

## 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  $\leq 100$  mV RMS
- 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
- 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 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 $\Omega$  with Resolution, 0,1m $\Omega$ , 200...999 m $\Omega$  with Resolution, 1m $\Omega$ , 2,00...19,99  $\Omega$  with Resolution 0,01 $\Omega$ , 20,0...199,9  $\Omega$  with Resolution 0,1 $\Omega$ , 200...1999  $\Omega$  with Resolution, 1 $\Omega$

Accuracy should be 0.25%

- input impedance of the voltmeter:  $\geq 200$  k $\Omega$  „m.v.” - measured value.

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

