



Precision Micro-Ohmmeter

- ✓ Measurement On Site
- ✓ Easy to Use
- ✓ High Resolution: 10 $\mu\Omega$
- ✓ Resistance and Voltage Measurements
- ✓ Temperature Compensation and Measurement

The HHM518 micro-ohmmeter is used for four-wire resistance measurement from low values (resolution 10 $\mu\Omega$) up to 50 k Ω , with an excellent accuracy. It includes thermal emf compensation and temperature compensation. It can also measure dc and ac voltages and ambient temperature. The HHM518 has a compact, rugged, heavy duty housing with input protected up to 250 V. It is battery powered for use on site. Fitted with a removable stand and powered by an external ac charger, it can also be used on the bench.

Applications

On-site, in workshop or laboratory, the main applications are listed below:

- ✓ Cable Resistance and Resistivity Measurements
- ✓ Inductive Resistance Measurements (Motors, Transformers)
- ✓ Contact Resistance Measurements (Connectors, Switches, Relays, Quality of Joints)
- ✓ Metallization and Earth Bonding Measurements
- ✓ Testing and Measurement of Electrical Components: Resistors, Fuses, Thermistors, Heating Elements, PCB Trade
- ✓ Surface State, Resistance of Mechanical Bonds and Materials Testing

Specifications

Display of measurement values (with units) and ambient temperature. Indication of measurement range, type of current, possible temperature compensation. 50,000 counts (4½ digits) LCD. 13 mm high (0.5")

Range, current waveform, temperature compensation and trigger selected by keyboard

Four-Wire Measurements with automatic compensation for thermal electromotive forces (emfs) and automatic ambient temperature compensation



Model HHM518

\$1135



HHM518 Micro-Ohmmeter
Shown Smaller Than Actual Size



Measurement Current: User can choose two waveforms for current: continuous (dc) for inductive resistance measurements (permanent current); or pulsed in other cases: current shutoff between measurements (advantage: low self-heating of resistance in test and low power consumption)

Measurement Time: 0.5 s (dc), 1 s (pulsed)

Input Voltage Protection: 250 V (430 V for voltage measurement). Electrical protection against breakoff currents when measuring inductive resistance

Calibration: No need to open the instrument for recalibration; just connect a standard resistance and enter its value through the keypad

Operating Conditions:
Nominal Operating Temperature and Humidity: 0 to 50°C, 20 to 75% RH
Maximum Operating Temperature and Humidity: -10 to 55°C, 10 to 80% RH
Maximum Storage and Transport Temperature: -30 to 60°C
 Protection according to IP41

Power Supply:
 Internal Battery pack Ni-Cd: 1.7 AH
 Battery life (typical use) >10 h
 External ac charger provided allows either battery charging or permanent use on ac power, 100-240 Vac, 50/60 Hz

Connections: Sockets for 4 mm test plugs

Housing: Rugged ABS case for site or bench use

Dimensions: 120 x 65 x 245 mm (4.7 x 2.6 x 9.6")

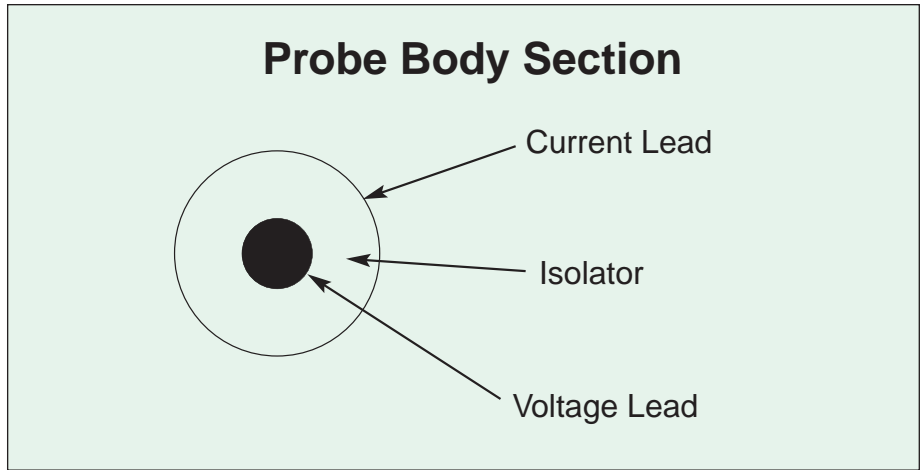
Weight: 1.1kg (2.4 lb)

Resistance Measurement
 From very low values (resolution 10 $\mu\Omega$) up to 50 k Ω with: Measurement and automatic compensation for thermal electromotive forces (emfs); Measurement and compensation (user choice) of ambient temperature. With temperature compensation, the HHM518 displays the theoretical value at 20°C of a copper or aluminum resistance (other metals on request). Ambient temperature is measured with a sensor built in to the instrument and displayed.

Kelvin Test Lead Set HHM518-TL1
 A pair of security measurement leads, each with a Kelvin clip, 1.20m of wire and two 4 mm plugs. The Kelvin clip

can be used for four-wire measurement because there is a perfect galvanic isolation between the current input and the voltage connector. Gold-plated contacts.

Maximum opening: 1.2 cm
Maximum current: 10 A
Kelvin Test Probe HHM518-TL2: One measurement lead with a dual probe (concentric). Length of rod: 8 mm. Diameter of rod: 8 mm. Length of wire: 3 m. Equipped of two 4 mm security banana plugs
 Maximum current: 10 A



Range	Resolution	Measurement Current	Voltage Drop	Accuracy*
500 m Ω	10 $\mu\Omega$	100 mA	50 mV	0.05% + 50 $\mu\Omega$
5 Ω	0.1 m Ω	10 mA	50 mV	0.05% + 0.5 m Ω
50 Ω	1 m Ω	10 mA	500 mV	0.05% + 5 m Ω
500 Ω	10 m Ω	1 mA	500 mV	0.05% + 50 m Ω
5 k Ω	0.1 Ω	0.1 mA	500 mV	0.05% + 0.5 Ω
50 k Ω	1 Ω	0.1mA	500 mV	0.05% + 5 Ω
400 Vac/dc rms	1 V	—	—	0.05% + 1 V
-10 to 60°C	0.1°C	—	—	1.5°C

*Accuracy is \pm (% of reading + n) over 1 year at 23°C \pm 5°

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)		
Model Number	Price	Description
HHM518	\$1135	Micro-Ohmmeter
HHM518-TL1	250	Test leads with gold-plated Kelvin alligator clips, 4' (1.2 m) length
HHM518-TL2	485	Test leads with dual concentric probe, 10' (3 m) length
HHM518-BATT	45	Replacement battery pack
HHM518-SC	55	Soft case

Unit supplied with hard carrying case, ac charger, and operator's manual.

Ordering Example: HHM518, micro-ohmmeter, HHM518-TL1 test leads, \$1135 + 250 = \$1385



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