

Model 152P-2P

Two Point Resistance Probe



The Trek Model 152P-2P probe is used to perform accurate two point resistance measurements in the range of 10³ to 10¹³ ohms.

The Model 152P-2P probe is designed to perform resistance measurements on objects too small to be measured using the concentric ring probe specified in ESD (Electrostatic Discharge) Association standard S11.11, or too small to be measured using the point-to-point probes specified in other 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 Model 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 robe electrode pins which can be removed for easy replacement.

An 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 Model 152P-2P operates with the Trek Model 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 10³ to 10¹³ 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 Model 152

Independent spring probe action for uneven surfaces

Probe cap can insure rapid, 90° right angle measurements

CONTROL WITHOUT COMPROMISE



Model 152 P-2P Probe Specifications

Probe Dimensions 6.4″ length x 0.75″ diameter (163 mm x 19 mm).

Cable Length 6 ft (1829 mm).

Probe Contacts 0.125" (3.2 mm) diameter conductive silicon elastomer. Distance Between Probe Contacts (center to center) 0.25" (6.4 mm).

Contact Travel 0.170 " (4.3 mm).

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

CERTIFICATION

TREK, INC. certifies that each Model 152P-2P probe is tested and calibrated to specifications using measurement equipment traceable to the National Institute of Standards and Technology or traceable to consensus standards.

Model 152 ResistanceMeter using the 152P-2P Probe

Performance

Resistance/Resistivity Measurement Ranges

 10^3 to 10^{13} ohms.

Measurement Accuracy (of reading)

At 25 °C ±5 °C, 50% ±20% RH:

10³ to 10¹¹ Ω range, ±2.5 %, 10¹² to 10¹³ Ω range, ±8 %.

At 25° C ±10 °C, 50% ±30% RH:

10³ to 10¹¹ Ω range, ±5 %, 10¹² to 10¹³ Ω range, ±8 %.

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, $\pm 2\%$.

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.

General

- 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.

- ESD Association Standards The Model 152 conforms to the following ESD Association Standards for measuring surface resistance and surface resistivity:
 - S2.1 Garments.
 - S4.1 Work surfaces-resistive characterization.
 - **S7.1** Flooring materials.
 - S11.11 Surface resistance measurements of static dissipative planar materials.
- 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.

Copyright © 2003 TREK, INC. All specifications are subject to change. 0305/JNC

Please contact TREK, INC. for information about additional EOS/ESD probes and instruments



TREK, INC. 11601 Maple Ridge Road • Medina, NY 14103 • 800-FOR TREK 585-798-3140 • 585-798-3106 (fax) • www.trekinc.com • sales@trekinc.com

