

# Digital Multimeter

## DM-817

### • Auto Range

- 9 Function
- 1000VDC / 750VAC
- AC/DC Current: 10A
- Data Hold / Backlight
- Auto Power Off
- Includes: Capacitance/Temperature/Frequency
- 6000 Count
- Carrying Case

Battery, Test Leads (standard and temperature) and Operating Instructions Included

### SPECIFICATIONS:

Accuracy is specified for a period of one year after calibration and at 18 to 28°C (64 to 82°F) with relative humidity to 80%.



#### General

**Display:** (LCD)

**Maximum Display:** 5999 (5 5/6) bits  
Automatic polarity display

**Measurement:** double integral A/D conversion

**Sampling Rate:** about 3 times per second

**Overrange Display:** the most significant bit was "OL"

**Low Voltage Display:** "L" symbol appears

**Working Environment:** (0-40) °C, relative humidity < 80%

**Power Supply:** 9V (NEDA1604 / 6F22) / 1.5V\*2 AAA battery

**Size:** 184 \* 90 \* 46 mm (LWH)

#### DC Voltage

Range/Accuracy	6000counts	Resolution
600mV	(0.5%+3)	0.1mV
6V	(0.5%+3)	0.001V
60V	(0.5%+3)	0.01V
600V	(0.5%+3)	0.1V
1000V	(0.8%+10)	1V

Input impedance: 10MΩ  
Overload protection: 200mV range is 550V DC or AC peak; the rest is 1000V DC or 750V AC peak.

#### DC Current

Range/Accuracy	6000counts	Resolution
600uA	(0.8%+10)	0.1uA
6000uA	(0.8%+10)	0.001mA
60mA	(0.8%+10)	0.01A
600mA	(0.8%+10)	0.1A
10A	(2.0%+30)	1A

The maximum measured pressure drop: 600mV  
Overload protection: 600MA  
600MA/250V speed Glass Fuse: 10A: 10A/250V ceramic speed fuse.

#### AC Voltage

Range/Accuracy	6000counts	Resolution
600mV	(0.8%+5)	0.1mV
6V	(0.8%+5)	1mV
60V	(0.8%+5)	10mV
600V	(0.8%+5)	100mV
750V	(1.2%+10)	1V

Input impedance: 10MΩ  
Standard sine wave and triangular wave frequency response: 40 Hz-1kHz; other waveform frequency response: 40Hz-200Hz

#### AC Current

Range/Accuracy	6000counts	Resolution
600uA	(0.8%+10)	0.1uA
6000uA	(0.8%+10)	0.001mA
60mA	(0.8%+10)	0.01A
600mA	(0.8%+10)	0.1A
10A	(2.0%+30)	1A

The maximum measured pressure drop: 600mv  
Overload protection: 600MA  
600MA/250V speed Glass Fuse: 10A: 10A/250V ceramic speed fuse.  
Frequency response: Sine wave and triangular wave is 40Hz-1Kz; other waveform is 40Hz-200Hz;  
Display: True RMS;

#### Resistance

Range/Accuracy	6000counts	Resolution
600Ω	(0.8%+5)	0.1Ω
6KΩ	(0.8%+3)	1Ω
60KΩ	(0.8%+3)	10Ω
600KΩ/6MΩ	(0.8%+3)	100Ω/1KΩ
60MΩ	(2.0%+25)	10KΩ

Open circuit voltage: less than 3V; overload protection: 550V DC or AC peak;  
A: In the use of 600Ω range, you should first short-circuit test leads, measured lead resistance, and then subtracted from the real measurement;  
B: when measures larger than 1MΩ resistance, the slow reading is a normal phenomenon, please read the value after show stability.

#### Capacitance

Range/Accuracy	6000counts	Resolution
60nF	(3.5%+20)	10pF
600nF	(3.5%+20)	100pF
6uF	(3.5%+20)	1nF
60uF	(3.5%+20)	10nF
600uF/6mF	(5.0%+10)	100nF/1uF

## SPECIFICATIONS: (continued)

### Frequency


Range/Accuracy	6000counts	Resolution
10Hz	(0.1%+3)	0.01 Hz
100Hz	(0.1%+3)	0.1 Hz
1kHz	(0.1%+3)	1 Hz
10kHz	(0.1%+3)	10 Hz
100kHz	(0.1%+3)	100 Hz
1MHz	(0.1%+3)	1 kHz
20MHz	(0.1%+3)	10 kHz

Input sensitivity: 1V RMS; overload protection;  
550V DC or AC peak (not more than 10 seconds)

### Temperature

Range/Accuracy	6000counts	Resolution
(-20-1000) °C	(1.0%+5)<400°C	1°C
	(1.5%+1.5)>=400°C	
(0-1832) F	(0.75%+5)<750F	1F
	(1.5%+1.5)>=750F	

### Diodes Power-on Test

Range	Display Value	Test Conditions
	Diode forward voltage drop	Forward DC current    about 1mA Open circuit voltage    about 3V
	The buzzer makes long sounds to test the resistance of two points less than (50 20) Ω	Open circuit voltage    about 3V

Overload protection: 550V DC or AC peak

**Warning:** for safety within this range, it is prohibited to input the voltage value.