

GigaOhm 1 kV
Insulation / Continuity Tester
MI 3103



Insulation Resistance

- Three different test voltages (250, 500 and 1000 V) provide the tests required for all installations encountered.
- Extremely wide range of measured insulation resistance (**up to 2 GΩ**) enables periodic analysis of changes in insulation material.
- Automatic discharge of the equipment under test after completion of the test.

Continuity

- 200 mA measurement with automatic polarity change.
- Automatic compensation of test leads (up to 5 Ω) eliminates lead resistance.
- Continuous low current resistance measurement for testing of electrical motors, inductive windings, transformers, etc.

RMS Voltage and Frequency

- Warnings are given if hazardous voltages are detected.
- Auto power-off.

Standard set

- Instrument GigaOhm 1 kV
- Measuring lead, 1.5 m black
- Measuring lead, 1.5 m red
- Test tip, black
- Test tip, red
- Carrying strap
- Instruction manual
- Declaration of conformity
- Product verification data



Standards Applied

Instrument operation:
IEC / EN 61557-1, IEC/EN 61557-2,
IEC / EN 61557-4, IEC/EN 61557-10

Electromagnetic compatibility:
EMC: IEC 61326 Class B

Safety:
EN/IEC 61010-1 (instrument),
EN/IEC 61010-2-31 (accessories)

Technical Specification

Insulation resistance

0 MΩ ± 2 GΩ (500 V, 1000 V)
0 MΩ ± 200 MΩ (250 V)
Un: 250 V, 500 V, 1000 V \equiv
In: >1 mA at 250 kΩ (250 V)
500 kΩ (500 V)
1 MΩ (1000 V)

Isc: <2 mA

Continuity

$R \pm 200 \text{ mA}$:
0 Ω ± 2 kΩ
Uoc.: 4 V ± 7 V \equiv
I (2 Ω): >200 mA

R_{con} :

0 Ω ± 2 kΩ
Uoc.: 4 V ± 7 V \equiv
Isc.: <7 mA

Voltage / Frequency

U: 0 V ± 600 V TRMS
f: 16 Hz ± 450 Hz or \equiv

General

Power supply: 6 V DC (4 × 1.5V alkaline battery IEC LR14)
Typical operating time: >70 h
Auto power off: yes, approximately 10 min. of no activity
Display: custom LCD
Protection classification: Class II (double insulation)
Over-voltage category: CAT III 300V
Pollution degree: 2
Protection degree: IP 40
Working temp. Range: 0 °C + 40 °C
Dimensions (w × h × d): 280 x 70 x 80 mm
Weight (without access.): 420 g