

Low Resistance Micro Ohm Meter

- The kit should be work with the battery
- Measurement of resistive object type:
 - welded and soldered connections, equipotential bonding, earth wire,
 - terminals and connectors, rail welded joints, cables and wires,
 - measurement 4-pole method.
 - Both Unidirectional & Bidirectional measurement for the resistance measurement
 - Limit setting for the resistance value
- Measurement of inductive object type:
 - coils (motors and transformers), low resistance coils.
 - Both Unidirectional & Bidirectional measurement for the resistance measurement
- Range selection autoranging or manual (measurement of inductive object type).
- Selectable measurement mode adjusted to object type:
 - for resistive objects - fast mode (3 seconds),
 - for inductive objects - long mode with automatic discharge after measurements (or with lower accuracy - shorter mode).
- Selectable measurement mode adjusted to application:
 - normal mode - after pushing „START“ button,
 - automatic mode - since test leads are connected to the object meters automatically starts measurement with dual direction current flow and gives average result
 - what eliminates eventual DC voltage on tested object,
 - continuous mode - every 3 seconds for resistive objects or continuous measurement for inductive objects.
- Limits:
 - this option enables setting an upper and a lower limit between which the average measurement result is bound to appear.
- The results outside of this range will be indicated by two long audible signals and the symbols.
- Memory store for up to 990 results and a communications facility for transferring data from the device to a PC.
- Electric security:
 - type of insulation: double, according to EN 61010 - 1 and IEC 61557
 - measurement category: CAT III 300 V acc. to EN 61010 - 1
 - protection class acc. to EN 60529:
- IP54 Other technical data:
 - meter's power supply: battery package SONEL/Ni-MH 4,8 V
 - battery charging time: approx. 2.5 hours

- number of measurements with the current of 10 A: 300
- auto-off time: 120 seconds
- immunity to interference: additional error $\leq 1\%$ for voltage 50 Hz ≤ 100 mV RMS
- maximum leads resistance for the 10 A current: 0,1 Ω
- maximum inductance of the tested object: 40H
- accuracy of the test current: $\pm 10\%$
- resistance measurement time:
- with the selected resistive object type with the bidirectional current: 3 seconds
- RS232 connectivity
- Free software for report generation
- with the selected inductive object type, dependant on the resistance and inductance of the object: a few minutes (max. 10)

Standards:

EN 61326:1997+A1:1998+A2:2001 Electrical equipment for measurement, control and laboratory use - EMC requirements. Resistance measurement-

with Ranges 0.1 $\mu\Omega$...999 $\mu\Omega$ with Resolution 1 $\mu\Omega$, 1,000...1,999 m Ω with Resolution,0,001m Ω , 2,00...19,99 m Ω with Resolution,0,01m Ω , 20,0...199,9 m Ω Resolution,0,1m Ω , 200...999 m Ω with Resolution,1m Ω , 2,00...19,99 Ω with Resolution0,01 Ω , 20,0...199,9 Ω with Resolution0,1 Ω , 200...1999 Ω with Resolution,1 Ω

Accuracy should be 0.25%

- input impedance of the voltmeter: ≥ 200 k Ω „m.v.” - measured value.

Range	Resolution	Measurement current	Accuracy
0...999,9 $\mu\Omega$	0,1 $\mu\Omega$	10A	$\pm(0,25\% \text{ w.m.} + 2 \text{ digts})$
1,0000...1,9999 m Ω	0,0001 m Ω		
2,000...19,999 m Ω	0,001 m Ω		
20,00...199,99 m Ω	0,01 m Ω	10A/1A	
200,0...999,9 m Ω	0,1 m Ω	1A/0,1A	
1,0000...1,9999 Ω	0,0001 Ω		
2,000...19,999 Ω	0,001 Ω	0,1 mA	
20,00...199,99 Ω	0,01 Ω	10 mA	
200,0...1999,9 Ω	0,1 Ω	1 mA	

Standard Accessories: - two-wire 3m test lead (2pcs), - Kelvin's clamp (2pcs), - double pin probe (2pcs), - Power Cord, - Carrying case for meter and accessories, - USB cable, - User Manual, - Calibration Certificate, - PC software (Sonel Reader).

