

Megohmmeter

- 1 to 200 M Ω
- 500 V Test Voltage
- Simple One Range Operation
- Measures AC Voltage to 600 V
- LED on when Voltage is Present
- Rugged to MIL Specifications
- Single Push Button for Test
- 9 V Battery Operation



The Model R1M-B Handheld Voltmeter/Megohmmeter complies with MIL-T-28800, Type III, Class 3, Style E for rugged operational environments and shipboard applications. These units perform under the extremes of heat, cold, humidity, shock, vibration, and operator abuse.

The R1M-B is designed to measure insulation resistance in "live" circuits, which may have voltage present. The R1M-B may be connected to 600 V RMS AC or DC without damage, and its mode of operation is automatic. It has no fuse to replace. The R1M-B will operate after a drop from a height of four feet to a concrete floor.

Operation

The R1M-B Voltmeter/Megohmmeter is activated by pressing the "TEST" switch. When the R1M-B is first turned on, its input is automatically selected as a voltage input, reading any voltage present on the test leads, and displaying that voltage on a liquid crystal display. At the same time, the "VOLTS" LED lights. If the voltage sensed on the test leads exceeds approximately 1 V, the R1M-B will not take any additional readings. However if there is no voltage (or less than approximately 1 V) on the test leads, the instrument will automatically switch to the megohmmeter mode, whereupon the internal 500 V supply is connected to the test leads and the measured resistance is displayed.

As long as the "TEST" switch is depressed, the R1M-B will continue to take readings. Releasing the switch will automatically turn off the unit, to maximize battery life and minimize the risk of the operator being shocked by the 500 V across the test probes during resistance measurements. *(Note that the test current is limited to approximately 1 mA, but this can still produce a shock.)*

Specifications

Measurement Ranges	1 to 200 M Ω , for resistance 3 to 600 VAC RMS, for voltage
Test Voltage for Resistance	500 VDC 10%
Accuracy & Calibration	Voltage readings within 5% of reading \pm 1 count Resistance readings within 3% of reading \pm 1 count Suggested Calibraton Interval: 12 months End-of-interval confidence factor: 72%
Controls and Display	Single "TEST" switch (mode selection automatic) 3 ½ digit liquid crystal display with 0.5" digits LCD "LO BAT" legend to indicate low battery
Environmental	Operating Temperature: 0 °C to 50 °C, 75 % RH, Non-condensing Storage Temperature: -40 °C to 71 °C, 0-100 % RH, Non-condensing
Power and Physical	Power: Standard alkaline 9 V battery Size: 3.5" W x 7.0" H x 1.2" D Weight: 0.6 lb (including battery)
Included Accessories	Protective carrying pouch Two 40 inch test leads with probes and insulated, detachable alligator clips Operation and Maintenance manual
Ordering Information	R1M-B: NSN 6625-01-353-7077

