

Low Resistance Micro Ohm Meter

- The kit should 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.
- Temperature correction measurement results
- Temperature correction should be selectable for Aluminum, Copper, Steel, Silver & Tin
- Both Unidirectional & Bidirectional measurement for the resistance measurement
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- Temperature correction should be selectable for Aluminum, Copper, Steel, Silver & Tin
- Both Unidirectional & Bidirectional measurement for the resistance measurement
- Graphical representation Time versus resistance value.
- . Range selection auto ranging or manual
- . Selectable measurement mode adjusted to object type:
- for resistive objects - fast mode (3 seconds),
- . 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.
- . Logger Function:
- Selecting logging time: 1 min, 5 min, 10 min, 15 min, 30 min
- Selecting the time interval (Sampling): 1 s, 5 s, 10 s, 15 s, 1 min, 5 min, 10 min, 15 min
- . Limits:

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 (when powered from battery pack) : 700 to 800 depending on ambient temperature
- auto-off time: 120 seconds
- maximum leads resistance for the 10 A current: 0.1Ω
- 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
 - Interface through USB.
 - Free software for report generation

Standards:

EN 61326:1997 Electrical equipment for measurement, control and laboratory use - EMC requirements.

Resistance measurement-

with Ranges $0.1\mu\Omega$... $999\mu\Omega$ with Resolution $1\mu\Omega$, $1,000$... $1,999\text{ m}\Omega$ with Resolution, $0,001\text{ m}\Omega$, $2,00$... $19,99\text{ m}\Omega$ with Resolution, $0,01\text{ m}\Omega$, $20,0$... $199,9\text{ m}\Omega$

Resolution, 0,1mΩ, 200...999 mΩ with Resolution, 1mΩ, 2,00...19,99 Ω with Resolution, 0,01Ω, 20,0...199,9 Ω with Resolution, 0,1Ω, 200...1999 Ω with Resolution, 1Ω

Accuracy should be 0.25%

- input impedance of the voltmeter: $\geq 200 \text{ k}\Omega$

„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 mΩ	0,0001 mΩ		
2,000...19,999 mΩ	0,001 mΩ		
20,00...199,99 mΩ	0,01 mΩ		
200,0...999,9 mΩ	0,1 mΩ		
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).

