

# Mi1050e



## 1 kV ELECTRONIC INSULATION TESTER

- ✓ INSULATION TEST UP TO 2  $\Omega$
- ✓ 4 TEST VOLTAGES:  
100 V - 250 V - 500 V - 1000 V
- ✓ GUARD TERMINAL
- ✓ RECHARGEABLE BATTERY
- ✓ MULTIPLE SCALES FOR ACCURACY IMPROVEMENT
- ✓ TAUT-BAND ANALOGUE METER
- ✓ HIGH ACCURACY
- ✓ IP54 PROTECTION

The **MI-1050e** 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 ultra high insulation resistances up to **2.000.000 M $\Omega$**  with four test voltages: **100 V - 250 V - 500V - 1000V**. Readings are performed through an easy-to-read analogue indicator having a broad scale.

Many experienced technicians consider that insulation measurement are best performed with analogue 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 analogue, 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, with no metallic accessible parts. 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 insulation tester 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 reduced size and weight, its power autonomy and mechanical strength, this equipment is suitable for working out in the field, under severe weather conditions. It is battery powered with an internal, rechargeable battery. In order to easily carry the cabinet, it is closed and water-, dust- and sand-resistant. It provides an IP54 protection and is supplied with a complete kit of test leads.

# MI 1050<sub>e</sub> :: TECHNICAL SPECIFICATIONS

## TEST VOLTAGES

100 V - 250 V - 500 V - 1000 V.

## MAXIMUM RESISTANCE READING

200 GΩ @ 100 V.  
500 GΩ @ 250 V.  
1 TΩ @ 500 V.  
2 TΩ @ 1000 V.

## SHORT CIRCUIT CURRENT

1 mA ± 2%.

## TEST VOLTAGES ACCURACY

± 2% of nominal test voltages on R ≥ 1 GΩ.

## INTERNAL CURRENT LIMITING RESISTANCE

100 kΩ @ 100 V.  
250 kΩ @ 250 V.  
500 kΩ @ 500 V.  
1 MΩ @ 1000 V.

## MEGOHMMETER ACCURACY

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

## ANALOGUE INDICATOR

Class 1. Scale with up to 98 mm length, with extra fine pointer and mirror, thus avoiding parallax errors. Taut band system.

## ENVIRONMENTAL PROTECTION

IP54 (with closed lid).

## SAFETY CLASS

Meets the requirements of IEC 61010-1:1990,  
IEC 61010-1:1992 amendment 2.

## ELECTROMAGNETIC COMPATIBILITY (E.M.C)

In accordance with IEC 61326-1.

## ELECTROMAGNETIC IMMUNITY

In accordance with IEC 61000-4-3.

## ELECTROSTATIC IMMUNITY

In accordance with IEC 1000-4-2.

## POWER SUPPLY

Internal rechargeable 12 V - 2.3 Ah, sealed lead acid battery.

## BATTERY CHARGER

100 - 240 V~ mains supply.

## OPERATING TEMPERATURE RANGE

-5°C to 50°C.

## STORAGE TEMPERATURE RANGE

-25°C to 65°C.

## HUMIDITY RANGE

95 % RH (non condensing).

## EQUIPMENT WEIGHT

Approx. 3.7 kg.

## DIMENSIONS

274 x 250 x 124 mm.

## INCLUDED ACCESSORIES

2 Measuring test leads (1.80 m).  
1 GUARD test lead.  
1 Charger power cord.  
1 Operating instructions.  
1 Carrying bag.

## CE MARK

*Subject to technical change without notice. This catalogue is not a contractual document.*



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