

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 resistacne 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, $0,001m\Omega$, $2,00$... $19,99$ m Ω with Resolution, $0,01m\Omega$, $20,0$... $199,9$ m Ω Resolution, $0,1m\Omega$, 200 ... 999 m Ω with Resolution, $1m\Omega$, $2,00$... $19,99$ Ω with Resolution, $0,01\Omega$, $20,0$... $199,9$ Ω with Resolution, $0,1\Omega$, 200 ... 1999 Ω with Resolution, 1Ω

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	$\pm(0,25\% \text{ w.m.} + 2 \text{ digits})$
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		
200,0...999,9 m Ω	0,1 m Ω		
1,0000...1,9999 Ω	0,0001 Ω		
2,000...19,999 Ω	0,001 Ω		
20,00...199,99 Ω	0,01 Ω		
200,0...1999,9 Ω	0,1 Ω		

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).

