

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 k Ω	0.1 k Ω	$\pm(3\% \text{ w.m.} + 20 \text{ digits})$
1.000...9.999 M Ω	0.001 M Ω	
10.00...99.99 M Ω	0.01 M Ω	
100.0...999.9 M Ω	0.1 M Ω	
1.000...9.999 G Ω	0.001 G Ω	
10.00...99.99 G Ω	0.01 G Ω	
100.0...999.9 G Ω	0.1 G Ω	

Values of measured resistance depending on measurement voltage

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



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".

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	$\pm(2\% \text{ w.m.} + 3 \text{ digits})$
20.0...199.9 Ω	0.1 Ω	
200...999 Ω	1 Ω	$\pm(4\% \text{ w.m.} + 3 \text{ digits})$

- 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	$\pm(3\% \text{ w.m.} + 2 \text{ digits})$
300...750 V	1 V	$\pm(3\% \text{ w.m.} + 2 \text{ digits})$

- 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

WAPRZ1X8REB8
WAPRZ1X8UBB
WAPRZ1X8LB8
WAPRZUSB
WAKROBL20K07
WAKRORE20K07
WAKROBU20K07
WASONREOGB2
WASONBLOGB2
WAFUTM8
WAZASZ7