



MIC-10

Index: WMGBMIC10

Insulation Resistance Meter

Description

- **Insulation resistance measurement:**
 - selected test voltage: 50, 100, 250, 500, 1000 V,
 - continuous indication of insulation resistance or leakage current,
 - automatic discharge of capacitance of tested object after the insulation resistance measurement,
 - acoustic signalling of five-second periods to facilitate obtaining time characteristics,
 - indication of actual test voltage during the measurement,
 - protection against measuring live objects,
 - three-lead measurement.
- **Continuity measurement of protective and equipotential conductors according to EN 61557 - 4 with the >200 mA current**

- **Low-voltage circuit continuity and resistance measurement:**
 - circuit resistance measurement (<1999) with the <15 mA current,
 - quick sound signal if circuit resistance is below 30Ω.
- **Capacitance measurement during the R_{ISO} measurement**
- **Measurement of alternating and direct voltages in the 0...600 V range.**
- **Power supply: 4 AA disposable or rechargeable batteries, monitoring of power supply voltage.**
- **Meter conform to EN 61557.**

Specifications

Electric safety:

- type of insulation: double, according to EN 61010 - 1 and IEC 61557
- measurement category: IV 600 V (III 1000 V) according to EN 61010 - 1
- protection class acc. to EN 60529: IP67

Other technical specifications:

- power suply: 4 alkaline batteries or or battery package Ni-MH
- weight: ~1 kg
- dimentions: 220 x 100 x 60 mm

Insulation resistance measurement

Measuring range according to EN 61557 - 2 for $U_N=50$ V: 50 kΩ...250,0 MΩ

Range	Resolution	Accuracy
0,0...999,9 kΩ	0,1 kΩ	±(3% m.v. + 8 digits)
1,000...9,999 MΩ	0,001 MΩ	
10,0...99,99 MΩ	0,01 MΩ	
100,0...250,0 MΩ	0,1 MΩ	

Measuring range according to EN 61557 - 2 for $U_N=100$ V: 100 kΩ...500,0 MΩ

Range	Resolution	Accuracy
0,0...999,9 kΩ	0,1 kΩ	±(3% m.v. + 8 digits)
1, 000...9,999 MΩ	0,001 MΩ	
10,0...99,99 MΩ	0,01 MΩ	
100,0...500,0 MΩ	0,1 MΩ	

Measuring range according to EN 61557 - 2 for $U_N=250$ V: 250 kΩ...2,000 GΩ

Range	Resolution	Accuracy
0,0...999,9 kΩ	0,1 kΩ	±(3% m.v. + 8 digits)
1,000...9,999 MΩ	0,001 MΩ	

10,0...99,99 MΩ	0,01 MΩ
100,0...999,0 MΩ	0,1 MΩ
1,000...2,000 GΩ	0,001 GΩ

Measuring range according to PN-EN 61557 - 2 for **U_N=500 V**: 500 kΩ...5,00 GΩ

Range	Resolution	Accuracy
0,0...999,9 kΩ	0,1 kΩ	±(3% m.v. + 8 digits)
1,000...9,999 MΩ	0,001 MΩ	
10,00...99,99 MΩ	0,01 MΩ	
100,0...999,0 MΩ	0,1 MΩ	
1,000...5,000 GΩ	0,001 GΩ	±(4% m.v. + 6 digits)

Measuring range according to EN 61557 - 2 for **U_N=1000 V**: 1000 kΩ...10,00 GΩ

Range	Resolution	Accuracy
0,0...999,9 kΩ	0,1 kΩ	±(3% m.v. + 8 digits)
1,000...9,999 MΩ	0,001 MΩ	
10,00...99,99 MΩ	0,01 MΩ	
100,0...999,0 MΩ	0,1 MΩ	
1,000...5,000 GΩ	0,001 GΩ	±(4% m.v. + 6 digits)
5,00...10,00 GΩ	0,01 GΩ	

Continuity measurement of protective and equipotential conductors with the 200 mA current

Measuring range according to EN 61557 - 4: 0,10...1999 Ω

Range	Resolution	Accuracy
0,00...19,99 Ω	0,01 Ω	±(2% m.v. + 3 digits)
20,0...199,9 Ω	0,1 Ω	
200...1999 Ω	1 Ω	±(4% m.v. + 3 digits)

- Voltage on open terminals: <8 V
- Output current at R <2 Ω: I_{SC} >200 mA; I_{SC} >200 mA
- Compensation of test leads' resistance
- Unidirectional current flow

Low-voltage and resistance measurement

Range	Resolution	Accuracy
0,0...199,9 Ω	0,1 Ω	±(3% m.v. + 3 digits)

200...1999 Ω 1 Ω

- Voltage on open terminals: <8 V
- Current for closed terminals 5 mA < ISC < 15 mA
- Sound signal and green LED on when measured resistance < 30 $\Omega \pm 50\%$
- Compensation of test leads' resistance,

Capacitance measurements

Range	Resolution	Accuracy
1...999 nF	1 nF	$\pm(5\% \text{ m.v.} + 5 \text{ digits})$
1,00...9,99 μ F	0,01 μ F	

- Capacitance value displayed during the R_{ISO} measurement
- For test voltages below 100 V and measured resistance below 10 M Ω , unspecified capacitance measurement error

Measurement of alternating and direct voltage

Range	Resolution	Accuracy
0,0...299,9 V	0,1 V	$\pm(2\% \text{ m.v.} + 6 \text{ digits})$
300...600 V	1 V	$\pm(2\% \text{ m.v.} + 2 \text{ digits})$

- Frequency range: 45...65 Hz