

**Features:**

- 4<sup>1</sup>/<sub>2</sub> Digital Multimeter, 19,999 Counts
- Meter is designed according to IEC 1010 standard
- Large LCD Display with Manual Range
- Auto Power Off (APO) under natural operation
- Backlight LCD

**DC VOLTAGE**

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

**DC CURRENT**

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

**AC VOLTAGE**

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

**FREQUENCY**

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

**TRANSISTOR hFE TEST**

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

**AC CURRENT**

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

**RESISTANCE**

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

**CAPACITANCE**

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

**DM-23**



**Special Function**

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

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

**DM-87**



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

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

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

**Features:**

- 3<sup>6</sup>/<sub>7</sub> Digital Multimeter, 5,999 Counts • VSD & True RMS meter
- Auto Power Off (APO) under natural operation • Data Hold, Max. / Min. Value Hold • Capacitance, Frequency / Duty Cycle, Temperature and Transistor Test

**DC VOLTAGE**

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

**DC CURRENT**

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

**AC VOLTAGE (TRUE RMS)**

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

**Special Function**

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

**AC CURRENT (TRUE RMS)**

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

**RESISTANCE**

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

**CAPACITANCE**

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

**TRANSISTOR hFE TEST**

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

