

TM5402

Digital Surface Volume Resistivity Meter



The TM5402 is a comprehensive anti-static measuring instrument for checking surface and ground resistance, measuring the impedance or resistance of all conductive, antistatic, and electrostatic venting surfaces, as well as the relative humidity and temperature that affect electrical properties. Designed according to the international standard "EOS/ESD, CECC, ASTM and UL" test procedures, it can be used for material testing of all consumables and supplies required for production lines, such as different table mats, floor coating layers, lacquer surfaces, plates, wrist straps, ankle straps, anti-static overalls, shoes (shoe covers), various PE bags and containers of different specifications



Featured Functions

- Digital display Easy-to-read color TFT display
- ESD fast determination The indicator provides a visual indication of dissipation, conductivity, or insulation
- Complies ANSI/ESD S20.20 and IEC61340-5-1 Meets the general specifications for anti-static detection
- Measure temperature and humidity This is important for resistance measurement results
- Fully automated measurements The resistance range and test voltage are automatically selected for you
- Voice broadcast Increase test productivity
- Abundant probes (optional) Built-in parallel resistivity probe for use with 5lb weight, two-point probe, or concentric ring probe



Dissipative Pass Limit Indicator

The measured value is indicated by means of an LED display and indicator light, which indicates whether the value is conductive, dissipative or insulated. The user can set the resistance range of dissipation according to the production demand.







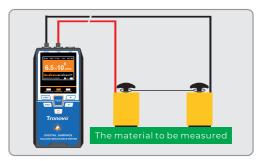
Specifications

Model	TM 5402
Range	$1.0 \times 10^3 \sim 1.0 \times 10^{12}$
Accuracy	±10%、±20% (≤1.0x10⁴ and≥1.0x10¹¹)
Displayed	TFT color screen
Test Voltage	10V/100V ±5% (AUTO)
Test Mode	AUTO, CONT, OFF, Set time: 5~120S
ESD Indicator	•
Voice	•
Temp & H Test	•
Display	•
Language	Chinese / English
Battery	2×3.7V Li-ion battery
Standby	240 hours
Interface	TYPE C
Environment	Temp: 0 to 50°C Humidity: 35 to 80%RH
Weight	350g
Warranty	One-year limited warranty



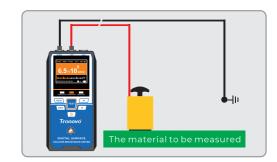
Point-to-point resistance testing

The ANSI/ESD TR53 specification places 2 weights on the material to be measured at a distance of 10 inches (25.4 cm) for a small area and a distance of 36 inches (91.44 cm) for a large area.



Ground resistance test

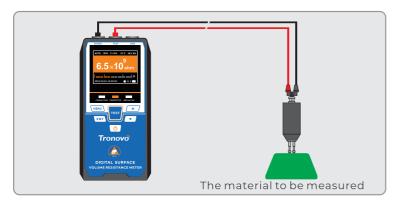
In the ANSI/ESD TR53 specification, one weight is placed on the material to be measured, and the other wire is plugged into the matching ground clamp for ground measurement.





Test the two-point resistance of the material

ANSI/ESD STM11.13 specification, connect the test table and the twopoint electrode, press the two-point electrode vertically on the material to be measured, and press the probe to the bottom (about 0.47kg pressure) to measure the surface resistance.





Surface resistance/resistivity test

In the ANSI/ESD STM11.11 specification, the concentric electrodes are placed on the material to be measured, and the geometric factor is set to X10 in the test table, and the conversion factor is the surface resistivity.

