

# INSULATION RESISTANCE METER MIC-2501

**INSULATION  
RESISTANCE  
MEASUREMENT  
UP TO  
1TΩ  
IN ACCORDANCE  
WITH IEC 61557-2**



- **Insulation resistance measurement:**
  - selectable measurement voltage in the 100...2500 V range with 100 V step,
  - 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,
  - measured test times T1, T2 i T3 to measure one or two absorption coefficients in 15, 60 and 600 s,
  - indication of actual test voltage during the measurement,
  - protection against measuring live objects,
  - two and three-lead measurement method,
- **Continuity measurement of protective and equipotential conductors according to EN 61557-4 with the  $>200$  mA current.**
- **Leakage current measurement.**
- **Measurement of alternating and direct voltages in the 0...750 V range.**
- **Built-in rechargeable battery pack.**
- **The instruments meet the requirements of the EN 61557 standard.**
- **The ability to charge from car lighter (12 V) socket (additional accessories).**

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# MIC-2501

## Insulation resistance measurement (two-lead)

Measurement range acc. to IEC 61557-2 for  $R_{ISOmin}=U_{ISOnom}/I_{ISOmax} \dots 1T\Omega (I_{ISOmax}=1 \text{ mA})$

Range	Resolution	Accuracy
0.0...999.9 kΩ	0.1 kΩ	±(3% w.m. + 20 digits)
1.000...9.999 MΩ	0.001 MΩ	
10.00...99.99 MΩ	0.01 MΩ	
100.0...999.9 MΩ	0.1 MΩ	
1.000...9.999 GΩ	0.001 GΩ	
10.00...99.99 GΩ	0.01 GΩ	
100.0...999.9 GΩ	0.1 GΩ	

## Values of measured resistance depending on measurement voltage

Voltage $U_{ISO}$	Measurement range
up to 100 V	50 GΩ
200 V...400 V	100 GΩ
500 V...900 V	250 GΩ
1000 V...2400 V	500 GΩ
2500 V	1000 GΩ



## Continuity measurement of protective connections and equipotential bonding with 200 mA current

Measurement range acc. to EN 61557-4: 0.10...999 Ω

Range	Resolution	Accuracy
0.00...19.99 Ω	0.01 Ω	±(2% w.m. + 3 digits)
20.0...199.9 Ω	0.1 Ω	
200...999 Ω	1 Ω	±(4% w.m. + 3 digits)

- Voltage on open terminals: 4...24 V
- Output current at  $R < 2 \Omega$ :  $I_{sc} > 200 \text{ mA}$
- Compensation of test lead resistance
- Current flowing in both directions, mean value of resistance is displayed

## DC and AC voltage measurement

Range	Resolution	Accuracy
0...299.9 V	0.1 V	±(3% w.m. + 2 digits)
300...750 V	1 V	±(3% w.m. + 2 digits)

- Frequency range : 45...65 Hz



## Standard accessories:

- test lead banana plug; 1,8 m; 5 kV; red
- test lead banana plug; 1,8 m; 5 kV; blue
- test lead banana plug; 1,8 m; 5 kV; black
- USB cable
- "crocodile" clip 5,5 kV; black
- "crocodile" clip 5,5 kV; red
- "crocodile" clip 5,5 kV; blue
- pin probe 5 kV with banana connector; red
- pin probe 5 kV with banana connector; black
- carrying case
- power supply adaptor Z7
- meter harness
- DVD with software, including "SONEL Reader" (reading data from memory)
- calibration certificate
- warranty card

WAPRZ1X8REBB  
WAPRZ1X8BUBB  
WAPRZ1X8LB8B  
WAPRZUSB  
WAKROBL20K07  
WAKRORE20K07  
WAKROBU20K07  
WASONRE0GB2  
WASONBLOGB2  
WAFUTM8  
WAZASZ7

### Electrical safety:

- type of insulation double, in acc. with EN 61010-1 and IEC 61557
- measurement category IV 600 V (III 1000 V) in acc. to EN 61010-1
- case protection rating in acc. with EN 60529 IP65

### Other technical specifications:

- power supply of the meter NiMH 9.6 V - 2 Ah battery pack and power supply 12 V
- weight of the meter approx. 0,9 kg
- dimensions 200 x 180 x 77 mm
- display LCD segment display
- measurement results memory 990 cells, 11880 records
- transmission of measurement results USB
- humidity 20%...90%

The acronym "m.v." stands for a "measured reference value".