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Features:

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

YX-360 TRE-B



DC VOLTAGE			RESISTANCE		
Range	Resolution	Accuracy	Range	Resolution	Accuracy
0.1mV~1000V	20KΩ/V	3; for 1000V ; 5	0.2Ω~2kΩ	-	-
DC CURRENT			2Ω~20kΩ	-	-
Range	Resolution	Accuracy	20Ω~200kΩ	-	3
50μA~10A	-	3; for 10V ; 5	200Ω~2MΩ	-	-
AC VOLTAGE			2kΩ~20MΩ	-	-
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	<input checked="" type="checkbox"/>	Function Protection	<input checked="" type="checkbox"/>
Transistor Testing	<input checked="" type="checkbox"/>	Continuity Buzzer	About 100Ω
• Standard Accessories : Test Lead, Manual			
• Dimension : 148(H) x 100(W) x 35(D)mm			

DM - 830L



Features:

- 3 1/2 Digit Manual Multimeter with Backlight
- 1,999 Count
- Data Hold
- Transistor & Diode Test
- Overload Protection
- Low Battery Indication
- CAT II 600V

DC VOLTAGE			AC VOLTAGE		
Range	Resolution	Accuracy	Range	Resolution	Accuracy
200mV	100µV	±0.5% of rdg + 2 digits	200V	100mV	±1.2% of rdg + 10 digits
2V	1mV		600V	1V	
20V	10mV				
200V	100mV				
600V	1V	±0.8% of rdg + 2 digits	RESISTANCE		
DC CURRENT			Range	Resolution	Accuracy
Range	Resolution	Accuracy	200Ω	0.1Ω	±0.8% of rdg + 3 digits
200µA	0.1µA	±1% of rdg + 2 digits	2kΩ	1Ω	
2mA	1µA		20kΩ	10Ω	±0.8% of rdg + 2 digits
20mA	10µA		200kΩ	100Ω	
200mA	100µA	±1.5% of rdg + 2 digits	2MΩ	1KΩ	±1.0% of rdg + 2 digits
10A	10mA	±3% of rdg + 2 digits	POWER		
TRANSISTOR hFE TEST (0-1000)			9V (6F22) x 1		
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



Features:

- 3½ Digit Manual Multimeter
- Counts 2000
- Battery Test
- Max / Min Hold
- Data Hold
- Auto Power Off
- True RMS

DC VOLTAGE

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

AC VOLTAGE

Range	Resolution	Accuracy
200V	0.1V	$\pm 1.2\%$ of rdg +5 digits
600V	1V	

RESISTANCE

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

DC CURRENT

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

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:**

- 3 1/2 Digit Manual Multimeter with Backlight
- 1,999 Count
- Data Hold
- True RMS
- NCV

DC VOLTAGE

Range	Resolution	Accuracy
200mV	100uV	
2000mV	1mV	
20V	10mV	$\pm 0.5\%$ of rdg +4 digits
200V	100mV	
600V	1V	

DC CURRENT

Range	Resolution	Accuracy
20uA	10nA	$\pm 1.0\%$ of rdg +5 digits
2mA	10uA	
200mA	100uA	$\pm 1.0\%$ of rdg +5 digits
10A	10mA	

TRANSISTOR hFE TEST (0–1000)

Range	Test Range	Test Current	Test Voltage
NPN & PNP	0–1000	1b=15 μ A	Vce=1.2V

Special Function

hFE test

Overload Protection

Low Battery Indication

CAT II 600V

Power AAA 1.5V x 2

AC VOLTAGE

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

RESISTANCE

Range	Resolution	Accuracy
200 Ω	0.1 Ω	$\pm 0.8\%$ of rdg +5 digits
2k Ω	1 Ω	
20k Ω	10 Ω	$\pm 0.8\%$ of rdg +1 digits
2M Ω	1k Ω	
200M Ω	100k Ω	$\pm 1.2\%$ of rdg +5 digits

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



Features:

- 3½ Digit Manual Multimeter
- Live Wire Recognition

- Live Remote Control Testing
- Full Overload Protection
- 1,999 Count
- True RMS

DM-81**DC VOLTAGE**

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

RESISTANCE

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

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

CAPACITANCE

Range	Resolution	Accuracy
20nF	10p	±4%of rdg 25 digits
200nF	100pF	
2µF	1nF	
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
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Transistor Testing	✓	Auto Power OFF	Approx. 15min.
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Power	AA1.5V x 2		
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• Standard Accessories : Test Lead, Manual

• Dimension : 175(H) x 83(W) x 31(D)mm

**DM-82****Features:**

- 3½ Digit Pen Type Multimeter with Backlight
- Non Contact Voltage (NCV)
- CAT III 600V
- 1,999 Count

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	

AC CURRENT

Range	Resolution	Accuracy
2mA	0.01mA	
200mA	0.1mA	±2.0% of rdg + 5 digits

RESISTANCE

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

DC CURRENT

Range	Resolution	Accuracy
2mA	0.01mA	±1.8% of rdg + 5 digits
200mA	0.01mA	

AC VOLTAGE

Range	Resolution	Accuracy
2V	0.001V	± 0.8% of rdg + 3 digits
20V	0.01V	
200V	0.1V	
600V	1V	

Special Function

Diode Test	✓	Input impedance	10MΩ
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Auto Power OFF	Approx. 15min.	Sampling Rate	3 times per second
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Continuity Buzzer	Approx. < 50Ω	AC Frequency Response	40-400Hz
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Power	9V (6F22) x 1		
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• Standard Accessories : Test Lead, Manual
• Dimension : 225(H) x 38(W) x 26(D)mm



DM-86**Features:**

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

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			DC CURRENT		
Range	Resolution	Accuracy	Range	Resolution	Accuracy
200mV	0.1mV		200µA	0.1µA	
2V	1mV	±0.5% of rdg + 4 digits	2000µA	1µA	
20V	10mV		20mA	10µA	±1.0% of rdg + 5 digits
200V	100mV		200mA	100µA	
1000V	1V	±1.0% of rdg + 4 digits	2A	1mA	
			20A	10mA	±2.0% of rdg + 5 digits

AC VOLTAGE			AC CURRENT		
Range	Resolution	Accuracy	Range	Resolution	Accuracy
200mV	0.1mV	± 1.5% of rdg + 15 digits	200µA	0.1µA	
2V	1mV		2000µA	1µA	
20V	10mV	± 0.8% of rdg + 6 digits	20mA	10µA	±1.5% of rdg + 5 digits
200V	100mV		200mA	100µA	
750V	1V	± 1.0% of rdg + 6 digits	2A	1mA	
			20A	10mA	±2.0% of rdg + 10 digits

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	
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

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

Special Function

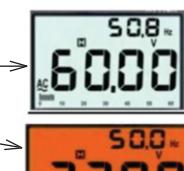
Diode and hFE test	✓	Function Protection	✓
Diode and hFE test	✓	Input impedance	10MΩ
Transistor testing	✓	Sampling Rate	3 times per second
Continuity Buzzer	Approx. < 30 +10	AC Frequency Response	40-400Hz
Low Battery Display	Lower 2.4V	Power	AAA 1.5V X 2
Auto Power OFF	Approx. 30 min		

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



DM-98**Features :**

- 3^½ Digit
- 6000 Count
- Dual LCD with Bargraph
- Live test (sound and light alarm)
- NCV
- True RMS
- Double color backlight
- Input jack LED indicate
- 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	

AC VOLTAGE

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

FREQUENCY / DUTY

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

DC CURRENT

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

AC CURRENT

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

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

RESISTANCE

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

CAPACITANCE

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

TEMPERATURE

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

**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



DM-83T**Features :**

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

DC VOLTAGE

Range	Resolution	Accuracy	Range	Resolution	Accuracy
200mV	0.1mV	±1.0% of rdg + 4 digits	2V	1mV	±0.8% of rdg + 6 digits
2V	1mV		20V	10mV	
20V	10mV		200V	10mV	±1.0% of rdg + 6 digits
200V	100mV		600V	10mV	
600V	1V	±1.0% of rdg + 4 digits			

DC CURRENT

Range	Resolution	Accuracy	Range	Resolution	Accuracy
200uA	0.1μA	±1.0% of rdg + 5 digits	200uA	0.1μA	±1.5% of rdg + 5 digits
2000uA	1μA		2000uA	1μA	
20mA	10μA		20mA	10μA	
200mA	100μA		200mA	100μA	
2A	1mA	±2.0% of rdg + 5 digits	2A	1mA	
10A	10mA	±2.0% of rdg + 10 digits	10A	10mA	±2.0% of rdg + 10 digits

RESISTANCE

Range	Resolution	Accuracy	Range	Resolution	Accuracy
200Ω	0.1Ω	±0.8% of rdg + 1 digits	-40~1000°C	1°C	<400°C ±1.0% of rdg + 5 digits ≥400°C ±1.5% of rdg + 15 digits
2KΩ	1Ω		0~1832°F	1°F	<750°F ±1.0% of rdg + 5 digits ≥750°F ±1.5% of rdg + 15 digits
20KΩ	10Ω		Power	AAA 1.5V X 2	
200KΩ	100Ω				
2MΩ	1KΩ				
20MΩ	10KΩ	±1.2% of rdg + 5 digits			

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

DM-85T**Features :**

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

DC VOLTAGE

Range	Resolution	Accuracy	Range	Resolution	Accuracy
600mV	0.1mV	±1.0% of rdg + 4 digits	6V	1mV	±0.8% of rdg + 6 digits
6V	1mV		60V	10mV	
60V	10mV		600V	100mV	±1.0% of rdg + 6 digits
600V	100mV	±1.0% of rdg + 4 digits			

DC CURRENT

Range	Resolution	Accuracy	Range	Resolution	Accuracy
600uA	0.1μA	±1.0% of rdg + 5 digits	600uA	0.1μA	±1.5% of rdg + 5 digits
6000uA	1μA		6000uA	1μA	
60mA	10μA		60mA	10μA	±1.5% of rdg + 5 digits
600mA	100μA		600mA	100μA	
6A	1mA	±2.0% of rdg + 10 digits	6A	1mA	
10A	10mA	±2.0% of rdg + 10 digits	10A	10mA	±2.0% of rdg + 10 digits

RESISTANCE

Range	Resolution	Accuracy	Range	Resolution	Accuracy
600Ω	0.1Ω	±0.8% of rdg + 5 digits	60nF	10pF	±2.5% of rdg + 6 digits
6KΩ	1Ω		600nF	100pF	
60KΩ	10Ω		6μF	1pF	±2.5% of rdg + 5 digits
600KΩ	100Ω	±0.8% of rdg + 1 digits	60μF	10nF	
6MΩ	1KΩ		600μF	100nF	
60MΩ	10KΩ	±1.2% of rdg + 5 digits	6mF	1μF	±5.0% of rdg + 8 digits
			60mF	10μF	

FREQUENCY

Range	Resolution	Accuracy	Range	Resolution	Accuracy
10Hz	0.01Hz	±0.5% of rdg + 4 digits	-40~1000°C	1°C	<70°C ±1.0% of rdg + 5 digits ≥70°C ±1.5% of rdg + 15 digits
100Hz	0.001Hz		0~1832°F	1°F	<750°F ±1.0% of rdg + 5 digits ≥750°F ±1.5% of rdg + 15 digits
1KHz	1Hz		Power	AAA 1.5V X 2	
10KHz	10Hz				
100KHz	100Hz				
1mHz	1kHz				
10mHz	10kHz				

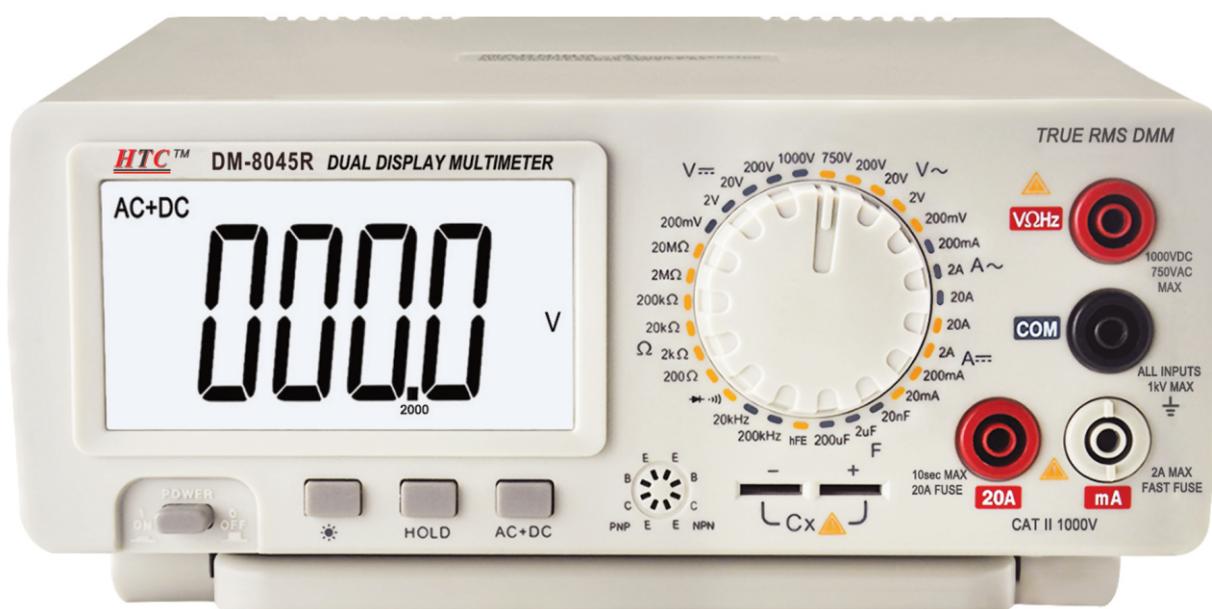
TEMPERATURE

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

- 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	

DC CURRENT

Range	Resolution	Accuracy
20mA	1µA	±0.35% of rdg + 10 digits
200mA	10µA	
2A	100µA	
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		50Hz-5kHz
750V	100mV	± 1.0% of rdg + 50 digits	50Hz-400kHz

AC CURRENT

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

- 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	
20kΩ	1Ω	
200kΩ	10Ω	±0.1% of rdg + 5 digits
2MΩ	100Ω	
20MΩ	1KΩ	

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	

AC VOLTAGE

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

AC CURRENT

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

RESISTANCE

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

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

Range	Resolution	Accuracy
400mV	0.1mV	±1.0% of rdg + 5 digits
4V	1mV	
40V	10mV	
400V	100mV	
600V	1V	

AC VOLTAGE

Range	Resolution	Accuracy
400mV	0.1mV	± 1.5% of rdg + 5 digits
4V	1mV	
40V	10mV	
400V	100mV	
600V	1V	

AC CURRENT

Range	Resolution	Accuracy
400A	100mA	<40A ±3.0% of rdg + 5 digits
600A	1A	

RESISTANCE

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

CAPACITANCE

Range	Resolution	Accuracy
4nF	1pF	±5.0% of rdg + 20 digits
40nF	10pF	
400nF	100pF	
4μF	1nF	
40μF	10nF	

FREQUENCY

Range	Resolution	Accuracy
100Hz	0.1Hz	±0.5% of rdg + 5 digits
1kHz	1Hz	
10kHz	10Hz	
100kHz	100Hz	
1MHz	1kHz	

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

Features:

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

AC VOLTAGE			DC VOLTAGE			TEMPERATURE		
Range	Resolution	Accuracy	Range	Resolution	Accuracy	Range	Resolution	Accuracy
20V	10mV	±1.0% of rdg + 5 digits	200mV	0.1mV	±0.5% of rdg + 5 digits	(-40~1000)°C	1°C	±1.0% of rdg + 5 digits
750V	1V	±1.2% of rdg + 5 digits	20V	10mV	±1.0% of rdg + 5 digits	1000V	1V	±1.0% of rdg + 5 digits

AC CURRENT			RESISTANCE					
Range	Resolution	Accuracy	Range	Resolution	Accuracy	Diode Test	✓	
200A	0.1A	±2.0% of rdg + 5 digits	200Ω	0.1Ω	±0.8% of rdg + 5 digits	Continuity Test	✓	
1000A	1A	±2.0% of rdg + 5 digits	2kΩ	1Ω	±0.8% of rdg + 5 digits	Function Protection	✓	
POWER			20kΩ	10Ω	±0.8% of rdg + 1 digits	Sampling Rate	2 or 3 times/sec	
AAA1.5V x 2			200kΩ	100Ω	±0.8% of rdg + 1 digits	Input Impedance	10MΩ	
			2mΩ	1kΩ	±0.8% of rdg + 1 digits	• Standard Accessories :		
			20mΩ	10kΩ	±1.2% of rdg + 5 digits	Soft Carrying Case, Manual, Test Lead		
			200mΩ	100Ω	±1.2% of rdg + 5 digits	• Dimension :		
			123(H) x 270(W) x 35(D)mm					

Special Function**CM-2070C****Features:**

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

DC VOLTAGE

Range	Resolution	Accuracy	AC VOLTAGE	Range	Resolution	Accuracy	TEMPERATURE	Range	Resolution	Accuracy	
200mV	0.1mV	±1.0% of rdg + 5 digits	200mV	0.1mV	±1.0% of rdg + 5 digits	200A	100mA	±2.0% of rdg + 5 digits	(-40~1000)°C	1°C	<400°C±1.0% of rdg + 5 digits
2V	1mV	±0.5% of rdg + 5 digits	2V	1mV	±0.5% of rdg + 5 digits	1000A	1A	±2.0% of rdg + 5 digits	(0~1832)°F	1°F	>400°C±1.5% of rdg + 5 digits
20V	10mV	±0.5% of rdg + 5 digits	20V	10mV	±0.5% of rdg + 5 digits	200kΩ	10Ω	±0.8% of rdg + 3 digits	200Ω	0.1Ω	<750°C±1.0% of rdg + 5 digits
200V	100mV	±0.5% of rdg + 5 digits	200V	100mV	±0.5% of rdg + 5 digits	200MΩ	100kΩ	±1.2% of rdg + 5 digits	100Ω	1Ω	≥750°C±1.5% of rdg + 5 digits
1000V	1V	±1.0% of rdg + 5 digits	1000V	1V	±1.0% of rdg + 5 digits	200MΩ	10Ω	±0.8% of rdg + 5 digits	1000A	1A	<400°C±1.0% of rdg + 5 digits

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

CM-2070FT**DC VOLTAGE**

CAPACITANCE			RESISTANCE			TEMPERATURE		
Range	Resolution	Accuracy	Range	Resolution	Accuracy	Range	Resolution	Accuracy
400mV	0.1mV	±1.0% of rdg + 5 digits	4nF	1pF	±5.0% of rdg + 10 digits	400Ω	0.1Ω	±0.8% of rdg + 5 digits
4V	1mV	±0.5% of rdg + 5 digits	40nF	10pF	±2.5% of rdg + 5 digits	4kΩ	1Ω	±0.8% of rdg + 5 digits
40V	10mV	±0.5% of rdg + 5 digits	400nF	100pF	±2.5% of rdg + 5 digits	40kΩ	10Ω	±0.8% of rdg + 1 digits
400V	100mV	±0.5% of rdg + 5 digits	4μF	1nF	±2.5% of rdg + 5 digits	400kΩ	100Ω	±0.8% of rdg + 1 digits
1000V	1V	±1.0% of rdg + 5 digits	40μF	10nF	±5% of rdg + 10 digits	4MΩ	1KΩ	±1.0% of rdg + 5 digits

FREQUENCY			RESISTANCE			TEMPERATURE		
Range	Resolution	Accuracy	Range	Resolution	Accuracy	Range	Resolution	Accuracy
4V	1mV	±0.8% of rdg + 5 digits	4mF	1μF	±5% of rdg + 10 digits	(-40~1000)°C	1°C	<400°C±1.0% of rdg + 5 digits
40V	10mV	±0.8% of rdg + 5 digits	40mF	10μF	±5% of rdg + 10 digits	40MΩ	10KΩ	±1.0% of rdg + 5 digits
400V	100mV	±0.8% of rdg + 5 digits	10Hz	0.01Hz	±400Hz ±1.0% of rdg + 5 digits	100Hz	0.1Hz	>400°C±1.5% of rdg + 5 digits
750V	1V	±1.0% of rdg + 5 digits	1kHz	1Hz	±400Hz ±1.0% of rdg + 5 digits	10kHz	10Hz	±400Hz ±1.0% of rdg + 5 digits

AC CURRENT			RESISTANCE			TEMPERATURE		
Range	Resolution	Accuracy	Range	Resolution	Accuracy	Range	Resolution	Accuracy
4A	1mA	±2.0% of rdg + 5 digits	10kHz	1kHz	±400Hz ±1.0% of rdg + 4 digits	10MHz	10kHz	±400Hz ±1.0% of rdg + 4 digits
40A	10mA	±2.0% of rdg + 5 digits	100kHz	100Hz	±400Hz ±1.0% of rdg + 4 digits	1MHz	1kHz	±400Hz ±1.0% of rdg + 4 digits
400A	100mA	±2.0% of rdg + 5 digits	1MHz	1kHz	±400Hz ±1.0% of rdg + 4 digits	10MHz	10kHz	±400Hz ±1.0% of rdg + 4 digits
1000A	1A	±2.0% of rdg + 5 digits	10MHz	10kHz	±400Hz ±1.0% of rdg + 4 digits	• Standard Accessories :		

POWER AAA 1.5Vx2



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	
60V	0.01V		± 2.0% of rdg + 5 digits
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			
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:

- 3 1/2 Digit Manual Range
- 3,999 Count
- 10µA 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	100mA	± 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-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

CM-2016**Features:**

- 3^½ Digit Clamp Meter with Backlight
- 5,999 Count & Polarity Display
- Clamp Torch
- Jaw Open : 28mm
- Auto Power Off. (APO)
- Duty Cycle / REL & Data Hold
- Non Contact Voltage (NCV) 5 Ranges
- True RMS

DC VOLTAGE

Range	Resolution	Accuracy
600mV	0.1mV	±1.0% of rdg + 5 digits
6V	0.001V	
60V	0.01V	±0.5% of rdg + 5 digits
600V	0.1V	

DC CURRENT

Range	Resolution	Accuracy
600A	0.1A	±2.0% of rdg + 3 digits

AC VOLTAGE

Range	Resolution	Accuracy
600mV	0.1mV	±1.5% of rdg + 5 digits
6V	0.001mV	
60V	0.01V	± 1.0% of rdg + 5 digits
600V	0.1V	

AC CURRENT

Range	Resolution	Accuracy
600A	0.1A	±2.0% of rdg + 30 digits

RESISTANCE

Range	Resolution	Accuracy
600Ω	0.1Ω	±0.8% of rdg + 5 digits
6kΩ	1Ω	
60kΩ	10Ω	±0.8% of rdg + 3 digits
600kΩ	100Ω	
6MΩ	1KΩ	
60MΩ	10KΩ	±1.0% of rdg + 25 digits

CAPACITANCE

Range	Resolution	Accuracy
60nF	10pF	
600nF	100pF	±3.5% of rdg + 20 digits
6μF	1nF	
60μF	10nF	
600μF	100nF	±5.0% of rdg + 10 digits
6000μF	1μF	

FREQUENCY

Range	Input Sensitivity	Accuracy
20MHz	>0.7V	±1.0% of rdg + 3 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

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

Features:

- 3^{3/4} 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
200mV	0.1mV	±1.0% of rdg + 5 digits
2V	1mV	
20V	10mV	
200V	100mV	
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	
200V	100mV	
750V	1V	

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	
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:

- 3½ 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

DC VOLTAGE

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

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	
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	
40µF	10nF	
400µF	100nF	
4mF	1µF	
40mF	10µF	±5.0% of rdg + 10 digits

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

A	V	W
AAA1.5Vx2		

- Standard Accessories : Soft Carrying Case, Manual, TP-04 Temperature Probe, Test Lead
- Dimension : 270(H) x 123(W) x 35(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		
40A	4.00kW	16.00kW	30.00kW		
100A	10.00kW	40.00kW	75.00kW	$\pm 3\%$ of rdg + 5 digits	$<1000\text{kW}: 0.01\text{ kW}$ $100\text{kW}: 0.1\text{kW}$
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		
40A	4.00kVA	16.00kVA	30.00kVA		
100A	10.00kVA	40.00kVA	75.00kVA	$\pm 3\%$ of rdg + 5 digits	$<1000\text{kVA}: 0.01\text{ kVA}$ $100\text{kVA}: 0.1\text{kVA}$
400A	40.00kVA	160.0kVA	300.0kVA		
1000A	100.0kVA	400.0kVA	750.0kVA		

POWER	9V (6F22) X 1
• 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	$\pm 1.0\%$ of rdg + 5 digits
180V		
400V	1V	
600V		

AC CURRENT RMS

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

SINGLE-PHASE ACTIVE POWER

Range	Resolution	Accuracy
30kW	0.01kW	$\pm 3\% \text{ of rdg} + 5 \text{ digits}$
60kW		
120kW	0.1kW	
150kW		
300kW	0.1kW	
600kW		

THREE-PHASE ACTIVE POWER

Range	Resolution	Accuracy
3kVA	0.001kVA	$\pm 3\% \text{ of rdg} + 5 \text{ digits}$
12kVA		
30kVA	0.1kVA	
120kVA		
150kVA	0.1kVA	
600kVA		

POWER FACTOR

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

PASSIVE POWER

Range	Resolution	Accuracy
3kVAr	0.001kVAr	$\pm 3\% \text{ of rdg} + 5 \text{ digits}$
12kVAr		
30kVAr	0.1kVAr	
120kVAr		
150kVAr	0.1kVAr	
600kVAr		

FREQUENCY

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

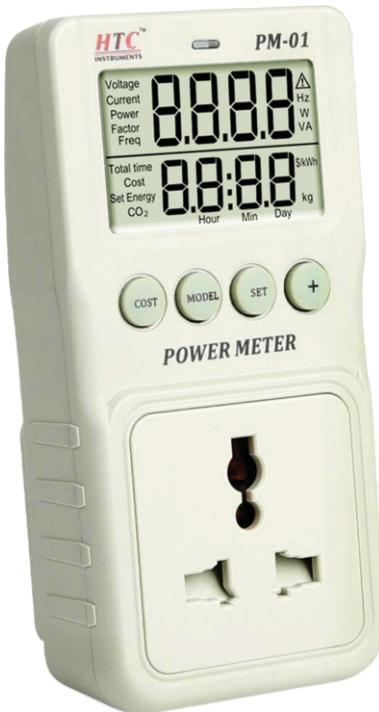
POWER

Range	Resolution	Accuracy
AA 1.5V X 4		

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



PM-01



Features:

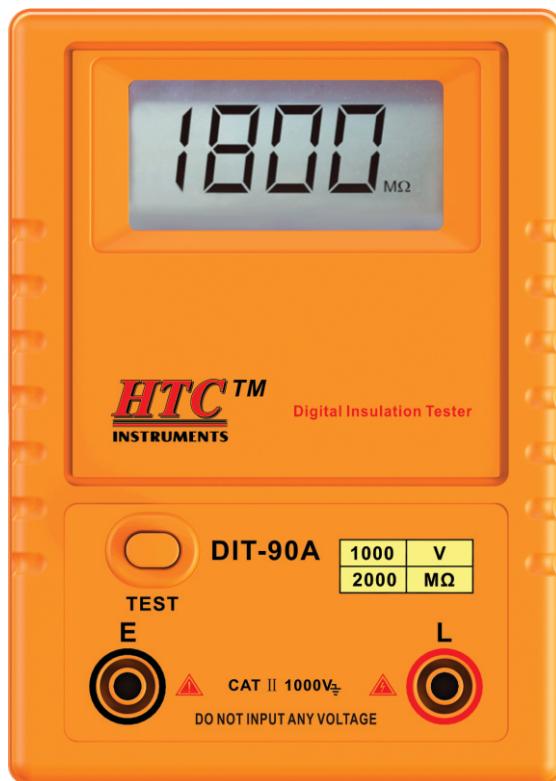
- Smart Three Pin Socket
- Dual Large LCD Display with Backlight
- Memory Retention (KWh, min)
- CO2 Display ON 9999kg

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		
DIT-90B	1000 V	200 MΩ	0.1 MΩ	<2 mA ± 3% of rdg + 2 digits	± 25% of rated voltage
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



CE-8200**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

RESISTANCE

Range	Resolution	Accuracy
0.010~0.099Ω	0.001Ω	
0.10~0.99Ω	0.01Ω	± 1%of rdg + 0.1Ω digits
1.0~49.9Ω	0.1Ω	
50.0~99.5Ω	0.5Ω	± 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
600~880Ω	20Ω	± 20%of rdg + 20Ω digits
900~1000Ω	30Ω	± 25%of rdg + 30Ω digits

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	
100.0Ωm~999.9Ωm	0.1Ωm	
1000Ωm~9999Ωm	1Ωm	
10.00kΩm~99.99kΩm	10Ωm	
100.0kΩm~999.9kΩm	100Ωm	
1000kΩm~9999kΩm	1kΩm	

p=2naR
(note1)**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



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
• Standard Accessories : Hard Carrying Case, Test Lead, Manual, Power Adaptor	• 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	Maximum than 2.0mA
				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

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

ST-852**Features:**

- Operational Voltage : 60~600V (3 Phase AC)
- Limit Support Voltage : 2000V/minutes
(impulse voltage 4000V)
- Measuring Frequency Range : 20~400Hz
- Time Limit for Continuous measurement :
Less than 60 minutes at 200 VAC
Less than 40 minutes at 600 VAC

Technical Data :

Measuring 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	Continous beep
Open Phase (One Phase Only)	Orange LED for Open Phase are off	Both Green & red LED are off	-

• Standard Accessories : Measuring Lead, Meter Pen, Measuring Shelf Band, Carrying Case, Manual
 • Dimension : 85(H) x 64(W) x 23(D)mm

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)

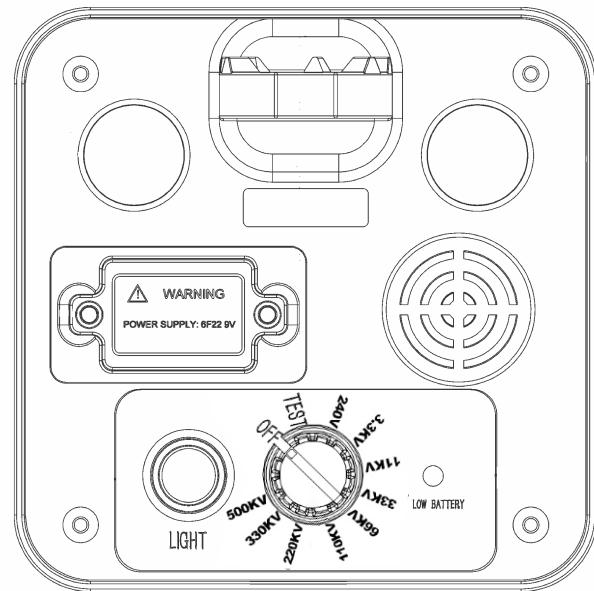


HP-500**Technical Data :**

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		80Hz	199.9nF
2μF	1000pF			1.999μF
20μF	0.01μF			19.99μF
200μF	0.1μF		8Hz	199.9μF
2000μF	1μF			1999μF
20mF	10μF			19.99μF

Only for CM-1501

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	
2000μF	1μF	

INDUCTANCE

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

RESISTANCE

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

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



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	$\pm(1.0\%+5)$
100Hz/120Hz	200.00mH	0.01mH	$\pm(0.5\%+5)$
100Hz/120Hz	2000.0mH	0.1mH	$\pm(0.5\%+5)$
100Hz/120Hz	20.000H	1mH	$\pm(0.5\%+5)$
100Hz/120Hz	200.0H	0.01H	$\pm(1.0\%+5)$
100Hz/120Hz	2000.0H	0.1H	$\pm(1.0\%+5)$
100Hz/120Hz	2000.0µH	0.1µH	$\pm(1.0\%+5)$
100Hz/120Hz	20.000nH	1µH	$\pm(0.5\%+5)$
100Hz/120Hz	200.00nH	0.01mH	$\pm(0.5\%+5)$
100Hz/120Hz	2000.0nH	0.1mH	$\pm(1.0\%+5)$
1KHz	20.000H	1mH	$\pm(1.0\%+5)$
1KHz	200.0H	0.01H	$\pm(2.0\%+5)$
1KHz	2000.0H	0.1H	$\pm(1.0\%+5)$
1KHz	2000.0µH	0.1µH	$\pm(1.0\%+5)$
1KHz	20.000nH	0.01µH	$\pm(0.5\%+5)$
1KHz	200.00nH	0.1µH	$\pm(1.0\%+5)$
1KHz	2000.0nH	0.1µH	$\pm(2.0\%+5)$
100KHz	20.000H	1mH	$\pm(2.0\%+5)$
100KHz	200.0H	0.01H	$\pm(1.0\%+5)$
100KHz	2000.0H	0.1H	$\pm(2.0\%+5)$
100KHz	2000.0µH	0.1µH	$\pm(2.0\%+5)$
100KHz	20.000nH	0.01µH	$\pm(2.0\%+5)$
100KHz	200.00nH	0.1µH	$\pm(2.0\%+5)$
100KHz	2000.0nH	0.1µH	$\pm(2.0\%+5)$

RESISTANCE GEAR (R) & Rs/Rp

	Display Range	Min. resolution	Accuracy : $\pm(a\% \text{ of rdg} + b \text{ dgts})$ (under 18 ~ 28°C)
100Hz/120Hz	200.0Ω	0.01kΩ	$\pm(1.0\%+5)$
100Hz/120Hz	2.0000kΩ	0.1Ω	$\pm(0.3\%+5)$
100Hz/120Hz	20.000kΩ	1Ω	$\pm(0.3\%+5)$
100Hz/120Hz	200.00kΩ	0.01kΩ	$\pm(0.5\%+5)$
100Hz/120Hz	2.0000MΩ	0.1kΩ	$\pm(1.0\%+5)$
100Hz/120Hz	20.000MΩ	1kΩ	$\pm(2.0\%+5)$
1KHz	20.000Ω	0.001Ω	$\pm(1.0\%+5)$
1KHz	200.00Ω	0.01Ω	$\pm(1.0\%+5)$
1KHz	2.0000kΩ	1Ω	$\pm(0.3\%+5)$
1KHz	20.000kΩ	0.1kΩ	$\pm(0.3\%+5)$
1KHz	200.00kΩ	1kΩ	$\pm(0.5\%+5)$
1KHz	2.0000MΩ	0.01kΩ	$\pm(1.0\%+5)$
1KHz	20.000MΩ	1kΩ	$\pm(2.0\%+5)$
10KHz	20.000Ω	1kΩ	$\pm(1.0\%+5)$
10KHz	200.00Ω	0.001Ω	$\pm(1.0\%+5)$
10KHz	2.0000kΩ	0.01Ω	$\pm(0.3\%+5)$
10KHz	20.000kΩ	1Ω	$\pm(0.5\%+5)$
10KHz	200.00kΩ	0.1Ω	$\pm(1.0\%+5)$
10KHz	2.0000MΩ	0.01kΩ	$\pm(2.0\%+5)$
10KHz	20.000MΩ	1kΩ	$\pm(2.0\%+5)$
100KHz	20.000Ω	0.001Ω	$\pm(1.0\%+5)$
100KHz	200.00Ω	0.01Ω	$\pm(2.0\%+5)$
100KHz	2.0000kΩ	0.1Ω	$\pm(1.0\%+5)$
100KHz	20.000kΩ	1Ω	$\pm(2.0\%+5)$
100KHz	200.00kΩ	0.01Ω	$\pm(1.0\%+5)$

LCR-4080Q



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	$\pm(2.0\%+5)$
100Hz/120Hz	200.00nF	0.01nF	$\pm(0.5\%+5)$
100Hz/120Hz	2000.0nF	0.1nF	$\pm(0.5\%+5)$
100Hz/120Hz	20.000µF	1nF	$\pm(1.0\%+5)$
100Hz/120Hz	200.00µF	0.01µF	$\pm(1.0\%+5)$
100Hz/120Hz	2000.0µF	0.1µF	$\pm(2.0\%+5)$
100Hz/120Hz	20.000mF	0.1mF	$\pm(2.0\%+5)$
100Hz/120Hz	2000.0pF	0.1pF	$\pm(1.0\%+5)$
100Hz/120Hz	20.000nF	1pF	$\pm(1.0\%+5)$
1KHz	200.00nF	0.01nF	$\pm(0.5\%+5)$
1KHz	2000.0nF	0.1nF	$\pm(0.5\%+5)$
1KHz	20.000µF	1nF	$\pm(1.0\%+5)$
1KHz	2000.0pF	0.1pF	$\pm(1.0\%+5)$
1KHz	20.000nF	1pF	$\pm(1.0\%+5)$
10KHz	200.00nF	0.01nF	$\pm(1.5\%+5)$
10KHz	2000.0nF	0.1nF	$\pm(2.0\%+5)$
10KHz	20.000pF	0.1pF	$\pm(2.0\%+5)$
10KHz	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



MO-5000

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

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		
2Ω	1mΩ		
20Ω	10mΩ	$\pm 0.5\% \text{ of rdg} \pm 3 \text{ digits}$	Approx. 500mA
200Ω	100mΩ		
2kΩ	1Ω		

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



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	$\pm 2.5\%$ of rdg + 3 digits
30nF		
300nF		$\pm 3\%$ of rdg + 3 digits
3 μ F		
30 μ F		
300 μ F		
3mF		
30mF		

RESISTANCE

Range	Resolution	Accuracy
300 Ω	0.1 Ω	$\pm 1\%$ of rdg + 2 digits
3K Ω		
30K Ω		$\pm 1.2\%$ of rdg + 3 digits
300K Ω		
3M Ω		
30M Ω		

- 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 30 Ω , 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
	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
	10 μ A(Ib)	Ib approx 0.01mA
	2000 μ A	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**LX-103****LX-104****LX-107****Features:**

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

Features:

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

Features:

- 3,999 Count with Bar graph 61 Segments
- User selectable FC/Lux
- USB Computer Interface (Advanced software program for all windows)
- Capacity of Data Logging 99

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	0~2,00,000 LUX	0~2,00,000 LUX	0~1,00,000 LUX	4,00,000 LUX	2000 W/m^2
FC	-	0~20,000 FC	0~10,000 FC	-	634BTU(ft ² x h)
Resolution	0.1 Lux	-	1 Lux/1 FC	0.1 Lux / 0.01FC	1 W/m^2 /1BTU
Accuracy	+ 5% of reading ± 10% FS.	-	± (3%+5 Lux)	± 5%of rdg ± 10 digits (<10,000 Lux) ± 10%of rdg ± 10 digits (<10,000 Lux)	± 10 W/m^2 or ± 5% ± BTU/(ft ² x h) or ± 5%
Receiving Light	Silicon photo electricity diode	-	Silicon photo - diode & Spectral response filter	Silicon photo electricity 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	184(H) x 60(W) x 27(D)mm 203(H) x 75(W) x 50(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 Asound pressure level (i.e.Arithmatically 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 Weighting
- 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 Wiegthing Sensor	FAST (125mS),SLOW (1s) 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 each 2000 feet increase in altitude from sea level to 12,000 feet elevation, or comparable atmospheric pressure change (approximately every 50mn 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**AVM-07****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

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)	0.40~45.00 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(m ³ /min)	0~9999 m ³ /min	0.001~1	-
CFM(ft ³ /min)	0~9999 ft ³ /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 Vane arm with low- Friction ball bearing	Operating Humidity	Max. 80% RH
Temperature Sensor	Precision thermistor	Power Supply	4x 1.5 AAA size
POWER		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	
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	
Temperature	0~50°C (32°F to 122°F)	0.1°C/0.1°F	± 1°C / 1.8°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:**VB-8205**

- 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)

**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



LX-10A MINI LUX METER



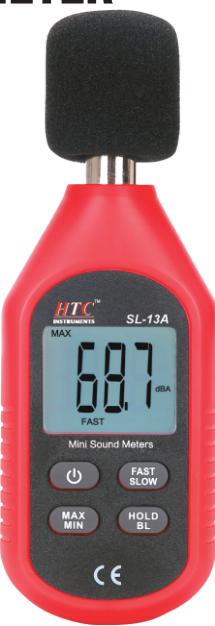
Features:

- Data Hold
- Auto Power Off (APO)
- Max./Min.

Technical Data

Basic Functions	LX-10A	Resolution	Accuracy
Illumination	Lux	0~9999 Lux	1 Lux $\pm 4\%$ rdg $\pm 8\%$ dgt.
	Lux	≥ 10000 Lux	10 Lux $\pm 5\%$ rdg $\pm 10\%$ dgt.
Range			0~199,999 Lux
Sensor Type			Silicon photocell
Power			AAA 1.5V x 3
Standard Accessories			Manual
Dimension			160(H) x 50(W) x 28(D)mm

SL-13A MINI SOUND LEVEL METER



Features:

- Data Hold
- Auto Power Off (APO)
- Max./Min.
- Overload Indication "UN & OL"

Technical Data

Basic Functions	SL-13A	Resolution	Accuracy
Sound Level	dB	30~130dB	0.1dB $\pm 1.5\%$
Sampling Time			Fast / Slow
Frequency			31.5 Hz~8KHz
Sensor Type			1/2 inch Condensor Micro Phone
Power			AAA 1.5V x 3
Standard Accessories			Manual
Dimension			150(H) x 52(W) x 27(D)mm

AVM-03 MINI ANEMOMETER



Features:

- Data Hold
- Auto Power Off (APO)
- Used for Temperature, Wind Speed & Wind Chill Notification.
- Back Light

Technical Data

Basic Functions	AVM-03	Resolution	Accuracy
Wind Speed	0~30m/s (as standard)	0.1m/s	$\pm 5\%$ rdg ± 0.5 dgt.
	1.4~108 Km/h (Refer Only)		$\pm 5\%$ rdg ± 15 dgt.
	0.7~58 Knots (Refer Only)		$\pm 5\%$ rdg ± 10 dgt.
	0.8~7 mph (Refer Only)		$\pm 5\%$ rdg ± 10 dgt.
	78~5905 ft/min (Refer Only)		$\pm 5\%$ rdg ± 180 dgt.
Temperature	-10~50°C	0.1°C	± 2 °C
	14~122°F		± 4 °F
Power	AAA 1.5V x 3		
Standard Accessories			Manual
Dimension	160(H) x 50(W) x 28(D)mm		

HD-303 MINI HYGROMETER



Features:

- Data Hold
- Auto Power Off (APO)
- Max./Min.
- Unit Selectable °C / °F
- Back Light

Technical Data

Basic Functions	HD-303	Resolution	Accuracy
Humidity	%	0~100%RH	0.1%RH $\pm 5\%$ RH
Temperature	°C	-10~60°C	0.1°C $\pm 1.0\%$ C
	°F	14~140°F	0.2°F $\pm 2.0\%$ F
Sampling Rate			1/s
Power			AAA 1.5V x 3
Standard Accessories			Manual
Dimension			155(H) x 50(W) x 28(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	RH		Temp.							
Measuring Range	0~100%RH		-40°C~70°C		-40°F~158°F					
Accuracy	0~35% & 80~100% RH		<±5% RH		-40°C~40°C	±1.0 °C				
	35%~80% RH		±3.0% RH		40°C~70°C	±2.0 °C				
Resolution	0.1%RH		0.1°C							
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**Technical Data :**

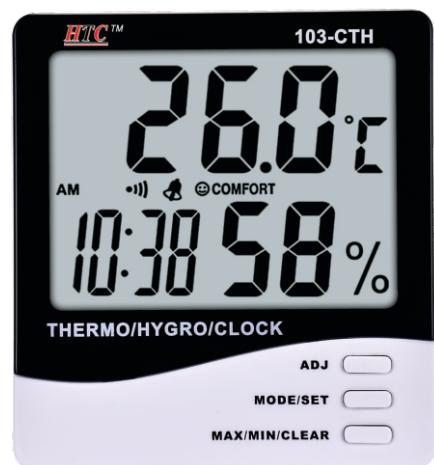
Basic Functions	RH		Temp.				
Measuring Range	0~100%RH		-40°C~70°C		-40°F~158°F		
Accuracy	45~75%RH	±3.0% RH	-40°C~70°C	±1.0 °C	-40°F~158°F	±1.8 °F	
	Others±5% RH		-10~50°C		14°F~122°F		
Others±2.0°C / ±3.6 °F							
Memory	25000 each Temperature & Humidity						
Resolution	0.1%RH		0.1°C				
File Format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

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

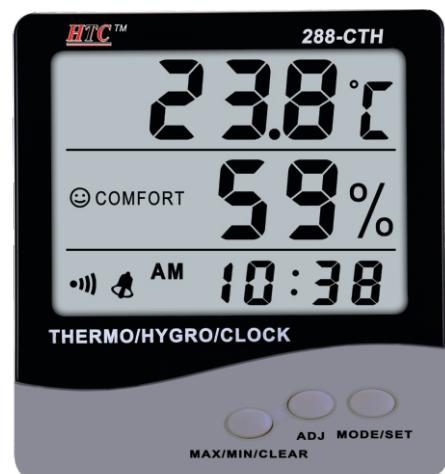
Humidity & Temperature Data Logger With PDF Report

103-CTH**Big Display Thermo / Hygrometer with Clock large
2 line LCD display.**

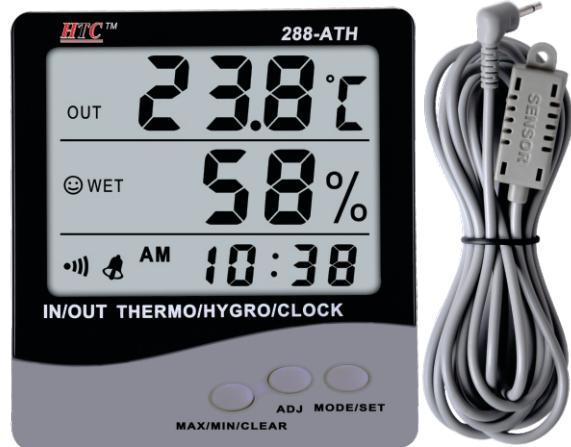
- Temperature Range : -50°C ~ 70°C (-58°F ~ 158°F)
- Temperature Accuracy : ±1.0°C or ±1.8 °F
- Humidity Range : 10% ~ 99% RH
- Humidity Accuracy : ±5% (35% ~ 75%) & else ±10%
- Time / Temperature / Humidity indicate.
- Temperature Reading for °F & °C.
- MAX./MIN. Temperature & Humidity Memory.
- Calendar 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 : ±1.0°C or ±1.8 °F
- Humidity Range : 10% ~ 99% RH
- Humidity Accuracy : ±5% (35% ~ 75%) or else ±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 : ±1.0°C or ±1.8 °F
- Humidity Range: (10% ~ 99%)
- Humidity Accuracy : ±5% (35% ~ 75%) or else ±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**HD-304****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

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°C/0.1°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°C/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
Tempreture 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	$\pm 0.5\%$ 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, TP01Temprature 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 Alaram 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

MT4**Features:**

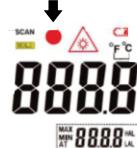
- °C or °F Selection Circular
- Circular Laser
- Auto Power Off (APO)
- Data Hold Function
- Colour LCD Display

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

MT8**Features:**

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

**LCD Alarm Indicator****MTX-2****Features:**

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

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

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
- Automatic High & Low Alarm
- Trigger Lock
- Auto Power Off (APO)
- Type K temperature measurements
- Backlight LCD

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 -58~932°F	-50~850°C -58~1472°F	-50~1050°C -58~1922°F	-50~1250°C -58~2282°F	-50~1550°C -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-01Temperature Probe, Hard Carrying Case, Manual
- Dimension : 192(H) x 120(W) x 59(D) mm



BODY SCAN - II**Features:**

- Precise non-contact measurements
- User selectable °C or °F
- Selectable body and surface Temperature
- Set alarm value
- Memorization of the last 32 measurements
- Automatic Data Hold
- Auto Power Off (APO)
- Automatic selection range & Display
- Backlight LCD

Technical Data :

Model	Scan II
Temperature range	32°C~42°C (89.6°F~109.2°F)
Basic accuracy	±0.3°C (±0.6°F)
Optimum measuring distance	5cm ~ 10cm
Response time	500ms
Optical response	8 m~14 m
Auto shutdown	3
Low battery indication	3
High-temperature alarm	Sound alaram for >32.7°C/98.96°F
Data hold	3
Unit conversion (C/F)	3
Operating environment	15°C~30°C(59°F~86°F)<85%RH
Transport and storage environment	-20°C~60°C(-4°F~140°F), <85%RH

POWER

9V (6F22) X 1

- Standard Accessories : Soft Carrying Case, Manual
- Dimension : 155.5(L) x 98.8(W) x 27.5(H)mm

**Features:**

- TFT Colour 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 Colour palette
- Visual and heat map image alignment
- Image capture and save it in SD Card

VT-100**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	bmp
File format	Micro SD Card
Image storage	Scroll through all saved images and view on-screen
Memory view	Power off after 12 minutes of inactivity
Power save	-5~40°C/23~104°F
Working temperature	-20~55°C/-4~131°F
Storage temperature	10~80%RH
Relative humidity	CE EN61326-1:2006
Electromagnetic Compatibility	AA1.5V X 4
Power	6Hrs.
Battery life	310g
Weight	223(H) x 88(W) x 65(D)mm
Dimension	



VT-110**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 environment 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:

- 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



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

Technical Data:

Output Voltage	Range mV	Output Range	Resolution	Accuracy	Explanation
Thermo-couple	J	-200~1200°C/-328~2192°F	0.1°C OR °F	$\pm 0.02\% + 2DGT$	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



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

OHM Measurement :

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

OHM Simulate :

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

RTD Specification :

RTD Type	Range °c(°f)	Accuracy (°C)			Allowable Excitation(mA)	
		Input		Output		
		4w	2w/3w			
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	



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

Features:

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

Technical Data:

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

• 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: ±(0.02% of reading +0.01% FS) ACV: ±(0.05% of reading +0.02% FS)	Input Max.	5A	10A
Current	100µA, 500µA, 2.5mA, 10mA, 25mA, 100mA, 250mA, 1A, 2.5A, 10A, 50A	DCI: ±(0.03% of reading +0.02% FS) ACI: ±(0.05% of reading +0.03% FS)	Current	500A	1000A
Frequency	50Hz, 60Hz, 400Hz, 1kHz	<0.1%	Clamp Jaw	> 20mm	> 28mm
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	±(0.2% of reading +20mΩ)	DC Impedance	0.7Ω	0.9Ω
			DC Burden	5A / 3.5V	10A / 2.5 V
			AC Burden	5A / 6V	10A / 5V
			Frequencies	DC to 60Hz	DC to 60Hz
			Accuracy	±0.3% rdg	±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 Cord, 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	± 5kgf	±20kgf	± 100kgf
	±5000gf		
	±49N	±196N	±980N
	±11Lbf	±44Lbf	±220Lbf
Resolution	0.001kgf	0.01kgf	0.01kgf
	1gf		
	0.01N	0.1N	0.1N
Accuracy	0.01Lbf	0.01Lbf	0.1Lbf
	±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.
inH ₂ O	±55.40	0.01	±138	0.1	±415.2	0.1	±830	1	±2078	1
Psi	±2.000	0.001	±5.000	0.001	±15.00	0.01	±30.00	0.1	±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	0.1	±15.00	0.1
mmHg	±103.4	0.1	±258.5	0.1	±775.7	1	±1551	1	±3878	1
ozin ²	±32.00	0.01	±80	1	±240.0	0.1	±480.0	1	±1200	1
ftH ₂ O	±4.612	0.001	±11.53	0.01	±34.60	0.01	±69.2	0.1	±173.0	0.1
cmH ₂ O	±140.6	0.1	±351.5	0.1	±1055	1	±2109	1	±5272	1
kgcm ²	±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 indication	Err.1
cmH ₂ O	140.6	0.1	Under range indication	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,20/200µT
- Resolution : 0.1/1mG or 0.01/0.1µT
- Frequency Response : 30~300Hz
- Sensor : Single Axis
- Accuracy : ±(2.5%+6dgt) 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 µA/m, 0.001 µW/m², 0.001 µW/cm²
- Setting time : typically 1.5s (0 to 90% measurement value)
- Sample rate : 3 times per second
- Units: mV/m, V/m, µA/m, mA/m, µW/m², mW/m², µW/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 - 532.6m/Am
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 factor : ± 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) : ± 0.2dB

POWER

9V (6F22) X 1

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



HTC-5020 / HTC-5020C

**Features:**

- Highest Sensitivity up to 1mV/div (After Expand)
- Full band Trig Auto Sweep Circuit
- Flex Trig mode (Select either CH1 or CH2 Signal / External Signal)
- Alt-Trig View 2 in relative Signal
- Ext Trig Input

DEFLECTION FACTOR

Operating Mode	Y1,Y2,ALT,CHOP,ADD,X-Y
Deflection Factor	5mV/div~10V/div in 1-2-5 sequence, altogether 11 steps. Error ±5%
MAG Rate	x5 Error ±5%
Frequency Bandwidth	AC: 10Hz ~ 20MHz -3dB DC: 0 ~ 20MHz -3dB
Frequency Bandwidth By MAG	AC: 10Hz~5MHz -3dB DC: 0~5MHz -3dB
Rising Time	≤18ns, <70ns by MAG
Overshot	≤5%
Damp	≤5%
Coupling Mode	AC, DC
Input Implement	1±5%MΩ, ≤30pF (direct) 10±5%MΩ, ≤23pF (by probe)
MAX. Safe Voltage	400V(DC+ACp-p)
Slope Inverting	Y2 only
TRIGGERING SYSTEM	
Triggering Source	Y1, Y2, ALT, POWER, EXT
Coupling	AC/DC (EXT), NORM/TV
Polarity	+, -
Synchronized Frequency Range	Auto: 50Hz ~ 20MHz
MIN. Synchronized Trigger Level	Trig : 5Hz~20MHz Int : 1div; EXT: 0.2Vp-p Tv : Int : 2div Ext : 0.3Vp-p Trig Lock (20Hz~10MHz) Int : 2div
Input Implement (By Ext Trigger)	1±5%MΩ, ≤30pF
MAX. Safe Voltage	400V(DC+ACp-p)
HORIZONTAL SYSTEM	
Sweep Mode	AUTO, TRIG, LOCK, SINGLE
Sweep Time Factor	0.1μ s/div~0.2s/div in 1-2-5 sequence altogether 20 steps Error ±5%
MAG	x5 Error ±10%

X-Y MODE

Signal Input	X-Axis: Y1 Y-Axis: Y2
Deflection Factor	Same as Y1
Frequency Response	AC: 10Hz ~ 1MHz -3dB DC: 0 ~ 1MHz -3dB
Input Implement	Same as Y1
MAX. Safe Voltage	Same as Y1
X-Y Phase Difference	≤3° (DC~50kHz)
AXIS SYSTEM	
MIN. Input Level	TTL Level
MAX. Input Voltage	50V(DC+ACp-p)
Input Resistance	10kΩ
Input Polarity	Low level to brighten
Frequency Range	DC ~ 5MHz

SIGNALS FOR PROBE CALIBRATION

Waveform	Square wave
Amplitude	0.5±2% Vp-p
Frequency	1±2%kHz

CRT

Persistence	MIDDLE PERSISTENCE
Working Area	8CM x 10CM (1CM=1DIV)

POWER SUPPLY

Power	220±10%V
Frequency	50±5%Hz
Power Consumption	About 35VA

PHYSICAL CHARACTERISTICS

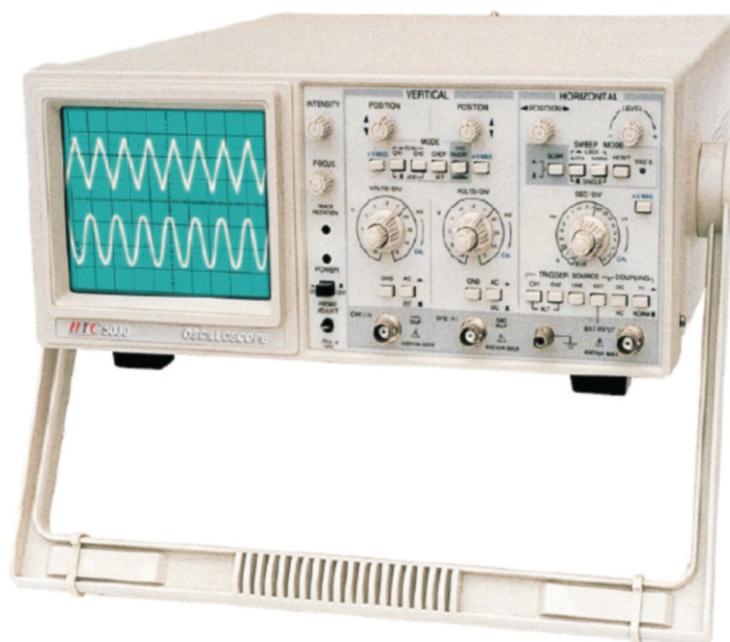
Weight	7.2kg
Dimension	320(H) x 130(W) x 400(D)mm

COMPONENT TEST (5020C)

AC 9VRMS : No Load
2mA : SHORT



HTC-5030 / HTC-5030C

**Features:**

- Highest Sensitivity up to 1mV/div (After Expand) • Full band Trig Auto Sweep Circuit
- Flex Trig mode (Select either CH1 or CH2 Signal / External Signal) • Alt-Trig View 2 in relative Signal
- Ext Trig Input

DEFLECTION FACTOR

Operating Mode	Y1,Y2,ALT,CHOP,ADD,X-Y
Deflection Factor	5mV/div~10V/div in 1-2-5 sequence, altogether 11 steps. Error ±5%
MAG Rate	x5 Error ±5%
Frequency Bandwidth	AC: 10Hz ~ 30MHz -3dB DC: 0 ~ 30MHz -3dB
Frequency Bandwidth By MAG	AC: 10Hz~5MHz -3dB DC: 0~5MHz -3dB
Rising Time	About 12ns, about 70ns by MAG
Overshot	≤8%
Damp	≤8%
Coupling Mode	AC, DC
Input Implement	1±5%MΩ, ≤30pF (direct) 10±5%MΩ, ≤23pF (by probe)
MAX. Safe Voltage	400V(DC+ACp-p)
Slope Inverting	Y2 only

TRIGGERING SYSTEM

Triggering Source	Y1, Y2, ALT, POWER, EXT
Coupling	AC/DC (EXT), NORM/TV
Polarity	+, -
Synchronized Frequency Range	Auto: 50Hz ~ 30MHz
MIN. Synchronized Trigger Level	Trig :5Hz~30MHz Int :1div; Ext :0.2Vp-p Tv :Int :2div Ext :0.3Vp-p Trig Lock (20Hz~10MHz) Int :2div
Input Implement (By Ext Trigger)	1±5%MΩ, ≤30pF
MAX. Safe Voltage	400V(DC+ACp-p)

HORIZONTAL SYSTEM

Sweep Mode	AUTO, TRIG, LOCK, SINGLE
Sweep Time Factor	0.1μ s/div~0.2s/div in 1-2-5 sequence altogether 20 steps Error ±5%
MAG	x5 Error ±10%

X-Y MODE

Signal Input	X-Axis: Y1 Y-Axis: Y2
Deflection Factor	Same as Y1
Frequency Response	AC: 10Hz ~ 1MHz -3dB DC: 0 ~ 1MHz -3dB
Input Implement	Same as Y1
MAX. Safe Voltage	Same as Y1
X-Y Phase Difference	≤3° (DC~50kHz)
AXIS SYSTEM	
MIN. Input Level	TTL Level
MAX. Input Voltage	50V(DC+ACp-p)
Input Resistance	10kΩ
Input Polarity	Low level to brighten
Frequency Range	DC ~ 5MHz

SIGNALS FOR PROBE CALIBRATION

Waveform	Square wave
Amplitude	0.5±2% Vp-p
Frequency	1±2%kHz

CRT

Persistence	MIDDLE PERSISTENCE
Working Area	8CM x 10CM (1CM=1DIV)

POWER SUPPLY

Power	220±10%V
Frequency	50±5%Hz
Power Consumption	About 35VA

PHYSICAL CHARACTERISTICS

Weight	7.2kg
Dimension	320(H) x 130(W) x 400(D)mm

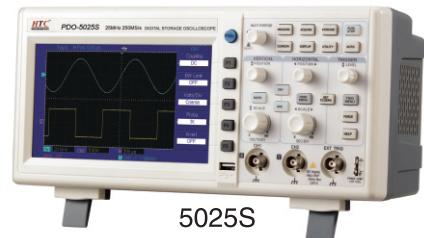
COMPONENT TEST (5030C)

AC 9VRMS : No Load	
2mA : SHORT	

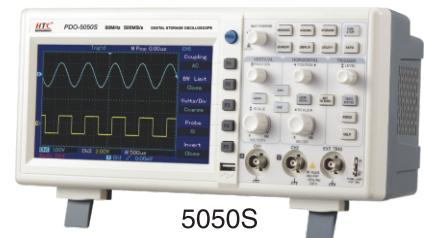


PDO-5025S/5050S/5070S/50100S/50200S

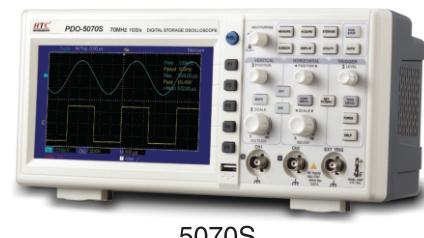
	Model	Band width	Real-time
PDO-5000 Series	PDO-5025S	25MHz	250MS/s
	PDO-5050S	50MHz	1GS/s
	PDO-5070S	70MHz	1GS/s
	PDO-50100S	100MHz	1GS/s
	PDO-50200S	200MHz	1GS/s
Trigger			
Trigger sensitivity	<1div		
Trigger level scope	Internal	±5div away from screen center	
	EXT	±3V	
	EXT/5*	±15V	
(Typical) precision 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 ($1/\Delta$)	
	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 difference	±3 degrees	
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	



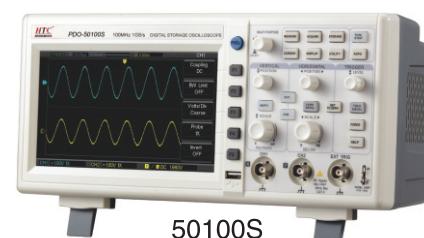
5025S



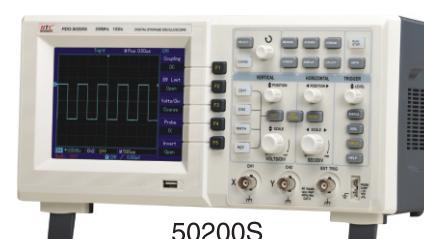
5050S



5070S



50100S



50200S



SMPS-3002/SMPS-3005**Mini Series Switching Power Supply**

Output Voltage	Output Current	Display	Accuracy
0~30V	0~2A	LED Digit Display	±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	≤0.2%	≤0.8%	≤0.2%	≤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 : ≤0.01% +3mV
- Load Regulation : ≤0.001% +3mV
- Ripple and noise : ≤1mV rms
- Protection : Constant current and Short-circuit protection
- Indication Accuracy : ≤0.5% +1digit
- Input Voltage : 220VAC ± 10%, 50Hz ± 2Hz

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

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**Technical Features**

Frequencty 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±10V (Continously 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±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 ± 0.5 dB	Input Impedance : no less than $1M\Omega/20pF$
100KHz-5MHz ± 1 dB	Sensitivity : 100m Vrms
100KHz-2MHz ± 1 dB	The maximum input : 150V (AC+DC) with attenuator
TTL/CMOS output	Input attenuation : 20dB
Level : TTL pulse low level is no more than 0.4V, high level is no less than 3.5V	Measurment error : $<0.003\% \pm 1$ digit
Risising time : no more than 100ns	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

ML-2**VC-3165****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	$1M\Omega$
Channel A (40MHz ~ 2.4GHz)	Channel B (0.01Hz ~ 40MHz)
Sensitivity : 50m Vrms	Sensitivity : 30m Vrms
Input resistance : 50Ω	Input resistance : $1M\Omega$ ($<35pF$)
Maximum Input : 3V	Maximum Input : 30V

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

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/cm²
Warning Values	50mW/cm²
Power	9V (6F22) X 1

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

AL-7000**Features:**

- Units of measurement : meters (m) /hpa

UDM-01**Features:**

- With laser pointer
- Foot/Meter display options
- LCD screen with LED backlight
- Support sum-up, multiplication and subtraction of 2 measurement data.
- All stored measurement data can be cleared.

Technical Features

Basic Function	
Measuring Range	0-5000m/580-1040 hpa
Resolution	20m/5hpa
Operating Temperature	-20~60oC
Storage Condition	-30~65oC; <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 / foot
Barometer	300~1100 hPa/mbar	8.84~32.44inHG	1 hPa / mbar (0.01HG)
Indoor Temp.	-10~60oC	14~140oF	0.1oC (0.18oF)
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

Technical Data

Basic Function	Range
Measurement Range	0.5~18m
Auto shutdown	After 15 seconds without pressing any key
Memory	can store 3 measurement data for calculation of area and volume
Accuracy	±0.5%
Ultrasonic Frequency	40 kHz
Working temperature	0oC~43oC
Laser beam: Wattage	1mW
Wavelength	650nm

POWER
9V (6F22) X 1

- Standard Accessories : Soft Carrying Case, Manual
- Dimension : 142(H) X 73(W) X 47(D)mm

LD-40 / LD-70 / LD-100**Features:**

- Area/Volume measurement function
- Pythagorean proposition measurement function
- Add and subtract measurement function
- Continuous measurement function

**Specification :**

Basic Function	LD-40	LD-70	LD-100
Range	0.05-40m	0.05-70m	0.05-100m
Distance Measurement Precision	±1.5mm		
Measurement Unit Options		mm/in/ft	
Area Volume Funtion		✓	
Volume Measurement Function		✓	
Automatically Cut Off Laser	20s		
Automatic Shutdown	150s		

POWER

AA 1.5V X 2

- Standard Accessories : Soft Carrying Case, Manual
- Dimension : 118(H) X 53(W) X 26(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:**

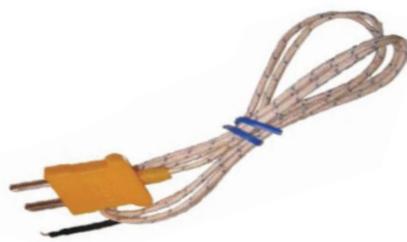
- The Battery Tester is designed for measuring the internal impedance and open circuit voltage of the secondary battery including Nickel-metal hydride battery (NiMH), Nickel-cadmium battery(NiCd),Lithium-ion battery(Li-ion), Alkaline battery and lead-Acid battery.
- AC four-terminal method to measure 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**TL-2 TEST LEAD**

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

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

