



Validate your material's surface resistance and volume resistivity characteristics. Electro-Tech Systems' 803 delivers critical insight on these metrics for planar surfaces. The electrodes are made from nickel coated graphite silicon for excellent probe-to-test-surface contact. Contact resistance of less than 10 ohms enables measurements 100 Ohms and greater to be made. Teflon insulators provide high insulation resistance between electrodes under most humidity conditions. The 803B comes complete with metal and acrylic test beds.

Standards Satisfied

ANSI/ESD STM11.11, STM11.12 & S4.1; ASTM D257 & F150, IEC 60093, NFPA 99, MIL-PRF-81705D

Applications

- Testing and Auditing ESD Work Surfaces and Flooring
- Material Research, Design, and Qualification of planar materials and textiles
- Quality assurance of static dissipative materials
- Static hazard control in health care facilities

Key Features

- Measure Surface & Volume resistance
- Concentric ring design
- Streamlined x10 conversion to surface resistivity
- Precision 5lb weight meets industry specifications
- Ground & Insulated test beds included
- Validate your results with available optional verification fixtures
- Compatible with resistance meters featuring standard 0.161" banana jack



electro-tech systems, inc.

Surface and Volume Resistance Probe Model 803B

Specifications

ELECTRICAL

Measurement Range: $10^2\Omega$ to $10^{14}\Omega$

Contact electrodes: Nickel coated graphite silicone

Volume resistance: As low as $10^2\Omega$

Insulation: Teflon

Connectors, STD. Banana Jack 0.162" (4mm): Red (Source), Black (Sense)

MECHANICAL

Electrode Dimensions:

Outer: 2.5" dia. x 0.125 x 0.125" (8 x 3 x 3mm)

Inner: 1.2" dia. x 0.125" (30.5 x 3mm)

Shore-A Hardness: 65 ± 10 Durometer

Probe dimensions: 3.25" dia. x 4.0" H (83 x 102mm)

Weight: 5.0 lb \pm 2oz (2.2 \pm 0.05 kg)

Cables (Banana-Banana): 3 foot (92cm) Red (Teflon®), Black, Green

CALIBRATION FIXTURES

Model 809B Resistance Calibration Fixture (STM 11.11)

Checks the calibration of the Model 803B Probe by verifying the alignment of the concentric rings and the low measurement range using an array of 20, 10 megohm, 1% resistors. The reverse side 5%, $1 \times 10^{12} \Omega$ resistor checks both the high range measurement accuracy and determines the electrification time.

Model 819 Volume Resistance Calibration Fixture

The Model 819 verifies the surface contact of the Model 809B center electrode using a similar parallel array of 20, 1%, 10 megohm resistors spaced around the surface area of the center electrode.

Warranty: One (1) Year – Parts & Labor



Specifications subject to change without notice

