}$		
	$\pm 49\text{N}$	$\pm 196\text{N}$	$\pm 980\text{N}$
	$\pm 11\text{Lbf}$	$\pm 44\text{Lbf}$	$\pm 220\text{Lbf}$
Resolution	0.001kgf	0.01kgf	0.01kgf
	1gf		
	0.01N	0.1N	0.1N
	0.01Lbf	0.01Lbf	0.1Lbf
Accuracy	$\pm 0.1\%$ FS ± 1 Digit		
Measurement State	Peak Value Measurement, Real Time Measurement		
Display	2 Reversed 4 Digit Led		
Power Off	10 Minutes Auto Power off, Manual Power Off		
Backlight	Blue Backlight		
Safe Load	150% FS(Buzzer arm Over 110%FS)		
Data Output	USB, Bluetooth (99 Groups)		
Power	AA 1.5V X 2 (UM-3) or 6V DC		
Surrounding	No Vibration Source of Corrosive Medium Around		
Dimension	211(H)x80(W)x36(D)mm		



PM-6102/PM-6105/PM-6115/PM-6130/PM-6175

Features:

- Psi / in H₂O / Mbar
- 11 Pressure Ranges
- Auto Pressure Off (APO)
- Backlight LCD

Unit	PM-6102		PM-6105		PM-6115		PM-6130		PM-6175	
	Range	Res.	Range	Res.	Range	Res.	Range	Res.	Range	Res.
inH2O	±55.40	0.01	±138	1	±415.2	0.1	±830	1	±2078	1
Psi	±2.000	0.001	±5.000	0.001	±15.00	0.01	±30.00	0.01	±75.00	0.1
mbar	±137.8	0.1	±344.7	0.1	±1034	1	±2608	1	±5168	1
KPa	±13.79	0.01	±34.47	0.01	±103.4	0.1	±206.8	0.1	±517.1	0.1
inHg	±0.407	0.001	±1.018	0.001	±30.54	0.01	±61.08	0.01	±15.00	0.1
mmHg	±103.4	0.1	±258.5	0.1	±775.7	0.1	±1551	1	±3878	1
ozin²	±32.00	0.01	±80	1	±240.0	0.1	±480.0	0.1	±1200	1
ftH2O	±4.612	0.001	±11.53	0.01	±34.60	0.01	±69.2	0.1	±173.0	0.1
cmH2O	±140.6	0.1	±351.5	0.1	±1055	1	±2109	1	±5272	1
kgcm²	±0.140	0.001	±0.351	0.001	±1.055	0.001	±2.109	0.001	±5.250	0.001
bar	±0.137	0.001	±0.344	0.001	±1.034	0.001	±2.068	0.001	±5.138	0.001
Max. Pressure Psi	10 Psi		20 Psi		100 Psi					
Accuracy	±0.3% FS									
Linearity/Hysteresis	±0.1% FS									
Repeatability	±0.25% FS									
Pressure connector	1/8" (3.18mm) quick connector									
Over range indication	ERR1 or ERR2									
Power	9V (6F22) X 1									



- Standard Accessories : Soft Carrying Case, Soft Tube, 2 Pcs, Manual, Soft / Hard Tube 2 Pcs, Metal Gas Mouth 2 Pcs
- Dimension : 140(H) X 20(W) X 50(D)

PM-6202 / PM-6205

Features:

- Large Dual LCD with backlight
- Data hold
- Max./Min. Average value with relative time stamp
- Zero adjust, offset & Different function
- Auto Power off
- Low battery indication
- USB Computer Interface
(Advanced Software program for all windows)
- Power : 9V (6F22) X 1



Unit	PM-6202/6205		Unit	
	Range	Resolution		
inH ₂ O	55.40	0.01	Accuracy	±0.3% FSO (25oC)
Psi	2.000	0.001	Repeatability	±0.2%
mbar	137.8	0.1	Linearity/Hysteresis	±0.29% FSO
KPa	13.79	0.01	Pressure Range	± 2 psi
inHg	4.072	0.001	Maximum Pressure	± 10 psi
mmHg	103.4	0.1	Response Time	0.5 Seconds typical
ozin ²	32.00	0.01	Low battery Indicator	Yes
ftH ₂ O	4.612	0.001	Over range indicator	Err.1
cmH ₂ O	140.6	0.1	Under range indicator	Err.2
kgcm ²	0.140	0.001	Operating Conditions	0 to 50oC
bar	0.137	0.001	Storage Conditions	-10 to 60oC
Display	Dual LCD		Power	9V (6F22) X 1

- Standard Accessories : Hard Carrying Case, Tube, Manual, USB Cable & Software.
- Dimension : 210(H) x 75(W) x 50(D)mm

EMF-522



Features:

- 3½ Digits LCD
- 1,999 Counts
- Over Load : LCD display "OL"
- Battery Life : Approximate 100 hours

Specification:

- Range : 200/2000mG, 20/200 μ T
- Resolution : 0.1/1mG or 0.01/0.1 μ T
- Frequency Response : 30~300Hz
- Sensor : Single Axis
- Accuracy : $\pm(2.5\%+6\text{dgt})$ at 50Hz/60Hz
- Sample rate : 2.5 times per Second
- Operating Temperature & Humidity : 5~40°C, below 80% RH
- Storage Temperature & Humidity : -10~60°C, below 70% RH

POWER

9V (6F22) X 1

- Standard Accessories : Soft Carrying Case, Manual
- Dimension : 130(H) x 56(W) x 38(D)mm

EMF-523



Features:

- Measurement method : Digital, triaxial measurement
- Directional characteristic : Isotropic (triaxial)
- Measurement range selection : One continuous range
- Display resolution : 0.1mV/m, 0.1 μ A/m, 0.001 μ W/m², 0.001 μ W/cm²
- Setting time : typically 1.5s (0 to 90% measurement value)
- Sample rate : 3 times per second
- Units: mV/m, V/m, μ A/m, mA/m, μ W/m², mW/m², μ W/cm²

Specification:

Frequency Range : 50Mhz ~ 3.5 Ghz

- Specified measurement range : CW signal (f>50MHz)
0.01V/m - 20.0 V/m
0.01mA/m - 532.6mA/m
0.01W/m² - 106.94mW/m²
- Dynamic range : Typically 75dB
- Absolute error at 1V/m and 2.45GHz : ± 1.0 dB.

Frequency response :

- Sensor taking into account the typical CAL facto : ± 2.4 dB (50MHz to 1.9 GHz)
 ± 1.0 dB (1.9GHz to 3.5GHz)
- Isotropy deviation : Typically ± 1.0 dB (f2.45GHz)
- Overload limit : 0.42 mW/cm² (11 V/m) per axis
- Overload Limit : (0 to 50°C) : ± 0.2 dB

POWER

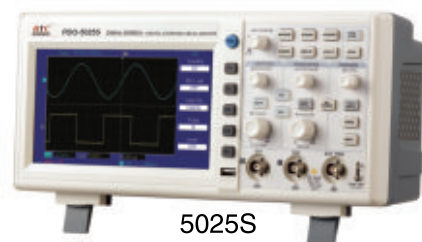
9V (6F22) X 1

- Standard Accessories : Soft Carrying Case, Manual
- Dimension : 60(H) x 60(W) x 195(D)mm

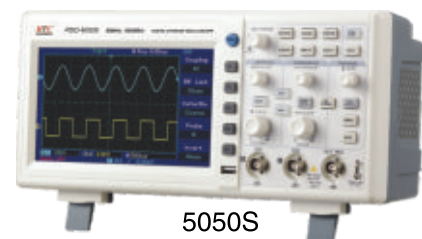


PDO-5025S/5050S/5070S/50100S/50200S

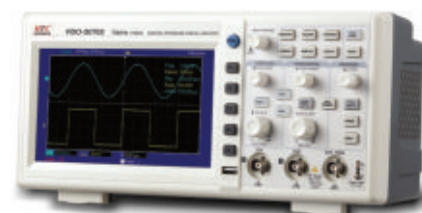
	Model	Band width	Real-time
PDO-5000 Series	PDO-5025S	25MHz	250MS/s
	PDO-5050S	50MHz	1GS/s
	PDO-5070S	70MHz	1GS/s
	PDO-50100S	100MHz	1GS/s
	PDO-50200S	200MHz	1GS/s
Trigger			
Trigger sensitivity	≤1div		
Trigger level scope	Internal	±5div away from screen center	
	EXT	±3V	
	EXT/5*	±15V	
(Typical) precision of trigger level for signal of which Rise Time or Descend Time is not less than 20ns	Internal	±(0.3div V/div) (within scope of ±4div ± from screen center)	
	EXT	±(6% of set value+40mV)	
	EXT/5*	±(6% of set value+200mV)	
Pre-trigger ability	Normal mode/scanning mode, pre-trigger/delay trigger with adjustable pre-trigger depth		
Inhibition scope	PDO-50200S: 100ns-1.5s PDO-5025S/5050S/5070S/50100S : 80ns-1.5s		
(Typical) level set to 50%	Operation if frequency of input signal is not less than 50Hz		
Edge trigger			
Edge type	Ascend, descend, ascend & descend		
Pulse width trigger			
Trigger mode	To be more than, less than or equivalent to positive/negative pulse width		
Pulse width scope	20ns-10s		
Measurement			
Cursor	Manual mode	Voltage difference (V) between cursors;	
		Time difference (T) between cursors;	
		Reciprocal of ΔT (1/Δ)	
Tracing mode	Voltage and time of waveform point		
	It is allowed to display cursor during automatic measurement		
Automatic measurement	Peak value, amplitude, the maximum value, the minimum value, top value, bottom value, middle value, average value, root-mean-square, overshoot, preshoot, frequency, cycle RiseTime, Descend Time, positive pulse width, negative pulse width, positive duty cycle negative duty cycle and delay		
Mathematical operation	+, -, x, %		
Stored waveform	PDO-50200S/PDO-5025S/5050S/5070S/50100S: 20 groups of waveform and 20 kinds of setup		
FFT	Window	Hanning, Hamming, Blackman, Rectangle	
	Sampling point	1024 points	
Lissajous's figure	Phase location	±3 degrees	
	difference		
Trigger Frequency Meter*			
Reading resolution	6-bit		
Trigger sensitivity	<30Vrms		
(Typical) precision	±51ppm (+1 word)		
Power			
Power Voltage	100-240VACRMS, 45-440Hz, CAT II		
Power consumption	To be less than 30VA		
Fuse	F1.6AL 250V; Fuses are on power board in the unit		
Dimension	Width	320mm	
	Height	150mm	
	Depth	130mm	
Weight	Not containing package	2.5kg	
	Containing package	4.0kg	



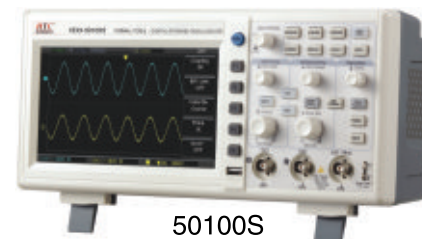
5025S



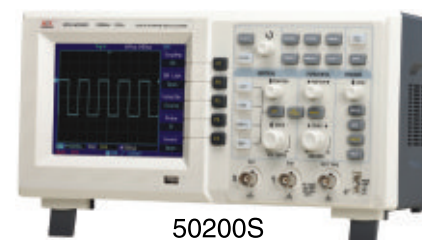
5050S



5070S



50100S



50200S

DSO-10100S WITH SIGNAL GENERATOR



	Model	Band width	Real-time
PDO-10000 Series	DSO-10100S	100MHz	1GS/s
Pulse with Trigger			
Vertical Sensitivity	50mV/div~500V/div		
Horizontal Time base Range	50S/div ~ 10nS/div		
Trigger Mode	Single, Normal, Auto		
Trigger Edge	Rising Edge / Falling Edge		
Coupling	AC/DC		
Input Resistance	1MΩ		
Maximum Test Voltage	40V(1xprobe), 400V(10xprobe)		
Measurement			
Cursor	Manual mode	Voltage Difference (V) between cursors;	
		Time Difference (T) between cursors;	
		Reciprocal of ΔT(1/Δ)	
Stored waveform	built-in 1GB storage space, can store up to 1000 screen capture pictures + 1000 groups of waveform data 240Kbit		
LCD	7 INCH		
	800+400		
Lissajou's figure	Phase location difference	±3 degrees	
Power			
Power Voltage	100~240VACRMS, 45~60Hz, CAT II		
Power Consumption	To be less than 30VA		
Fuse	F1, 6AL, 250V;		
	Fuses are on power board in the unit		
Dimension	Width	310mm	
	Height	145mm	
	Depth	70mm	
Accessories	100M Probe *2, USB Adapter, User Manual		

Features

Built in DDS Function Signal Generator
14 standard signals (@2.5VPP). including sine wave, square wave, triangle wave, sawtooth, anti sawtooth, ladder wave, half wave rectification, full wave rectification, exponential wave, logarithmic wave, pair index, open square wave, multi audio, sink pulse wave, as well as a cut-off output function that can customize the output signal freely. in which the sine wave frequency can reach 10MHz at most and other standard signals can reach 2MHz. cutt-off frequency can reach 2MHz. The wave output device can reach 1MHz at most an the frequency resolution of all signals can reach 1Hz (Step). It is not the half frequency step mode of half frequency division produced by other handheld devices.



SMPS-3002/SMPS-3005

Mini Series Switching Power Supply

Output Voltage	Output Current	Display	Accuracy
0-30V	0-2A	LED Digit Display	$\pm 1\%$ of rdg ± 1 digits
0-30V	0-5A		

The power output parameters

Model	Voltage Stability	Current Stability	Load Regulation	Ripple And Noise
Mini Series	$\leq 0.2\%$	$\leq 0.8\%$	$\leq 0.2\%$	$\leq 0.1\%$

- Standard Accessories : Power Cord, Manual, Test Lead
- Dimension : 240(H) x 150(W) x 270(D)mm



DC-3002/DC-3003/DC-3005/DC-3010

Features:

- Line Regulation : $\leq 0.01\% + 3\text{mV}$
- Load Regulation : $\leq 0.001\% + 3\text{mV}$
- Ripple and noise : $\leq 1\text{mV rms}$
- Protection : Constant current and Short-circuit protection
- Indication Accuracy : $\leq 0.5\% + 1\text{digit}$
- Input Voltage : $220\text{VAC} \pm 10\%$, $50\text{Hz} \pm 2\text{Hz}$

Models :

Model	DC 3002	DC 3003	DC 3005	DC 3010
O/P Voltage	0~30V			
O/P Current	0~2A	0~3A	0~5A	0~10A

- Standard Accessories : Power Cord, Manual, Test Lead
- Dimension : 120(H) x 150(W) x 270(D)mm



DC-3002-II/DC-3003-II/DC-3005-II

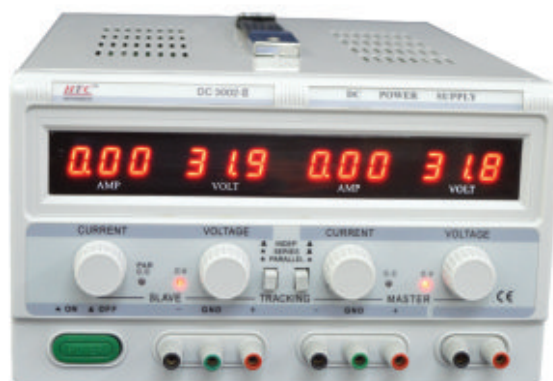
Features:

- Line Regulation : $\text{CV} \leq 0.01\% + 3\text{mV}$; * $\text{CC} \leq 0.2\% + 3\text{mA}$
- Load Regulation : $\text{CV} \leq 0.01\% + 3\text{mV}$; * $\text{CC} \leq 0.2\% + 3\text{mA}$
- Ripple and Noise : $\text{CV} \leq 1\text{mV rms}$; * $\text{CV} \leq 3\text{mA rms}$
- Protection : Constant current and Short-circuit protection
- Tracking Error : $\leq 0.5\% + 10\text{mV}$
- Indication Accuracy : $\leq 0.5\% + 1\text{digit}$
- Input Voltage : $220\text{VAC} \pm 10\%$, $50\text{Hz} \pm 2\text{Hz}$

Models :

Model	DC 3002-II	DC 3003-II	DC 3005-II
O/P Voltage	0~30V		
O/p Current	0~2A	0~3A	0~5A
Fixed O/P	5V, 2A		

- Standard Accessories : Power Cord, Manual, Test Lead
- Dimension : 240(H) x 150(W) x 270(D)mm



FG-2002 / FG-2010



VC-3165



Technical Features

Frequency Range	Output : Impedance : $50\Omega \pm 10\%$
0.1Hz-2MHz (FG-2002)	Amplitude : no less than 20vp-p (Empty load)
0.1Hz-10MHz (FG-2010)	Attenuation : 20dB 40dB
Waveforms	DC bias 0- $\pm 10V$ (Continuously adjustable)
Sine wave, Square wave, Triangle wave, Positive & Negative Sawtooth and Positive & Negative Pulse	Adjustment range of symmetry :
	90:10-10:90
Square-wave front	VCF input
0.1Hz-2MHz<100ns	Input voltage : 5V-0V $\pm 10\%$
0.1Hz-10MHz<35ns	The maximum Voltage ratio : 1000:1
Sine wave Distortion	Input signal : DC-1KHz
<1% (10Hz-100KHz)	Frequency meter
Frequency response	Mesuring range : 1Hz-20MHz
0.1Hz-100KHz $\leq \pm 0.5dB$	Input Impedance : no less than $1M\Omega/20pF$
100KHz-5MHz $\leq \pm 1dB$	Sensitivity : 100m Vrms
100KHz-2MHz $\leq \pm 1dB$	The maximum input : 150V (AC+DC) with attenuator
TTL/CMOS output	
Level : TTL pulse low level is no more than 0.4V, high level is no less than 3.5V	Input attenuation : 20dB
Rising time : no more than 100ns	Mesurement error : $\leq 0.003\% \pm 1\text{digit}$
	Voltage : 220V $\pm 10\%$ (110V $\pm 10\%$)
	Frequency : 50Hz $\pm 2Hz$ (220V $\pm 10\%$)

- Standard Accessories : Power Cord, BNC Line Cable, Manual
- Dimension : 310(H) x 230(W) x 90(D)mm

Features:

- 8digits green LED display
- Selective range, high stability
- Two Channels, operation mode memory
- Range and gate time adjustable
- Power supply: AC 220V, +10%

Specification:

Frequency Range	Accuracy
0.01Hz ~ 2.4GHz	Time base error x Frequency + 1Digit
Cyclic Measurement Range	Time Gate
0.5nS ~ 10S	100ms ~ 10s
Attenuation	Input Impedance
20dB	1M Ω
Channel A (40MHz ~ 2.4GHz)	Channel B (0.01Hz ~ 40MHz)
Sensitivity : 50m Vrms	Sensitivity : 30m Vrms
Input resistance : 50 Ω	Input resistance : 1M Ω (<35pF)
Maximum Input : 3V	Maximum Input : 30V

- Standard Accessories : Power Cord, Manual, Test Probe
- Dimension : 270(H) x 215(W) x 100(D)mm

ML-2



Features:

- LCD Displays with backlight
- Leakage volume in dangerous zone will sound beeping and a red LED flashing
- Low Leakage volume display for warming

Technical Date:

Range	0 ~ 9.99 mW/cm ²
Warning Values	50mW/cm ²
Power	9V (6F22) X 1

- Standard Accessories : Gift Bos, Carrying Case, Manual
- Dimension : 160(H) x 60(W) x 42(D)mm



AL-7000



Features:

- Units of measurement : meters (m) /hpa

Technical Features

Basic Function	
Measuring Range	0-5000m/580-1040 hpa
Resolution	20m/5hpa
Operating Temperature	-20~60°C
Storage Condition	-30~65°C; <90% RH
• Standard Accessories : Neck Strap +Belt Hook • Dimension : 85(H) x 68(W) x 28(D) mm • Weight : 90g	

AL-7010



Features:

- Altitude history & Graphical Display of the last 12 hour altitude readings.
- Total Altitude Gain & Loss
- Max./Min. memory for Altimeter and Barometer Pressure
- Barometer Pressure History & Graphical Display
- Electronic barometer Weather Forecast(Sunny, Slightly Cloudy, Cloudy, Small Rain, Large Rain)
- Pressure Trend Indicators
- Perpetual Calendar with day of week
- 12/24 hour selectable
- Low battery indication

Technical Features

Basic Function	Metric	Imperial	Basic Accuracy
Altimeter	500~9000 Meters	-1600~29500 feet	1 meter / feet
Barometer	300~1100 hPa/mbar	8.84~32.44inHG	1 hPa / mbar (0.01HG)
Indoor Temp.	-10~60°C	14~140°F	0.1°C (0.18°F)
Humidity	20~90% Rh		1% RH
Stop Watch	9hr 59min 59sec.		1/10th Sec. or Sec.

- Standard Accessories : Handy Belt, Manual, Charging Cord
- Dimension : 177(H) x 98(W) x 39(D)mm

CO-01

Features:

- High accuracy CO sensor, Fast response and stable readings
- Sensor : Stabilized electro-chemical Gas-specific
- Large LCD display
- Compact, light and easy to carry
- Low battery consumption, long battery life.

Specification:

Basic Function	Range
Operating Temperature	-20~50°C
Operating Humidity	15%~90%RH
Measurement Range	0~1000 PPM
Accuracy	5%±10PPM
Response Time	<30S
Auto Power off	after 15 minutes of inactivity
Sensor Type	Stabilized electro-chemical Gas-specific

POWER

9V (6F22) X 1

- Standard Accessories : Hard Carrying Case, Manual
- Dimension : 171(H) x 55(W) x 38(D)mm



BTS-600

Features:

- The Battery Tester is designed for measuring the internal impedance and open circuit voltage of the secondary battery including Nickel-metal hydride battery (NiMH), Nickel-cadmium battery(NiCd),Lithium-ion battery(Li-ion), Alkaline battery and lead-Acid battery.
- AC four-terminal method to measure the internal impedance by eliminating lead impedance and contact impedance to get the accurate results.
- Multi-display to show the internal impedance, voltage and clock of the battery simultaneously.
- It has 99 sets of composite comparator function, which can be set at impedance and voltage values to get the reliable detection of battery deterioration.
- Pin type leads, which can easily contact the battery electrodes supplied as standard to get more accurate 4-terminal measurement.

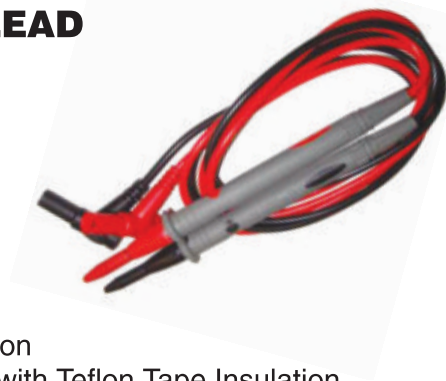


Range	Resolution	Measurement current	Accuracy
40 mΩ	10μΩ	100mA approx.	± 0.8% of rdg + 10 digits
400 mΩ	100μΩ	15mA approx.	
4 Ω	1mΩ	1.5mA approx.	
40 Ω	10mΩ	150μA approx.	



TL-1 TEST LEAD


- Double Insulation
- 100Cm length with Teflon Tape Insulation
- MAX. Insulating Temperature : 260°C
- CAT III 1000V 20A

TL-2 TEST LEAD


- Double Insulation
- 100Cm length with Teflon Tape Insulation
- CAT III 1000V 10A

TP-01 TEMPERATURE PROBE


- Tests the Temperature of environment
- Probe Connected With K Type Plug
- Thermocouple Index No.: K Type
- Length 1000mm
- Range : -40°C~260°C

TP-02A TEMPERATURE PROBE


- Tests the Temperature of environment
- Probe Connected With K Type Plug
- Thermocouple Index No.: K Type
- Range : -30°C~600°C
- Probe Diameter : 3mm, Probe Length : 80mm
- Cable Length : 1500mm

TP-03A TEMPERATURE PROBE


- Tests the Temperature of environment
- Probe Connected With K Type Plug
- Thermocouple Index No.: K Type
- Range : -30°C~750°C
- Probe Diameter : 3mm, Probe Length : 160mm
- Cable Length : 1500mm

TP-04 TEMPERATURE PROBE


- Tests the Temperature of environment
- Probe Connected With Multimeter Jack
- Range : -40°C~260°C
- Length : 1000mm

USB CABLE

Features:

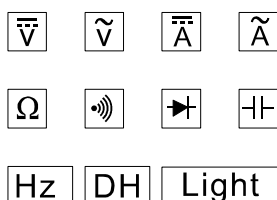
- 1.5 meter Cable with USB 8.5mm Jack for AVM-07 & VB-8205

DM-4010



Features :

- Data Hold
- True RMS
- Multi-Functions
- Electrical Repair
- Appliabce Repair
- Home wiring projects
- Testing electrical systems on cars and boats
- Solar Panel Testing



Technical Data

SPECIFICATION	RANGE	ACCURACY
MEASUREMENT		DM-4010
DC Voltage	2V/20V/200V/2000V	±(0.5%+5)
AC Voltage	2V/20V/200V/2000V	±(0.8%+5)
DC Current	20A/200A/2000A	±(1.9%+10)
AC Current	20A/200A/2000A	±(1.9%+10)
Resistance	200Ω /2kΩ /20kΩ / 200kΩ /2MΩ / 20MΩ	±(0.8%+5)
Capacitance	20nF/200nF/2uF/200uF	±(3%+10)
FEATURES		
Display	Count	1999
Sampling Rate	2.5 times/s	✓
Continuty Buzzer	Less than about 500	✓
Diode		✓
TRMS		✓
Data Hold		✓
Back Light		✓
ACV-Hz		✓
Function Protection		✓
GENERAL		
Power Supply	9V (6F22)	
Product Size	180x85x42mm	
Product Weighth	About 350g (Including Battery)	
Standard Accessory	Leads, Battery, Manual	

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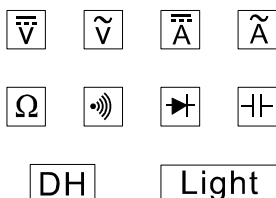


CM-4020



Features :

- Data Hold
- True RMS
- Multi-Functions
- Electrical Repair
- Appliance Repair
- Home wiring projects
- Testing electrical systems on cars and boats
- Solar Panel Testing



Technical Data

SPECIFICATION	RANGE	ACCURACY
MEASUREMENT		CM-4020
DC Voltage	2V/20V/200V/2000V	±(0.5%+5)
AC Voltage	2V/20V/200V/2000V	±(0.8%+5)
DC Current	20A/200A/2000A	±(1.9%+10)
AC Current	20A/200A/2000A	±(1.9%+10)
Resistance	200Ω /2kΩ /20kΩ / 200kΩ /2MΩ / 20MΩ	±(0.8%+5)
Capacitance	20nF/200nF/2uF/200uF	±(3%+10)
FEATURES		
Display	Count	1999
Sampling Rate	2.5 times/s	✓
Operating Method	Auto/Manual/Range	✓
Jaw Opening	55 MM	✓
Continuity Buzzer	Less than about 500	✓
Diode		✓
Data Hold		✓
Inrush Current		✓
Clamp Light		✓
Back Light		✓
Auto Power Off		✓
Function Protection		✓
GENERAL		
Power Supply	9V (6F22 Battery)	
Product Size	270x100x46mm	
Product Weight	About 460g (Including Battery)	
Standard Accessory	Test Leads, Battery, Manual, Carry Case	

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