

## 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**

<b>Ordering Information</b>	
<b>Micro-Ohmmeter</b>	<b>Catalog Number</b>
444-2 Micro-Ohmmeter, 85V/250V	12681
<b>Accessories</b>	<b>Catalog Number</b>
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	
<b>Accuracy</b>	± (0.05% of input ± 600 counts) DC mode ± (0.05% of input ± 15 counts) AC mode
<b>Alarm</b>	Resistance below set point activates audible beeper and display annunciator. Resistance above set point activates display annunciator
<b>Set Point Adjustment</b>	Front Panel Knob
<b>Set Point Accuracy</b>	± (2% of input +150 counts)
<b>Maximum Test Voltage</b>	100μV peak
<b>Measurement Techniques</b>	(AC) Pulse of 40 Hertz Square Wave and DC Switchable Polarity
<b>Display</b>	19,999 counts, 4.5 digits LCD type, 0.5" high, and "AC," "DC" and "↕" annunciators
<b>Conversion Rate</b>	Reading 2 per second
<b>Test Leads</b>	BNC to dual Kelvin clip (2 leads) RG-58
<b>Operating Voltage</b>	85VAC to 250VAC, 10VA maximum
<b>Operating Temperature Range</b>	0° to 50°C
<b>Storage Temperature Range</b>	-40° to +60°C
<b>Relative Humidity</b>	90% maximum up to 35°C, 70% maximum up to +50°C (non-condensing)
<b>Temperature Coefficient</b>	0.2%/°C (0° to 18°C and 28° to 50°C)
<b>Extended Battery Life</b>	Typical 10 hours
<b>Battery Mode Rated Circuit-To-Ground Voltage</b>	30V (RMS)
<b>Display Settling Time</b>	<15 seconds
<b>Dimensions</b>	2.7" x 8.4" x 9.0" (68 x 213 x 228 mm) nominal
<b>Weight</b>	Approximately 3 lbs.