

## 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
- 10M $\Omega$  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	$\pm 0.5\%$ of rdg $\pm 2D$
3V	1mV	$\pm 0.5\%$ of rdg $\pm 2D$
30V	10 mV	$\pm 0.5\%$ of rdg $\pm 2D$
300V	100mV	$\pm 0.5\%$ of rdg $\pm 2D$
1000V	1V	$\pm 0.5\%$ of rdg $\pm 2D$

Input Impedance: 10M $\Omega$

Overload Protection: 1100Vpk (15 sec.)

#### DC Current

Range	Resolution	Accuracy
300 $\mu$ A	0.1 $\mu$ A	$\pm 1\%$ of rdg $\pm 2D$
3mA	1 $\mu$ A	$\pm 1.2\%$ of rdg $\pm 2D$
30mA	10 $\mu$ A	$\pm 1\%$ of rdg $\pm 2D$
300mA	100 $\mu$ A	$\pm 1.2\%$ of rdg $\pm 2D$
20A	10mA	$\pm 2\%$ of rdg $\pm 3D$

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

Voltage Drop: 200mV on 300 $\mu$ A, 30mA ranges; 2V all others

#### AC Voltage

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

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

Input Impedance: 10M $\Omega$  on all ranges

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

#### AC Current

Range	Resolution	Accuracy
300 $\mu$ A	0.1 $\mu$ A	$\pm 1.5\%$ of rdg $\pm 3D$
3mA	1 $\mu$ A	$\pm 1.5\%$ of rdg $\pm 3D$
30mA	10 $\mu$ A	$\pm 1.5\%$ of rdg $\pm 3D$
300mA	100 $\mu$ A	$\pm 2\%$ of rdg $\pm 3D$
20A	10mA	$\pm 2.5\%$ of rdg $\pm 5D$

Frequency Range: 40Hz - 500Hz

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

Voltage Drop: 200mV on 300 $\mu$ A, 30mA ranges; 2V all others

#### Resistance

Range	Resolution	Accuracy
300 $\Omega$	0.1 $\Omega$	$\pm 1\%$ of rdg $\pm 4D$
3K $\Omega$	1 $\Omega$	$\pm 0.75\%$ of rdg $\pm 2D$
30K $\Omega$	10 $\Omega$	$\pm 0.75\%$ of rdg $\pm 2D$
300K $\Omega$	100 $\Omega$	$\pm 0.75\%$ of rdg $\pm 2D$
3M $\Omega$	1K $\Omega$	$\pm 1.5\%$ of rdg $\pm 3D$
30M $\Omega$	10K $\Omega$	$\pm 2.5\%$ of rdg $\pm 5D$

Lo-Power  $\Omega$  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: <50 $\Omega$

Response Time: Instant

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

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