

TWO POINT RESISTANCE PROBE

Trek 152P-2P



The Trek 152P-2P probe is used to perform accurate two point resistance measurements in the range of 10^3 to 10^{13} ohms.

The Trek 152P-2P probe is designed to perform resistance measurements on objects too small to be measured using the concentric ring probe specified in ANSI/ESD Association standard STM11.11, or too small to be measured using the point-to-point probes specified in other ANSI/ESD Association standards.

Items such as thermo-formed trays, tape and reel carriers, and similar objects can now be accurately measured for their resistance characteristics. The Trek 152P-2P probe housing is made from a dissipative, low-sloughing material for optimum performance in ESD areas. Additional features include Elastomer electrodes, which provide excellent surface contact, a compact probe design which is lightweight and portable, and probe electrode pins which can be removed for easy replacement.

A removable probe cap permits tests to be quickly performed using a precise 90° angle on flat surfaces. With the probe cap removed, the two independent probe electrodes can be placed in extremely small or recessed spaces. Independent spring action of each probe electrode allows measurements of uneven surfaces.

The Trek 152P-2P operates with the Trek 152 Surface Resistance Meter and most other brands of resistance meters with banana plug inputs.

- Performs measurements on areas too small to measure with other standard probes
- Exceptional accuracy, stability, and repeatability
- Wide measurement range of 10^3 to 10^{13} ohms
- Elastomer electrodes for excellent surface contact
- Efficient and compact probe design
- Six (6) ft. cable length
- Operates with most resistance meters including the Trek 152
- Independent spring probe action for uneven surfaces
- Probe cap can ensure rapid, 90° right angle measurements

Trek 152P-2P Probe Specifications

Probe Dimensions

6.4" length x 0.75" diameter
(163 mm x 19 mm)

Cable Length

6 ft (1829 mm)

Distance Between Probe Contacts

(center to center)
0.25" (6.4 mm)

Contact Travel

0.170" (4.3 mm)

Probe Contacts

0.125" (3.2 mm) diameter
conductive silicon elastomer.

Contact Force

16 oz (454 g), nominal at 0.170"
(4.3 mm) contact in-travel

Trek 152 Resistance Meter Using Trek 152P-2P Probe

Performance

Resistance/Resistivity Measurement Ranges

10^3 to 10^{13} ohms
(extends to 10^{14} ohms using the Concentric Ring probe).

Measurement Accuracy (of reading)

At 25 °C ±10 °C at 20% to 70% RH:

10^3 to 10^{11} Ω range, ±5 %,
 10^{12} to 10^{13} Ω range, ±10 %.

General

ANSI/ESD Association Standards

The Model 152 conforms to the following ANSI/ESD Association Standards for measuring surface resistance and surface resistivity:

- STM2.1** Garments.
- STM4.1** Work surfaces - resistive characterization.
- STM7.1** Flooring materials.
- STM9.1** Footwear resistive characteristics.
- STM11.11** Surface resistance measurements of static dissipative planar materials.
- STM12.1** Seating - resistive measurements.
- STM11.13** Two-point resistance measurement.
- STM97.1** Floor materials/footwear-resistance measurements in combination with active user.

General (cont.)

Battery Operation

Two (2) 9 Volt batteries (NEDA 1604 Alkaline, or equivalent) provide 6 hours of power for portable operation.

AC Line Operation

Use the AC battery eliminator. The eliminator output connector is a female type 2.1 mm DC power plug.

Instrument Dimensions

180 mm H x 100 mm W x
44 mm D
(7" H x 4" W x 1.75" D)

Instrument Weight

Approximately 0.5 kg (1 lb) with batteries.

Environmental Operating Range Temperature

15 °C to 35 °C.

Relative Humidity

5% to 80%, noncondensing.

Probes Available

Trek 2.27 kg (5 lb.) Concentric Ring Probe, (2) 2.27 kg. (5 lb.) point-to-point probes, and the two-point resistance 152P-2P probe.

Features

Test current Limit

Limited to less than 13 mA in the 10 V range and less than 1.7 mA in the 100 V range.

Probe Electrode Test Voltage

User selectable for 10 V or 100 V, ±2%.

LCD Display

Three digits plus two digit exponent (scientific notation).

Low Battery Indicator

LCD message for low battery.

Test Voltage Range Indicator

User selectable, either 10 V or 100 V.

Automatic Shutoff

If the unit is left idle for longer than 10 minutes, the unit automatically turns off.



For international contact information, visit advancedenergy.com.

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PRECISION | POWER | PERFORMANCE

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