#### Users manual SURFACE RESISTIVITY METER (Model: SRM-100V)

In the electronic semiconductor industry, products such as packing materials, component storage trays and boxes, workstation surfaces, floor mats, conveyor belts, aprons, seating, etc., have resistance value, which need to confirm to stringent specifications, more over these resistance values are expected to fall within specified limits.

The model SRM-100V is a precession, low cost, hand held, battery operated instrument designed to measure surface Resistivity, surface to ground and resistance between two points is accordance with EOS/ESD Association standard S-11.11.

The SRM-100V meter (including EXTERNAL ELECTRODES) is designed to make surface to ground and resistance between two point's measurements

**SURFACE RESISTIVITY MEASUREMENT:** Place the meter on the desired surface to be tested. PRESS & HOLD the TEST button, the meter will display the surface resistivity. When using the built in probes, the meter's test value for surface resistivity are in OHMS/SQ. Here, when the Instrument is used to measure in the conductive range, the instrument tests at 10 volts, and when the instrument measures the static dissipative ranges the instrument tests at 100 volts, and the Decades values are given below.

10^3	= 1 kilo ohm	10^8	= 100 Meg ohms
10^4	= 10 kilo ohms	10^9	= 1 Giga ohm
10^5	= 100 kilo ohms	10^10	= 10 Giga ohms
10^6	= 1 Meg ohm	10^11	= 100 Giga ohms
10^7	= 10 Meg ohms	10^12	= 1 Tera Ohm

**SURFACE TO GROUND MEASUREMENT:** Connect the external cords to the instruments. Connect one end of the external cord to ground, and connect another end of the external cord to EXTERNAL ELECTRODE. Place the electrode on the desired surface to be tested. PRESS & HOLD the TEST button, the meter will display the surface to ground resistance. When using the external electrode, the meter's test values for surface to ground are in OHMS.

**POINT TO POINT MEASUREMENT:** Connect the external cords to the instruments. Connect end of the external cords to the EXTERNAL ELECTRODES: place the electrodes on the desired surface to be tested. PRESS & HOLD the TEST button, the meter will display the point to point surface resistance. When using the external electrodes, the meter's test values for point to point are in OHMS.

### SPECIFICATIONS:

Measurement Range Measurement Accuracy Resolution Open Circuit Voltage	: <10^3 to >10^12 Ohms (or) Ohms/sq : Half decade : One decade : 100V (+/-5V)
Indication	: Different Color LED's
Test actuation	: Press & Hold to Test
Power supply	: 9 Volt Battery
Low Battery Indication	: Flashes by LOW-BATT Led
Dimensions	: 135 x 70 x 25mm
Weight	: 160 gms (with battery)
Calibration	: Recommended every 12 months
Warranty	: 12 Months
Accessories	: External cords & Carry Case
Optional	: External Electrodes.

**MAINTENANCE:** Apart from routine battery replacement, this SRM-100V meter is designed to be completely maintenance free. There are no parts inside which can be replaced by the user himself. In case of malfunction, kindly refer to manufacturer or his authorized personnel. Ensure that the surface to be tested and the bottom of the instrument internal electrodes & External Electrodes are clean because any dust or contaminates on either surface will lead to erroneous reading.

### DATA SHEET SURFACE RESISTIVITY METER (Model: SRM-100V)

The model SRM-100V is a precession, low cost, hand held, battery operated instrument designed to measure Surface Resistivity, Surface to Ground and Resistance between two points is accordance with EOS/ESD Association standards S-11.11.

The SRM-100V meter (Including EXTERNAL ELECTRODES) is designed to make Surface to Ground and Resistance between to point's measurements.



## SRM-100V SPECIFICATIONS:

Measurement Range	<pre>: &lt;10E3 to &gt;10E12 Ohms (or) Ohms/Sq</pre>
Measurement Accuracy	: Half decade
Resolution	: One decade
Probes test voltage	: 100V (+/-5V)
Indications	: Different color LED's
Test actuation	: Press & Hold to TEST
Power supply	: 9V Battery
Low battery indication	: Flashes by "LOW-BAT" LED
Dimensions	: 135 x 70 x 25 mm
Weight	: 160 gms (with battery)
Calibration	: Recommended every 12 months
Calibration traceability	: To NATIONAL STANDARDS
Warranty	: 12 Months
Accessories	: External cords & Carry case
Optional	: 1 Set of 5 Pound External Electrodes.
Optional	: 1 Set of 5 Pound External Electrodes.

# **OPTIONAL:**

### **EXTERNAL ELECTRODES**

(Model: TE-01)

External testing electrodes are used for measuring POINT to POINT resistance and SURFACE to GROUND resistance of floors, work surfaces, floor mats, Paint & floor finishes. The probe accepts 4mm banana plug or 6mm ring terminal for taking the connections. It is designed accordance with EOS/ESD standards.



### **SPECIFICATIONS:**

Weight	: 2.27 Kg (5 pound) per probe
Contact surface	: Conductive Pads
Contact Area	: 63.5 mm (2.5 Inches)
Conductive pads hardness	: < 70 (in durometer)
Resistance	: < 100 Ohms
Electrodes outer sleeve	: silicon rubber
Handle	: Insulative handle (Easy to carry)
Accessories	: PP corrugated box.

Note: The specifications mentioned in this datasheet are subject to change without prior notice due to our continuous research of product development, Buyer or User should decide the suitability of the product for the intended application.