

EM1001A MegOhmMeter

High Resistance Insulation Tester

Trimble Sustainment Engineering Inc is proud to offer the EM1001A, a ruggedized, digitally indicating high-resistance meter.

FEATURES:

- Digital Indication for ease of reading and high accuracy
- Pelican-case based enclosure
- Charge current up to 10mA
- 50k Ω to 200T Ω
- 1090 different Programmable Test Voltages (from 10 to 110VDC in 1VDC steps)
- USB interface for remote operation and data collection
- Easily understood accuracy specifications
- Safety jacks and isolated controls to ensure there is no risk of accidental shock hazards



USES:

- Insulation Resistance on wires and cables
- Insulation resistance on capacitors

Description

The EM1001A is a ruggedized design that was created specifically for military use, with the safety and well-being of the operator being the primary concern. With this in mind, legacy binding posts have been replaced with currently manufactured safety jacks and the dangerously exposed legacy binding post clip, bare metal so common in older designs, has been replaced with an isolated switch that controls an internal relay. All knobs and switches interface to a microcontroller, meaning that all levels tied to them are no greater than 5VDC, eliminating the risk of shock or injury.

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The output voltage of the EM1001A can be set in 1VDC steps from 10 to 1100 VDC with an accuracy across the entire range of $\pm 1\%$ of setting, allowing for non-standard voltage configurations to cover many applications.

The meter display includes an “analog” bargraph scale across the top, just above the large (and easily read) measured value, with a red “needle” indicator. Below the measured value is the current range setting, the Chassis Connection switch position and the Voltage Setting indication. All of these are provided both to supply the end-user with a tactile feedback of how the meter is configured, but also to allow for fast, visual troubleshooting should a switch fail during operation. Additionally, the digital display includes a count-up timer in the lower right for allowing the operator to know definitively when his measurement time requirements is up (if applicable), though it should be noted that the settling time of the EM1001A is far less than analog equivalents.

The entire meter is enclosed in a Pelican case, providing ruggedization as well as sand / fog / dust / water resistance...when closed, of course. All accessories are included in case attached to the outside of the unit’s lid, to include the lead kit, manual and power cord.

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SPECIFICATIONS

Resistance Accuracy:

Ranges 1-4: $\pm 2\%$ of reading
Ranges 5-7: $\pm 3\%$ of reading

Voltage Accuracy:

$\pm 1\%$ of setting

Short-Circuit Current:

10mA Approximately

Input Terminals:

Front Panel Mounted, 3 Safety Jacks

Display:

Full-color Display
High-Voltage Warning LED

Dimensions:

(l x w x d): 11.8" x 9.8" x 4.7" (does not include accessory pouch)

Weight:

Approximately 8.75 Pounds

Power:

100 to 250 VAC, 50 / 60 / 400Hz*, 11W

**Note that altering the voltage and frequencies*

do not require any selection by the operator

Environmental:

Operational 0 to +40 C, <70% RH

Storage:

-20 C to +60 C, <80% RH