

# Digital Micro-Ohmmeter Model 5600



The Digital Micro-Ohmmeter Model 5600 performs accurate, reliable low resistance measurements with test currents to 10A and resolution to 1m $\Omega$ .

The front end of the Model 5600 employs a 4-wire Kelvin configuration, which eliminates test lead resistance providing 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 large, easy-to-read LCD is 0.71" (18mm) high and directly displays resistance measurements in ohms with

an automatic decimal point. The LCD also displays a "1" to indicate range overload, and "-" to show a reversed connection of the measurement leads.

Power is supplied by a long-life NiCD battery with a built-in recharger (110/220V).

The Model 5600 features automatic shutoff after four minutes of non-use.

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 Model 5600 is fuse

protected at the inputs. Two fuses, accessible on the front panel, protect against stored energy in inductive loads.

Enhanced internal circuitry gives protection against possible inductive kickback when the current is shut off. A built-in thermal switch prevents the micro-ohmmeter against overheating on the 10A 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.

## Features

- Four-terminal Kelvin resistance measurement
- Up to 10A test current
- 0.25% basic accuracy
- 1m $\Omega$  resolution
- Direct reading, easy to operate
- Six selectable ranges
- Reverse polarity switch
- Overload and input fuse protection
- Automatic decimal point and zero
- Rechargeable NiCD battery with integral charger (110/220V)
- Rugged field case for industrial applications

## Applications

- Contact resistance of breakers and switches
- Wire to terminal connections
- Winding resistance of motors and transformers
- Resistance on electric motors
- Aircraft and rail bonds
- Grounding connections
- Battery strap measurements

## Specifications

ELECTRICAL						
Range	2000 $\mu\Omega$	20m $\Omega$	200m $\Omega$	2000m $\Omega$	20 $\Omega$	200 $\Omega$
Display	1999	19.99	199.9	1999	19.99	199.9
Resolution	1 $\mu\Omega$	10 $\mu\Omega$	100 $\mu\Omega$	1m $\Omega$	10m $\Omega$	100m $\Omega$
Test Current	10A	1A	1A	100mA	10mA	10mA
Accuracy	0.25% typical 0.5% max $\pm$ 2cts	0.25% typical 0.5% max $\pm$ 1ct	0.25% typical 0.5% max $\pm$ 1ct	0.25% typical 0.5% max $\pm$ 1ct	0.25% typical 0.5% max $\pm$ 1ct	0.25% typical 0.5% max $\pm$ 1ct
Power Source	Rechargeable 6V, 7Ah NiCD battery; built-in 110V/220V (47 to 450Hz) charger; automatic shutoff after 4 minutes non-use					
Battery Life	200 $\mu\Omega$ range: 200 to 300 8-second measurements 20-200m $\Omega$ ranges: 900 30-second measurements (approx.) 2000m $\Omega$ , 20-200 $\Omega$ ranges: 5000 30-second measurements (approx.)					
Operating Voltage	4.5 to 7Vdc					
Recharge Time	14 hours from full discharge (approx.)					
MECHANICAL						
Display	2000-count, 7-segment LED					
Connection	Terminals accept 4mm banana plugs or 6mm (min) spade lugs					
Operating Temperature	14° to 131°F (-10° 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 250mm)					
Weight	17 lbs 10 oz (8kg)					
Case	Fiberglass-charged polycarbonate with handle and removable lid, watertight to IP534 (lid closed), IP520 (lid open)					
Colors	Safety-yellow case, gray faceplate					
SAFETY						
Safety Ratings	Electrical: IEC 38, Supply voltage, Electromagnetic: IEC 801-2, Electrostatic discharge; EN 61010, 300V, Cat. II, IEC 801-3, Electromagnetic fields; IEC 801-5, Electrical shocks, Mechanical/environmental: IEC 529, Protection Index (IP); IEC 68.2.6, Vibration; IEC 68.2.27, Shocks; IEC 68-2-29, Shake IEC 68.2.31, Knock over; IEC 68.2.32, Drop test, Case Material: UL94					
Overload Input Protection	380Vrms					
Fuses	Two high-interrupting capacity 8A 380V, 1/4 x 1/4"					
CE Mark	Yes					

## Accessories



*Kelvin probes, 10A,  
set of two  
Catalog #1017.82*



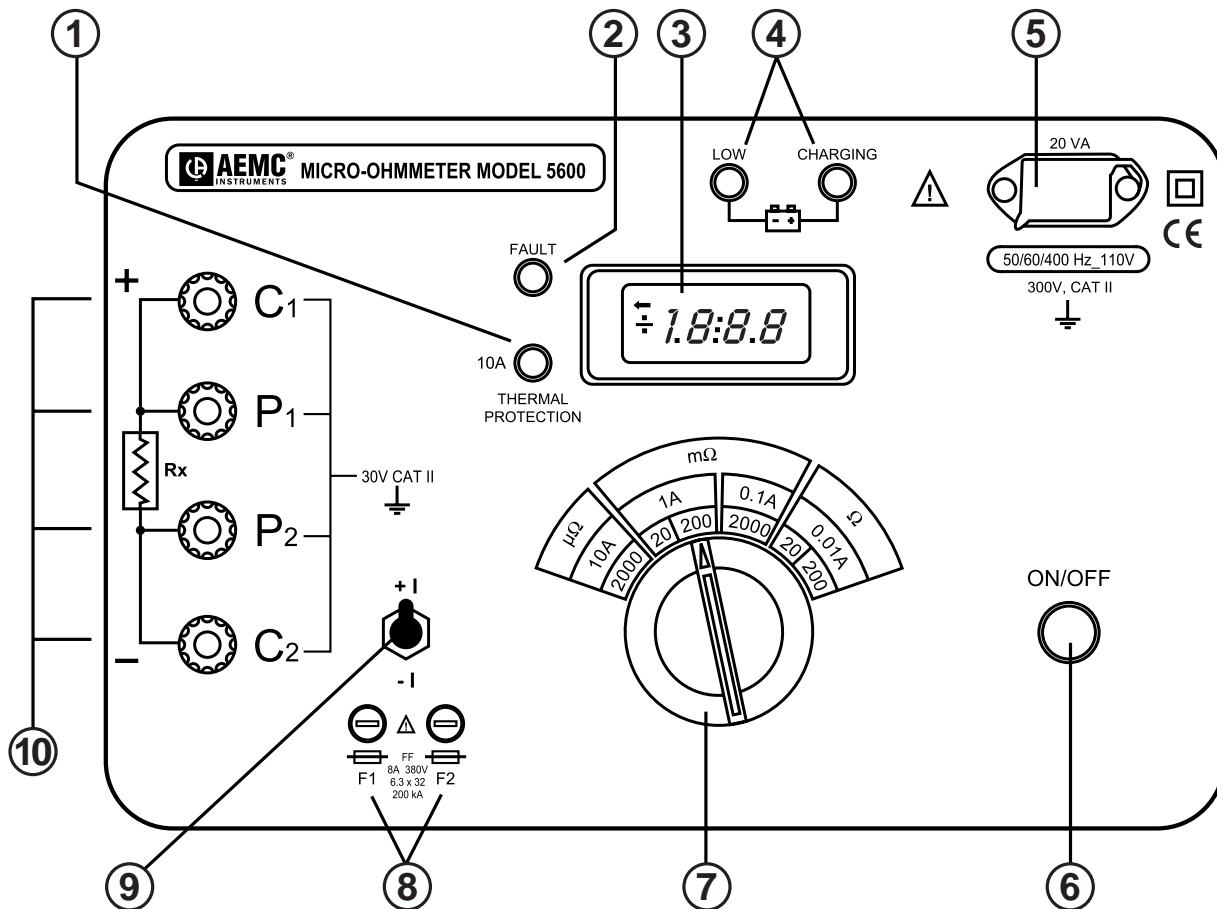
*Kelvin probes, 10A, 20 ft spring loaded  
Catalog #2118.52*



*Kelvin clips,  
1A, set of two  
Catalog #1017.83*



*Kelvin clips, 10A  
set of two  
Catalog #1017.84*



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|---------------------------------|---------------------------------------|----------------------------|
| 1. Thermal protection indicator | 5. Recharging power supply receptacle | 8. Input fuses             |
| 2. Fault indicator              | 6. On/off power button                | 9. Reverse polarity switch |
| 3. LCD                          | 7. Range selector switch              | 10. Input terminals        |
| 4. Battery status indicators    |                                       |                            |

## ORDERING INFORMATION

## CATALOG NO.

**Micro-Ohmmeter Model 5600 (10A)** ..... **Cat. #1431.01**  
 Includes 110V battery, AC supply cord and user manual

### Accessories (Optional)

Kelvin Probes (10A) (2 Spring Loaded) ..... Cat. #1017.82  
 Kelvin Clips (1A) ..... Cat. #1017.83  
 Kelvin Clips (10A) ..... Cat. #1017.84  
 Kelvin Probes (10A) (2 20 ft Spring Loaded) ..... Cat. #2118.52

## Contact Us

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