

Micro-Ohmmeter

Model 5600

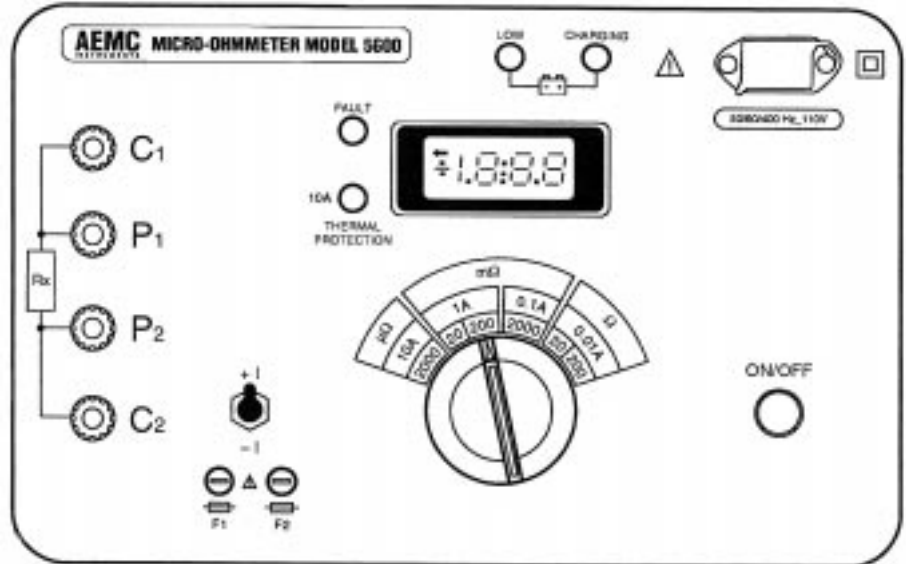
TRANSCAT

▶ Visit us at Transcat.com!

35 Vantage Point Drive // Rochester, NY 14624 // Call 1.800.800.5001

Features

- Four-terminal Kelvin resistance measurement
- 10 A regulated test current
- 0.25% basic accuracy
- 1 micro-ohm resolution
- Six selectable resistance ranges
- Reverse polarity switch
- Rechargeable NiCad battery with integral charger (110/220 V)
- Overload and input fuse protection
- Automatic decimal point and zero
- Large terminals accept banana plugs and spade lugs
- Built to international safety and environmental standards
- Rugged field case for industrial applications



CE

Description

The Micro-Ohmmeter Model 5600 performs reliable low resistance measurements with test currents to 10 A and resolution to one micro-ohm.

The Model 5600 uses a four-wire Kelvin bridge method, which eliminates test lead resistance for a measurement accuracy of 0.25%. A reverse polarity switch compensates for the effect of DC voltage interference on the accuracy and permits reading averaging. A built-in circuit filters against AC signals.

The Micro-Ohmmeter Model 5600 is housed in a sealed field case. Power is supplied by a long-life NiCad battery with a built-in charger (110/220 V). The large, easy-to-read LCD is 18 mm high; it displays the value of resistance, and indicates overrange and reversed connection of measurement leads.

Four LEDs on the front panel indicate measurement faults (open circuit, blown fuse, etc.); thermal protection; low battery and battery recharging.

For operator safety and instrument protection, the micro-ohmmeter is fuse protected at the inputs. Two fuses, accessible on the front panel, protect against stored energy in induction loads.

Enhanced internal circuitry protects against kickback when the current is shut off. A built-in thermal switch protects the micro-ohmmeter against overheating on the 10 A range when in continuous use.

The Model 5600 is housed in a sealed, safety yellow field case with carrying handle and a lid that may be removed during testing if desired.

Typical applications include measurements on:

- Contact resistance of breakers and switches
- Wire to terminal connections
- Winding resistance
- Battery straps on UPS systems
- Motors and generators
- Busbar connections
- Resistance of cable splices and welds
- Resistance of fuses
- Aircraft and rail bonds
- Grounding connections
- Many other very low resistance samples

 **AEMC**
INSTRUMENTS

Micro-Ohmmeter Model 5600

Specifications

SPECIFICATIONS

ELECTRICAL

Ranges	2000 $\mu\Omega$	20 m Ω	200 m Ω	2000 m Ω	20 Ω	200 Ω
Display	1999	19.99	199.9	1999	19.99	199.9
Resolution	1 $\mu\Omega$	10 $\mu\Omega$	100 $\mu\Omega$	1 m Ω	10 m Ω	100 m Ω
Test Current	10 A	1 A	! A	100 mA	10 mA	10 mA

Accuracy:

2000 $\mu\Omega$ range:

0.25% typical, 0.5% max \pm 2 digits

20-200-2000 m Ω , 20-200 Ω ranges:

0.25% typical, 0.5% max \pm 1 digit

Power supply:

Rechargeable 6 V, 7 Ah NiCad battery;
built-in 110 V/220 V (47-450 Hz) charger;
automatic shutoff after 4 minutes non-use

Battery Life (Typical):

200 $\mu\Omega$ range:

200 to 300 8-second measurements

20-200 m Ω ranges:

900 30-second measurements (approx.)

2000 m Ω , 20-200 Ω ranges:

5000 30-second measurements (approx.)

Operating Voltage: 4.5 - 7 VDC

Recharge Time:

14 hrs from full discharge (approx.)

MECHANICAL

Connections:

Terminals accept 4 mm banana plugs or 6 mm (min) spade lugs

Display: 2000 count, 7-segment LCD

Operating Temperature:

14° to 131°F (-20° to 55°C)

Storage Temperature:

-4° to 131°F (-20° to 55°C)

Dimensions: 15.35 x 10.24 x 9.84"
(390 x 260 x 250 mm)

Weight: 17 lbs 10 oz (8 kg approx)

Case: Fiberglass-charged polycarbonate,
with handle and removable lid, watertight
to IP534 (lid closed), IP520 (lid open)

Color: Safety yellow case; gray faceplate

SAFETY

Electrical:

IEC 348 Class II; IEC 38, Supply voltage

Electromagnetic:

IEC 801-2, Electrostatic discharge

IEC 801-3, Electromagnetic fields

IEC 801-5, Electrical shocks

Mechanical/environmental:

IEC 529, Protection Index (IP)

IEC 68.2.6, Vibrations

IEC 68.22.27, Shocks

IEC 68.2.29, Shake

IEC 68.2.31, Knock over

IEC 68.2.32, Drop test

Case Material: UL 94, Case material

Dielectric Test:

IEC 348, 1500 V 60 Hz (input terminals);

3000 V 60 Hz (power supply)

Overload Input Protection: 380 V rms

Fuses: Two high-interrupting capacity 8 A
380 V, 1-1/4 x 1/4"

ORDERING INFORMATION

CATALOG NO.

Micro-Ohmmeter Model 5600**Cat. #1431.01**
Includes user manual

Accessories

Kelvin probes, set of two, on 10-ft color-coded leads with banana plug terminationsCat. #1017.82

Kelvin clips, 1 A, set of two, on 10-ft color-coded leads with spade lug terminationsCat. #1017.83

Kelvin clips, 10 A, set of two, on 10-ft color-coded leads with spade lug terminationsCat. #1017.84

Fuse, set of 10, 8 A, 1-1/4" fast blowCat. #2970.13

Battery, 6 V 7 Ah rechargeable NiCadCat. #2960.12

Soft carrying bag for accessoriesCat. #2118.32

TRANSCAT

▶ Visit us at Transcat.com!

35 Vantage Point Drive // Rochester, NY 14624 // Call 1.800.800.5001