Digital Multimeter

DM-78A

- **Heavy Duty, Ideal For Plant/ Industrial Maintenance**

- Water Resistant (O-Ring Seals)
- Withstands 5' Drop
- Protective Holster (MH-350)
- Large Display Window
- 3200 Count LCD, .55" H
- 65 Segment Analog Bar Graph
- 0.5% Basic DC Accuracy
- Auto Power Off
- 10MΩ Input Z
- "No Hand" Data Hold
- Input Warning Beeper*
- 20A AC/DC Fused
- Diode Test
- Instant Continuity Beeper
- Overload Protection
- 1-Year Limited Warranty

Batteries, Test Leads (ML-375), and Operating Instructions Included

SPECIFICATIONS:

General

Display: *3200 count LCD, 65 segment bar graph, 0.55" high, with polarity*

Auto Power Off: *Approx. 10 min. after mode or function change*

Overrange Indication: *"OL" is displayed*

Operating Environment: *0°C to 50°C, <80% relative humidity*

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

Temperature Coefficient: *(0°C to 18°C and 28°C to 50°C), less than 0.15 x applicable accuracy specification per second*

Measurement Rate: *Digital 2 times per second, analog 12 times per second*

Power: *1.5V AAA (2) alkaline or carbon zinc batteries*

Battery Life: *1000 hours with alkaline cells*

Low Battery Indicator: *Symbol is displayed*

Fuse: *1A 240/250V Fast*

Dimensions, Weight: *3.3" wide x 6.9" long x 1.2" thick (84mm x 175mm x 31mm), net weight 12oz. (340g)*

DC Voltage

Range	Resolution	Accuracy
300mV	0.1mV	±0.5% of rdg ±2D
3V	1mV	±0.5% of rdg ±2D
30V	10 mV	±0.5% of rdg ±2D
300V	100mV	±0.5% of rdg ±2D
1000V	1V	±0.5% of rdg ±2D

Input Impedance: 10MΩ

Overload Protection: 1100VpK (15 sec.)

DC Current

Range	Resolution	Accuracy
300µA	0.1µA	±1% of rdg ±2D
3mA	1µA	±1.2% of rdg ±2D
30mA	10µA	±1% of rdg ±2D
300mA	100µA	±1.2% of rdg ±2D
20A	10mA	±2% of rdg ±3D

Overload Protection: µA, mA = 1A 240/250V, 20A = 13A 240/250V (readings over 10A max., 30 sec.)

Voltage Drop: 200mV on 300µA, 30mA ranges; 2V all others

AC Voltage

Range	Resolution	Accuracy
3V	1mV	±1.3% of rdg ±5D
30V	10mV	±1.3% of rdg ±5D
300V	100mV	±1.3% of rdg ±5D
750V	1V	±1.3% of rdg ±5D

Frequency Range: 3V on 40Hz - 300Hz; 40Hz - 500Hz all others

Input Impedance: 10MΩ on all ranges

Overload Protection: 770V AC RMS or 1100Vpk (15 sec.)

AC Current

Range	Resolution	Accuracy
300µA	0.1µA	±1.5% of rdg ±3D
3mA	1µA	±1.5% of rdg ±3D
30mA	10µA	±1.5% of rdg ±3D
300mA	100µA	±2% of rdg ±3D
20A	10mA	±2.5% of rdg ±5D

Frequency Range: 40Hz - 500Hz

Overload Protection: µA, mA = 1A 240/250V, 20A = 13A 240/250V (readings over 10A max., 30 sec.)

Voltage Drop: 200mV on 300µA, 30mA ranges; 2V all others

Resistance

Range (Lo-Power Ω)	Resolution	Accuracy
300Ω	0.1Ω	±1% of rdg ±4D
3KΩ	1Ω	±0.75% of rdg ±2D
30KΩ	10Ω	±0.75% of rdg ±2D
300KΩ	100Ω	±0.75% of rdg ±2D
3MΩ	1KΩ	±1.5% of rdg ±3D
30MΩ	10KΩ	±2.5% of rdg ±5D

Lo-Power Ω open circuit 1.3V

Overload Protection: 600VDC or 600V AC RMS (10 sec.)

Diode Test

Voltage: 3.3V @ 1.5mA max

Continuity Test

Beeper Response: <50Ω

Response Time: Instant

Delay Hold: *Allows "No-Hand" data hold operation*

**** Input Warning Beeper:*** *Eliminates incorrect test lead placement and selector switch settings*