

### **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.
  - Temperature correction measurement results
  - Temperature correction should be selectable for Aluminum, Copper, Steel, Silver & Tin
  - Both Unidirectional & Bidirectional measurement for the resistance measurement
  - Temperature correction measurement results
  - 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 SONEC/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: 0.1  $\Omega$
- 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 m $\Omega$  with Resolution 0,001m $\Omega$ , 2,00...19,99 m $\Omega$  with Resolution 0,01m $\Omega$ , 20,0...199,9 m $\Omega$

Resolution,0,1mΩ,200...999 mΩ with Resolution,1mΩ,2,00...19,99 Ω with Resolution0,01Ω,20,0...199,9 Ω with Resolution0,1Ω,200...1999 Ω with Resolution,1Ω

Accuracy should be 0.25%

- input impedance of the voltmeter: ≥200 kΩ

„m.v.“ - measured value.

Range	Resolution	Measurement current	Accuracy
0...999,9 μΩ	0,1 μΩ	10A	± (0,25% w.m. + 2 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	10 A / 1 A	
200,0...999,9 mΩ	0,1 mΩ	1 A / 0,1 A	
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).



