

444-2 Low Voltage Micro-Ohmmeter

Measures from 50 Micro-Ohm to 20 Ohms



Simpson's high precision Model 444-2 has been redesigned for added ESD immunity and longer battery life.

The model 444-2 Micro-Ohmmeter measures resistance from 50 micro-ohm to 20 ohms. It measures using an extremely small test voltage (100 microvolt maximum) and a four wire measurement technique.

The resistance reading is indicated on a 4-1/2 digit LCD display using one of two measuring modes: An automatic AC measurement mode or a manual DC measurement mode.

By limiting the test voltage of the Model 444-2 to only 100 micro volts the instrument will not "punch through" contamination or corrosion.

An audible tone can be used to indicate resistance values below any selected reading.

The Model 444-2 has a universal power input range of 85Vac to 250Vac and incorporates a self-contained rechargeable Ni-Cad battery for field use.

- **20,000 Count 4 1/2-Digit LCD**
- **2 Measurement Methods: AC Pulse and DC Polarity Switching**
- **"Punch-Through" Prevention by 100µV Max. Test Voltage**
- **User-Adjustable, Low-Resistance Alarm**
- **AC Test Mode Cancels Offset Voltages and Thermocouple Effects**
- **Includes Ni-Cad Battery for Field Use and Test Leads**
- **Extended Battery Life, 10 Hours Typical**

Ordering Information	
Micro-Ohmmeter	Catalog Number
444-2 Micro-Ohmmeter, 85V/250V	12681
Accessories	Catalog Number
Standard Test Lead Set	00827
Kelvin Test Probe Set	02151
Case, Molded Plastic	45029

444-2 Low Voltage Micro-Ohmmeter

Specifications		
Range	Resolution	Maximum Test Current
20mΩ	1μΩ	5mA
200mΩ	10μΩ	500μA
2Ω	100μΩ	50μA
20Ω	1mΩ	5μA

Specifications	
Accuracy	± (0.05% of input ± 600 counts) DC mode ± (0.05% of input ± 15 counts) AC mode
Alarm	Resistance below set point activates audible beeper and display annunciator. Resistance above set point activates display annunciator
Set Point Adjustment	Front Panel Knob
Set Point Accuracy	± (2% of input +150 counts)
Maximum Test Voltage	100μV peak
Measurement Techniques	(AC) Pulse of 40 Hertz Square Wave and DC Switchable Polarity
Display	19,999 counts, 4.5 digits LCD type, 0.5" high, and "AC," "DC" and "↕" annunciators
Conversion Rate	Reading 2 per second
Test Leads	BNC to dual Kelvin clip (2 leads) RG-58
Operating Voltage	85VAC to 250VAC, 10VA maximum
Operating Temperature Range	0° to 50°C
Storage Temperature Range	-40° to +60°C
Relative Humidity	90% maximum up to 35°C, 70% maximum up to +50°C (non-condensing)
Temperature Coefficient	0.2%/°C (0° to 18°C and 28° to 50°C)
Extended Battery Life	Typical 10 hours
Battery Mode Rated Circuit-To-Ground Voltage	30V (RMS)
Display Settling Time	<15 seconds
Dimensions	2.7" x 8.4" x 9.0" (68 x 213 x 228 mm) nominal
Weight	Approximately 3 lbs.