

Digital Multimeter

DM-59

- Perfect For Workshop and School
- 10 Functions, 30 Ranges

- Frequency Counter
- h_{FE}
- Capacitance
- Diode Test
- 20M Ω FS
- 10A AC/DC
- 0.5% Basic DC Accuracy
- 3 1/2 Digit LCD, 0.55" H
- Audible Continuity Test
- 10M Ω Input Z
- Overload Protection
- RF Shielded
- Tilt Stand
- 1-Year Limited Warranty

Battery, Test Leads (ML-375), Spare Fuse and Operating Instructions Included

SPECIFICATIONS:

General

Display: 3 1/2 Digit LCD, 0.55" high, with polarity

Overrange Indication: "OL" is displayed

Measurement Rate: 2.5 times per second

Operating Environment: 0°C to 50°C, <70% relative humidity

Storage Environment: -20°C to 60°C, <80% relative humidity with battery removed

Power: 9V carbon zinc battery (NEDA 1604)

Battery Life: 150 hours typical with carbon zinc cells

Low Battery Indicator: Symbol is displayed

Dimensions, Weight: 2.8" wide x 6" long x 1.5" thick (70mm x 151mm x 38mm)
net weight 7oz. (200g)



DC Voltage

Range	Resolution	Accuracy
200mV	100 μ V	$\pm 0.5\%$ of rdg $\pm 1D$
2V	1mV	$\pm 0.5\%$ of rdg $\pm 1D$
20V	10mV	$\pm 0.5\%$ of rdg $\pm 1D$
200V	100mV	$\pm 0.5\%$ of rdg $\pm 1D$
600V	1V	$\pm 0.5\%$ of rdg $\pm 1D$

Input Impedance: 10M Ω on all ranges

Maximum Input: 600V DC or AC rms

DC Current

Range	Resolution	Accuracy
2mA	1 μ A	$\pm 1.0\%$ of rdg $\pm 1D$
20mA	10 μ A	$\pm 1.0\%$ of rdg $\pm 1D$
200mA	100mA	$\pm 1.0\%$ of rdg $\pm 1D$
10A	10mA	$\pm 3.0\%$ of rdg $\pm 1D$

Overload Protection: mA input, 0.5A/250V fuse;
10A input 10A/600V fuse

AC Voltage

Range	Resolution	Accuracy
200mV	100 μ V	$\pm 1.0\%$ of rdg $\pm 4D$
2V	1mV	$\pm 1.0\%$ of rdg $\pm 4D$
20V	10mV	$\pm 1.0\%$ of rdg $\pm 4D$
200V	100mV	$\pm 1.0\%$ of rdg $\pm 4D$
600V	1V	$\pm 1.9\%$ of rdg $\pm 4D$

Input Impedance: 10M Ω on all ranges

Maximum Input: 600V DC or AC rms

Frequency Range: 50Hz - 500Hz

AC Current

Range	Resolution	Accuracy
2mA	1 μ A	$\pm 2.0\%$ of rdg $\pm 4D$
20mA	10 μ A	$\pm 2.0\%$ of rdg $\pm 4D$
200mA	100mA	$\pm 2.0\%$ of rdg $\pm 4D$
10A	10mA	$\pm 3.5\%$ of rdg $\pm 4D$

Overload Protection: mA input, 0.5A/250V fuse;
10A input 10A/250 fuse

Resistance

Range	Resolution	Accuracy
200 Ω	0.1 Ω	$\pm 0.8\%$ of rdg $\pm 3D$
2K Ω	1 Ω	$\pm 0.8\%$ of rdg $\pm 1D$
20K Ω	10 Ω	$\pm 0.8\%$ of rdg $\pm 1D$
200K Ω	100 Ω	$\pm 0.8\%$ of rdg $\pm 1D$
2000K Ω	1K Ω	$\pm 0.8\%$ of rdg $\pm 1D$
20M Ω	10K Ω	$\pm 3\%$ of rdg $\pm 3D$

Overload Protection: 500V DC or AC rms

Capacitance

Range	Resolution	Accuracy
2000pF	1pF	$\pm 2.0\%$ of rdg $\pm 10D$
20nF	10pF	$\pm 2.0\%$ of rdg $\pm 10D$
200nF	100pF	$\pm 2.0\%$ of rdg $\pm 10D$
2 μ F	1nF	$\pm 2.0\%$ of rdg $\pm 10D$
20 μ F	10nF	$\pm 2.0\%$ of rdg $\pm 10D$

Test Frequency: 2.5Hz

Test Voltage: 3V

Frequency Measurement

Range: 2kHz - 15MHz (Autorange)

Accuracy: $\pm 0.1\%$ rdg $\pm 1D$

Input Sensitivity: Trig Lo: 1 Vrms; Trig Hi: 2 Vrms

Overload Protection: 500V DC or AC rms

Continuity Test (Audible)

Resistance Range: 200 Ω

Beeper Response: <40 Ω

Transistor h_{FE} Test (PNP, NPN)

Test Condition: 10 μ A Base Current @ <3.5V

h_{FE} Range: 0 - 1000

Diode Test

Voltage: 2V @ 1.6mA Max