TRANSFORMING TECHNOLOGIES
OUTSTANDING ALTERNATIVES IN STATIC CONTROL

OhmMETRICS™ SRM330
Travel Resistance Test Kit

The Ultimate ESD Resistance Testing Travel Kit

The SRM330 Surface Resistance Meter tests materials for electrical resistivity/resistance according to EOS/ESD, CECC, ANSI, ASTM test procedures. The battery powered SRM330 is equipped with built-in parallel electrodes for quick surface measurements and includes two lightweight "travel" electrodes that eliminate the cumbersome weight of standard kits. When pressed, the travel electrodes simulate the 5lbs of pressure necessary to measure resistance point-to-point (RPP) or resistance-to-ground (RTG).

Meets requirements of ANSI/ESD S4.1, S7.1, S2.1 and STM12.1 and STM97.1

"Press and Test" Travel Probes

Features

- Designed for Measuring Surface Resistance for ESD Compliance.
- Two Lightweight Travel Probes
- Built-in Parallel Resistivity Probes
- Easy-To-Read Color Coded Readout
- Automatic Test Voltage Selector
- Carrying Case and Conductive Plate

Applications:

Performs resistance measures required by ANSI ESDS20.20 including ANSI/ESD S4.1, S7.1, S2.1 and STM12.1 and STM97.1. Perform resistance-to-ground, resistance-point-to-point and volume resistance. Measures temperature and humidity.

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Work Surface Measurements

There are three primary measurements for evaluating a work surface; Resistance Point to Point (RTT – also known as Resistance Top to Top), Resistance to Groundable Point (RTGP) and Resistance to Ground (RTG).

Resistance to Ground Measurement

This measurement is made using a 5 lb electrode connected to the positive terminal of the resistance meter. The electrode is placed on the work surface in the most heavily used area. The negative lead is connected to electrical ground. This measurement assures that the mat is connected to AC Equipment Ground. Test at 10 volts, and if the measurement exceeds 1.0 x10^6 ohms, switch to 100 volts.

If the resulting RTG measurement is within your required limits, no further work surface testing is required and you can proceed to the next work surface. Should the measurements still exceed your limits you will then want to conduct a Resistance to Groundable Point (RTGP) measurement.

Resistance to Groundable Point Measurement

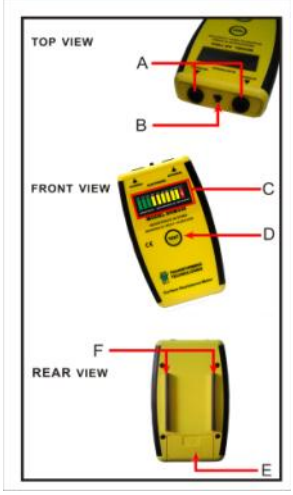
This measurement is similar to the RTG measurement except that the negative lead is attached to the grounding point (snap) of the work surface. The testing is performed using 100 volts when the expected resistance is greater than 1.0 x 10^6 ohms.

Should this measurement provide a reading that is within your requirements the problem is somewhere between the snap and AC Ground. If this measurement also provides a value that exceeds your requirements, then there may be a problem with the work surface. A point-to-point resistance measurement can be done to verify the performance of the work surface material.

Model SRM330	**Specifications**
Dimensions/Weight	5.8" H x 3.5" W x 0.98" D /7.0 oz
Test range:	10^3-10^{12}
Test voltage:	10V/100V(automatic ranging)
Accuracy	± 1/2 decade
Power Supply	9V-Battery (PP3)
Probes:	Two travel probes Two built-in 3"parallel probes
Read Out	Color coded LCD
Test Range	
Resistivity:	10^3-10^{12} ohms/sq.
Resistance:	10^3-10^{12} ohms

Product Number

SRM330	Meter with travel probes and carrying case
SR0055	5lb Disc Probes, Black, Set
SR0065	5lb Disc Probes, Yellow Rubber Set



A: Jacks for Leads
B: Voltage Selection
C: Readout
D: Test Button
E: Battery Compartment
F: Parallel Probes

RTT – Resistance Point-to-Point

This measurement is made using two 5 lb electrodes. The electrodes are placed 10" apart on the work surface in various locations. The testing is performed using 100 volts when the expected resistance is greater than 1.0 x10^6ohms. If the reading meets your requirements, there is possibly a connection problem with the groundable point. Should the reading exceed your limits the work surface is likely faulty and should be replaced. It is important that RTG measurements be made regularly. The frequency of testing is dependent up on internal requirements and testing history. RTG testing must be performed even if constant monitoring is in place, as constant monitors verify ground connection of the worksurface, but not the performance of the worksuface.

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.

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