Surface Resistance Test Kit

model 292

Description:

Monroe Model 292 Digital Surface Resistance Test Kit is a portable, versatile, instrument designed to accurately measure resistance between two points (RTT), surface to ground (RTG), and surface resistivity in accordance with EOS/ESD Association standard S-4.1. In addition, the meter measures ambient temperature and relative humidity.

The Surface Resistance Meter (included in the kit) is designed to make measurements in accordance with specified test methods on:

- **Work surfaces** – ANSI/ESD STM S4.1 Work surfaces – Resistance Measurements
- **Floors** – ANSI/ESD STM S7.1 – Resistive Characterization of Materials Floor Materials
- **Footwear** – ANSI/ESD STM S9.1 – Footwear-Resistive Characterization
- **Garments** – ANSI/ESD STM 2.1 Garments
- Seating – ANSI/ESDESD STM 12.1 Seating – Resistive Measurement
- **Floor/Footwear** – ANSI/ESD STM 97.1 Floor Materials and Footwear Resistance Measurement in Combination with a Person
- **Workstations** – ANSI/ESD-AVD53.1 ESD Protective Workstations

Features:

- **Liquid Crystal Display (LCD):** A 3.5 digit 9/16" high, liquid crystal display provides easy to read measurements directly from the meter. No interpretations or calculations are required.
- **LED Displays:** Surface resistance exponents are displayed via 12 light emitting diodes (< 10^{6} - >10^{12}). LEDs are color coded for quick check recognition: Five additional Function LEDs identify the measurement taken when lit.
- **Auto/10 Volt Hold Test Range Voltage Button:** When in the "up" or Auto position, during resistance portion of test, meter will automatically switch to the correct voltage for the resistance range. When in the "down" or 10 Volt Hold position automatic voltage selection is overridden and the test is performed at 10 Volts regardless of resistance level. An LED illuminates to note selected voltage.
- **Test Push Button:** Activates electrical power to the meter.
- **Ambient Temperature and Relative Humidity Measurement:** Ambient temperature and relative humidity are displayed during the meter's electrification period. An LED illuminates to note measurement taken.

Surface Resistivity:

Resistivity measurements require mounting the meter onto our ***optional*** resistivity adapter sled, model 292/41.

The Surface Resistance Test Meter incorporates easy attachment to an optional resistivity adaptor Parallel silicone rubber electrodes provide for measurement of surface resistivity or when quick testing without the use of the 5-pound electrodes is desired. ***The adapter sled is optional and must be specified separately when ordering, (292/41 p/n 0930229).***

Surface Resistance Test Kit model **292**

Specifications:

Range: 1.0 x 10^3 to 1 x 10^{12} Ω @ 10V
1.0 x 10^7 to 1 x 10^{12} Ω @ 100V

Accuracy: 1.0 x 10^3 to 9.9 x 10^6Ω @10V ±10% of reading at 70-80°F; 15-60% RH

1.0 x 10^7 to 1 x 10^{12}Ω @100V ±10% of reading at 70-80°F; 15-60% RH

Open Circuit Voltages: 10 and 100 volts ± 3%

Electrification Period: 15 seconds

Temperature Accuracy: ±5 degrees F and ± 3 degrees C Typ.

Relative Humidity: Range from 5% - 95%; ± 10% Typ.

Power: Two - Alkaline AA batteries
Battery Life: approximately 1500 measurements.

Meter Jacks: Left jack on meter accepts a 3.5 mm plug
Right jack on meter accepts a standard banana plug

Test Leads: Black lead terminated with a 3.5 mm plug one end and a standard banana plug on the other
White lead terminated with a standard banana plus both ends

External Electrodes: Two NFPA-99 5 pound electrodes (80 oz.) ±2oz with Shore A (IRHD) 50 - 70 durometer conductive pads that comply with EOS/ESD S4.1

Resistivity Electrodes: Parallel conductive silicone rubber electrodes 4 inches long and spaced 4 inches apart mounted onto an adapter sled

Meter Weight: 15.5 oz. without adapter;
23 oz. with adapter

Dimensions: 8” L x 4.3” W x 1.6” H

Kit includes:

- Meter
- Protective carrying case
- Test leads
- Two NFPA-99 5-pound electrodes
- Two AA Alkaline batteries
- Operator’s Manual

***Resistivity adapter sled is optional and must be ordered separately.**

Maintenance:

The 292 Surface Resistance Kit requires little maintenance. Containing no user serviceable parts, only careful cleaning of the electrodes and replacement of the batteries is required.

Calibration:

Monroe Electronics instruments are factory-calibrated prior to shipment. Recalibration should be performed annually, or more frequently if specified by contract or comp any policy. Your instrument should also be recalibrated any time it has been repaired or tampered with. We are happy to recalibrate your instrument for you at a reasonable cost, or provide information and procedures on calibration upon request.

Warranty:

Monroe Electronics, Inc., warrants that each instrument and sub-assembly manufactured by them shall be free from defects in material and workmanship for a period of two years after shipment from the factory. This warranty is applicable to the original purchaser only .

The finest ESD instrumentation and support:

For more than 40 years - ever since we invented the feedback--nulled electrostatic voltmeter, Monroe has been the technology and quality leader in electrostatic detection and measurement instrumentation. Today we offer the world’s most complete array of fieldmeters, voltmeters and resistivity meters. Our customers include the leading makers of photocopiers and laser printers to converters and microelectronics worldwide.

We know you need quality support as well as quality products. We pride ourselves on providing our customers with the most knowledgeable applications and installation support - as well as superior customer service.

How can we help?

Contact your Monroe Electronics representative for price and delivery information on this and other ME products, to schedule a no-obligation demonstration at your convenience. For the name of your nearest dealer, or for technical or applications assistance, contact Monroe Electronics directly at the address and numbers below .

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