TRANSFORMING TECHNOLOGIES, LLC
OUTSTANDING ALTERNATIVES IN STATIC CONTROL

Ohm Metrics TM

Pocket Resistance Meter

Model SRM 310

Instruction Manual

Contents

1 Description

SRM 310 1

Ohm Metrics 1

2 Operation

Battery Installation 2

Measuring Surface Resistance 2

Measuring Resistance to Ground 2

Measuring Two Point Resistance 3

LED Indication Guide 4

Calibration 4

3 Parts Included List 4

4 Specifications 4

5 Service and Warranty 5

Description

Ohm Metrics Pocket Resistance Meter: SRM 310

This SRM 310 uses parallel electrodes and concentric rings to accurately measure RTT, RTG, or resistivity for periodic verification, factory audits or test lab evaluation of product.

This meter is designed to verify incoming materials such as floor mats, table mats, bins and shelving in static controlled areas. Work surfaces, bags, wrist straps, footwear, packaging materials, garments, and ESD chairs can also be tested with the device.

The SRM310 meets periodic test requirements per Compliance Verification ESD TR53 and conforms to ANSI/EOS/ESD (S4.1, S7.1, S12.1, S2.1).

Ohm Metrics test and measurement products, from Transforming Technologies, are useful, reliable tools for characterizing and identifying the electrical resistance of materials and the performance of personal grounding products.

- All Ohm Metrics products are designed to support ESDA Compliance Verification TR53.
- All Ohm Metrics products can be calibrated.
- All Ohm Metrics test and measurement products are warranted for 1 full year.

Operation

Battery Installation

Remove screws from back cover using a Phillips style screw driver and detach from monitor. Insert the included 9 volt battery, replace back cover and secure with screws.

- Only new and valid batteries can be used.
- Low battery power is indicated when the last Red LED flashes during measurement. Stop testing and replace with fully charged 9v battery.

Measuring Surface Resistance

1. To measure the surface resistance of an object, hold the instrument to the surface and press the TEST" button.
2. The value is indicated by colored LED lights.
3. Refer to "LED Indication Guide" on Page 4 for LED.

Other Measurements

By connecting the optional SR0055,Surface Resistance Probes, it's possible to measure other forms of resistance such as "point to point" resistance ,or "volume resistance".

Contact Transforming Technologies for Surface Resistance Probes, Model number: SR0055.

Operation Cont.

Measuring Resistance to Ground

For surface resistant probes:

1. Plug in the supplied grounding cord into socket of the meter. The associated internal electrode is now disconnected.
2. Connect the opposite end of the grounding cord to "ground".
3. Use Steps 1-3 in "Measuring Surface Resistance" to complete the test.

Measuring Resistance Between Two Points

Note: Must have surface resistant probes:

1. Position the two 5lb probes 3 ft. away from the surface to be measured.
2. Attach the 3.5mm leads to meter and connect the banana plug to probes.
3. Press power button to test.

NOTE: The voltage will automatically change to either 10v or 100v depending on the resistivity of the material.

Refer to the EOS/ESD Specifications. EOS/ESD-S4.1, ANSI -ESD S7.1 and EOS/ESD-S11.11-1993

LED Indication Guide

The LED lights on the meter indicates how much resistance a surface has and if it is "Conductive", "Dissipative" or "Insulating" by flashing colored LED lights.

Alarm Indications

Display	Resistance	Indicates
GREEN	$<-10^5$ K	Conductive
YELLOW	10^6-10^{11} M	Dissipative
RED	10^{12} M->	Insulating

Calibration

The recommended calibrating interval is 12 months.

Notice

This instrument is not approved for measurements in explosion hazard areas. High electrostatic charges or measuring highly charged materials might damage the instrument.

Using the instrument in power plants is not permitted.

Parts Included List

1. SRM 310
2. Carrying bag
3. 9V battery (installed in domestic shipment)
4. Grounding cord
5. User's manual

Product Specifications

Product Number

SRM310	Resistance Meter
SR0055	Probes (two required)

Specifications:

Dimensions/Weight	5.15” H x 2.50” W x 1.8” D / 8.46 oz
Test range:	10^3-10^{12}
Test voltage:	10V/100V(automatic ranging)
Accuracy	$\pm$ 5%
Power Supply	9V-Battery (PP3) Or rechargeable Battery
Probes:	Internal parallel probe jacks. External probes for SR0055 (internal probes are switched off)

Service and Warranty

Transforming Technologies, LLC provides a limited warranty for the Model SRM310. All new products are guaranteed to be free from defects in material and workmanship for a period of one (1) year from the date of shipment. Liability is limited to servicing (after evaluating, repairing or replacing) any product returned to Transforming Technologies. The company does not warrant damage due to misuse, neglect, alteration or accident. In no event shall Transforming Technologies be liable for collateral or consequential damages.

To receive service under warranty, please contact Transforming Technologies Technical Support.

About Transforming Technologies

Since 1998, Transforming Technologies has helped electronic manufacturing facilities to protect their products and processes from the many serious problems associated with static electricity.

Transforming Technologies offers a wide range of unique and outstanding products to detect, protect, eliminate and monitor electrostatic charges. Our products are integral components of an effective static control program.

TRANSFORMING TECHNOLOGIES, LLC

3719 King Rd.
Toledo, Ohio 43617

Phone: 419-841-9552
Fax: 419-841-3241
E-mail: info@transforming-technologies.com