


## ACCESSORIES

- User manual
- Pair of test leads
- K-type Thermocouple

## SPECIFICATION GENERAL

- T-RMS Measurements
- Auto-Ranging
- Display 6000 counts LCD;
- Sampling Rate: 2~3 times/s;
- Over-Range Indication 'OL'.
- Display for Capacitance range: 6200 counts
- Display for Frequency range: 9999 counts
- Polarity: Auto
- Operating Temperature: 0°C~40°C(32°F~104°F)
- Storage Temperature: -10°C~50°C(14°F~122°F)
- Relative Humidity: 0°C~30°C, RH≤75%; 30°C~40°C, RH≤50%
- Operating Altitude: 0~2000m
- Battery: 6F22 9V
- Low Battery: LCD displays the symbol, '  '.
- Size: 186 mm×91mm×39mm
- Weight: around 305g (including batteries)
- Electromagnetic compatibility: RF≤1V/m, overall accuracy=specified accuracy+5% of range; RF>1V/m, no specified calculation.
- CE Certification
- Data Hold: To freeze displayed data
- Relative Measurement
- The device complies with IEC60101-1, Pollution Degree 2, over-voltage (CAT II 1000V), and double insulation safety standards
- Transistor Test and Diode Test
- Built-in Non Contact type Voltage Detector



## TECHNICAL SPECIFICATIONS

**Accuracy :** ± (a% of reading + b), 'b' is the numerical value in least significant digit slot; 1 year warranty,

Ambient temperature: 23°C±5°C (73.4°F±9°F).

Ambient humidity: ≤75% RH.


*Note: Specifications are subject to change, Photos shown above are Indicative, Actual Product can Vary.*

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## DC VOLTAGE

Range	Resolution	Accuracy
600.0mV	0.1mV	$\pm(0.8\%+3)$
6.000V	0.001V	$\pm(0.5\%+3)$
60.00V	0.01V	
600.0V	0.1V	$\pm(0.7\%+3)$
1000V	1V	

 **Input impedance:** around 10M $\Omega$

## AC VOLTAGE (T-RMS)

Range	Resolution	Accuracy
600.0mV	0.1mV	$\pm(1.0\%+4)$
6.000V	0.001V	$\pm(0.8\%+3)$
60.00V	0.01V	
600.0V	0.1V	$\pm(1.2\%+3)$
1000V	1V	

 **Input impedance:** around 10M $\Omega$



- True RMS display. Frequency response: 45~400Hz
- Accuracy assurance range: 5~100%,
- AC crest factor can reach up to 3.0 (1.5 for 600V range)


Non sine wave: When the crest factor is 1.0~2.0, the accuracy should increase by 3.0%, 2.0~2.5, 5.0%, and 2.5~3.0, 7.0%  
Max input voltage: 1000Vrms.

## RESISTANCE

Range	Resolution	Accuracy
600.0 $\Omega^*$	0.1 $\Omega$	$\pm(1.0\%+2)$
6.000k $\Omega$	0.001k $\Omega$	$\pm(0.8\%+2)$
60.00k $\Omega$	0.01k $\Omega$	
600.0k $\Omega$	0.1k $\Omega$	
6.000M $\Omega$	0.001M $\Omega$	$\pm(1.2\%+3)$
60.00M $\Omega$	0.01M $\Omega$	$\pm(2.5\%+5)$


## CONTINUITY , DIODE

Range	Resolution	Note
	0.1 $\Omega$	Resistance setting in open circuit status: >50 $\Omega$ , buzzer doesn't beep; Resistance setting for normal circuit: $\leq 10\Omega$ , buzzer beeps continuously.
	0.001V	Voltage at open circuit: about 3.2V Normal voltage of silicon PN junction is about 0.5~0.8V.
hFE	1B	Triode amplification factor 1~1000B I <sub>b</sub> ≈10uA; V <sub>CC</sub> ≈3.2V

 **Overload protection :** 250V

## CAPACITANCE

Range	Resolution	Accuracy
6.000nF	1pF	In relative mode: $\pm(4\%+10)$
60.00nF ~ 600.0 $\mu$ F	10pF ~ 0.1 $\mu$ F	$\pm(4\%+5)$
6.000mF ~ 60.00mF	1 $\mu$ F ~ 10 $\mu$ F	$\pm 10\%$

 **Overload protection:** 250V

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## FREQUENCY/DUTY RATIO

Range	Resolution	Accuracy
9.999Hz ~ 9.999MHz	0.001Hz ~ 0.001MHz	±(0.1%+5)
0.1%~99.9%	0.1%	Unspecified

- ⚠ **Overload protection:** 250V  
**Input amplitude a:** (DC level is zero)  
 ≤ 100kHz: 100mVrms ≤ a ≤ 20Vrms  
 > 100kHz~1MHz: 200mVrms ≤ a ≤ 20Vrms  
 > 1MHz: 500mVrms ≤ a ≤ 20Vrms  
 > 5MHz~10MHz: 900mVrms ≤ a ≤ 20Vrms  
 Duty ratio %: only applicable to ≤10kHz measurement

## TEMPERATURE

Range		Resolution	Accuracy
°C	-40~1000°C	1°C	-40~40°C ±4°C
	>40~500°C		±(1.0%+4)
	>500~1000°C		±(2.0%+4)
°C	-40~1832°F	1°F	-40~104°F ±5°F
	>104~932°F		±(1.5%+5)
	>932~1832°F		±(2.5%+5)

- ⚠ **Overload protection:** 250V  
**Note:** The equipped accessory, K-type thermocouple can only test the temperature below 230°C /446°F.

## DC CURRENT

Range	Resolution	Accuracy
μA	600.0μA	0.1μA
	6000μA	1μA
mA	60.00mA	10μA
	600.0mA	0.1mA
A	6.000A	1mA
	20.00A	10mA

- The device can test up to 10A current continuously.
- Overload protection:**  
 μA mA range: F2 Fuse FF0.6A H 250V  
 20A range: F1 Fuse F 20A H 250V

## AC CURRENT (T-RMS)

Range	Resolution	Accuracy
μA	600.0μA	0.1μA
	6000μA	1μA
mA	60.00mA	0.01mA
	600.0mA	0.1mA
A	6.000A	0.001A
	20.00A	0.1A

**Frequency response:** 45~400Hz

**Display:** True RMS

**Accuracy assurance range:** 5~100%, in short circuit status, remaining readings with less than 2 digits are permitted.

AC crest factor can reach up to 3.0.

**Non sine wave:** When the crest factor is 1.0~2.0, the accuracy should increase by 3.0%, 2.0~2.5, 5.0%, and 2.5~3.0, 7.0%

- ⚠ **Overload protection:** similar to the protection for DC current measurement

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