



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 100 μ V 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



Specifications

Range	Resolution	Maximum Test Current
20m Ω	1 $\mu\Omega$	5mA
200m Ω	10 $\mu\Omega$	500 μ A
2 Ω	100 $\mu\Omega$	50 μ A
20 Ω	1m Ω	5 μ A

Accuracy: \pm (0.05% of input \pm 600 counts) DC mode
 \pm (0.05% of input \pm 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

Accuracy: \pm (2% of input +150 counts)

Maximum Test Voltage: 100 μ V peak

Measurement Techniques: (AC) Pulse of 50 Hertz Square Wave and DC Switchable Polarity

Display: 19,999 count LCD with 0.5" digits and "AC," "DC," "B" and " \blacklozenge " 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

Ordering Information

MICRO-OHMMETER	Catalog No.	ACCESSORIES	Catalog No.	ACCESSORIES	Catalog No.
444-2 Micro-Ohmmeter, 85V/250V	12681	Standard Test Lead Set	00827	Case, Molded Plastic	45029
		Kelvin Test Probe Set	02151		

Specifications (Continued)

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.