

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. |