

## 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  $50 \text{ Hz} \leq 100 \text{ mV RMS}$
- maximum leads resistance for the 10 A current:  $0,1 \Omega$
- maximum inductance of the tested object:  $40\text{H}$
- 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  $1\mu\Omega \dots 999\mu\Omega$  with Resolution  $1\mu\Omega, 1,000 \dots 1,999 \text{ m}\Omega$  with Resolution  $0,001\text{m}\Omega, 2,00 \dots 19,99 \text{ m}\Omega$  with Resolution  $0,01\text{m}\Omega, 20,0 \dots 199,9 \text{ m}\Omega$  Resolution  $0,1\text{m}\Omega, 200 \dots 999 \text{ m}\Omega$  with Resolution  $1\text{m}\Omega, 2,00 \dots 19,99 \Omega$  with Resolution  $0,01\Omega, 20,0 \dots 199,9 \Omega$  with Resolution  $0,1\Omega, 200 \dots 1999 \Omega$  with Resolution  $1\Omega$

Accuracy should be 0.25%

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

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

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).

