Digital Multimeter

DM-78A

Heavy Duty, Ideal For Plant/ Industrial Maintenance

- Water Resistant (0-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

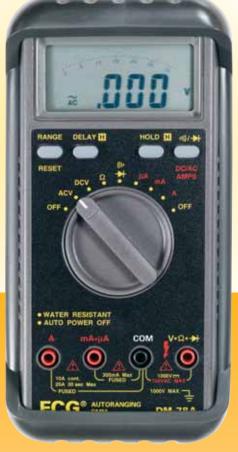
zinc batteries

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	$\pm 0.5\%$ 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

2V all others

Range	Resolution	Accuracy	
300μΑ	0.1μΑ	$\pm 1\%$ of rdg $\pm 2D$	
3mA	1μΑ	$\pm 1.2\%$ of rdg $\pm 2D$	
30mA	10μΑ	$\pm 1\%$ of rdg $\pm 2D$	
300mA	100μΑ	$\pm 1.2\%$ of rdg $\pm 2D$	
20A	10mA	$\pm 2\%$ of rdg $\pm 3D$	
Overload Protection: μ A, m A = 1A 240/250V,			
20A = 13A 240/250V (readings over 10A max.			
30 sec.)			

Voltage Drop: 200mV on 300μA, 30mA ranges;

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	1 <i>V</i>	$\pm 1.3\%$ 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

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

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	Resolution	Accuracy		
(Lo-Power Ω)				
300Ω	0.1Ω	$\pm 1\%$ of rdg $\pm 4D$		
$3K\Omega$	1 Ω	$\pm 0.75\%$ of rdg $\pm 2D$		
30 K Ω	10Ω	$\pm 0.75\%$ of rdg $\pm 2D$		
300 K Ω	100Ω	$\pm 0.75\%$ of rdg $\pm 2D$		
$3M\Omega$	$1K\Omega$	$\pm 1.5\%$ of rdg $\pm 3D$		
$30M\Omega$	10KΩ	$\pm 2.5\%$ of rdg $\pm 5D$		

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



