

# Mi1000e



- Insulation test up to 200 GΩ
- 2 test voltages: 500 V - 1,000 V
- GUARD terminal
- Rechargeable battery
- Multiple scales for accuracy improvement
- Taut-band analog meter
- High accuracy
- IP54 protection (with closed lid)

## Description

The **Mi1000e** general purposes insulation tester is a truly portable equipment suitable to measure insulation resistances using test voltages up to 1 kV. It employs high-reliable, state-of-the-art technology for accurate measurements of insulation resistances up to 200 GΩ with two test voltages: 500 V and 1,000 V. Readings are performed through an easy-to-read analog indicator having a broad scale.

Many experienced technicians consider that insulation measurements are best performed with analog instruments, because they get useful information from the pointer displacement along the time. This equipment is specially indicated for that people, because it is a true analog, simple to use, cost effective, insulation resistance tester.

Insulation of low voltage in electrical systems, transformers, motors, cables, electro-medical equipment and installations, distribution networks, etc., the measurement are easily performed with great reliability, using this instrument.

In order to maximize the operator's safety, this equipment was made within a plastic cabinet of high breakdown strength. A light indicator warns about dangerous voltages presence both in the equipment and in the element under testing, and switches-off automatically when the discharge process has finished. This instrument has a GUARD terminal that allows to remove the effects of parasitic resistances and surface currents on the isolation resistances to be measured.

Due to its strong and lightweight cabinet, it's easy to carry, impact-resistant and suitable to be used under severe weather conditions. Thus the insulation tester supplies very reliable and accurate measurements both in laboratory and out in the field.

# Mi1000e

## Technical specifications

**TEST VOLTAGES**

500 V - 1,000 V.

**MAXIMUM RESISTANCE READING**

100 GΩ @ 500 V.

200 GΩ @ 1,000 V.

**SHORT CIRCUIT CURRENT**

1 mA ± 2%.

**TEST VOLTAGES ACCURACY**

± 2% of nominal test voltages on  $R \geq 1 \text{ G}\Omega$ .

**EQUIPMENT ACCURACY**

Class 2 (± 2% of full scale deflection).

**INTERNAL CURRENT LIMITING RESISTANCE**

500 kΩ @ 500 V.

1 MΩ @ 1,000 V.

**ANALOG INDICATOR**

Up to 98 mm scale length, taut band, with mirror (thus avoiding parallax errors).

**ENVIRONMENTAL PROTECTION**

IP54 with closed lid.

**SAFETY CLASS**

In accordance with IEC 61010-1.

**E.M.C.**

In accordance with IEC 61326-1 and 61000-4-3.

**ELECTROSTATIC IMMUNITY**

In accordance with IEC 61000-4-2.

**POWER SUPPLY**

Internal rechargeable battery 7.2 V - 1500 mAh (NiMH).

**BATTERY CHARGER**

12 V - 1.0 A AC adapter.

**OPERATING TEMPERATURE RANGE**

23°F to 122°F (-5°C to 50°C).

**STORAGE TEMPERATURE RANGE**

-13°F to 149°F (-25°C to 65°C).

**HUMIDITY RANGE**

95% RH (non condensing).

**EQUIPMENT WEIGHT**

Approx. 3.52 lb (1.6 kg).

**DIMENSIONS**

8.70" x 7.44" x 3.89" (221 x 189 x 99 mm).

**INCLUDED ACCESSORIES**

- 2 Measuring test leads.
- 1 GUARD test lead.
- 1 AC adapter for the battery charger.
- 1 Protective bag.
- 1 Operating instructions.