Typical Applications Include

- Measuring surface or volume resistance on materials
  - Conductive, dissipative, insulative
- Measuring in accordance with ANSI/ESD Standards for
  - Garments (STM2.1)
  - Work surfaces (S4.1)
  - Flooring (S7.1)
  - Footwear (STM9.1)
  - Planar materials (STM11.11)
  - Volume resistance (STM11.12 and IEC 61340-2-3)
  - Seating (STM12.1)
  - Two point resistance measurements (STM11.13)
  - Floor materials/footwear (STM97.1)

Key Specifications

- Measurement Range: \(10^3\) to \(10^{13}\) Ω
- Measurement Accuracy (of reading) at 25° ±10° C and 20% to 70% RH:
  - Point to Point Probe (152BP-5P): \(10^1\) to \(10^{12}\) Ω range, ±5% (+100 to 200 Ω)
  - Concentric Ring Probe (152-CR-1): \(10^1\) to \(10^{13}\) Ω range, ±5%
  - Two Point Resistance Probe (152P-2P): \(10^1\) to \(10^{13}\) Ω range, ±10%
- Probe Electrode Test Voltage: User selectable, 10 V or 100 V ±2%
- Test Limit Current: Limited to less than 13 mA in 10 V range and 1.7 mA in 100 V range

Features and Benefit

- Complies to ANSI/ESD Association Standards
- Concentric ring probe pre-amplifier eliminates interference and enables reliable operation at high resistance values
- Exceptional accuracy, stability and repeatability
- Wide measurement range (\(10^3\) to \(10^{13}\) Ω)
- Elastomer electrodes for excellent surface contact
- Optional accessories include a Walking Test Adapter and Test Plate set
- NIST-traceable Certificate of Calibration provided with each unit
- CE compliant
# Model 152-1 Specifications

## Performance

<table>
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<td>Concentric Ring Probe (152P-CR)</td>
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<td></td>
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</tr>
</tbody>
</table>

## Features

- LCD Display: Three digits plus two digit exponent (scientific notation)
- Low Battery Indicator: LCD message for low battery
- Test Voltage Range Indicator: Indicates the test voltage selected, either 10 V or 100 V
- Automatic Shutoff: If the unit is left idle for longer than 10 minutes, the unit automatically turns off
- ANSI / ESD Association Standards: The Model 152-1 conforms to ANSI / ESD Association Standards for measuring surface resistance and surface resistivity. Please refer to the Applications section on page 1 of this data sheet for more information

## Test Probes/Accessories

### Model 152BP-5P Test Probes

Set of 2 (2.27 kg / 5 lb). Available for performing resistance measurements including ANSI/ESD STM 4.1 standards (point-to-point or resistance to ground measurement).

### Model 152P-2P Two-Point Resistance Probe

Performs measurements on surface areas too small to be measured with conventional probes.

### Model 152P-CR-1 Surface/Volume Concentric Ring Probe*

Measures surface and volume resistance of materials as per IEC or ESDA standards. A three (3) position switch on the probe selects either SURFACE distance or VOLUME resistance measurements with either a GUARDED or UNGUARDED outer electrode. Uses an exclusive built-in pre-amplifier design.

## Test Probes / Accessories (cont.)

| Test Plate Set (consists of two separate plates) | The use of these plates is described in the ESD STM 11.12 (IEC 61340-2-3) standard |
| Conductive Plate | (5” x 5” / 127 mm x 127 mm) A stainless steel conductive plate with a mini banana plug |
| Insulative Plate | (5.4” x 5.4” / 137 mm x 137 mm) Acts as an insulative surface |
| Walking Test Adapter Kit | The Walking Test Adapter allows the analysis of resistance levels on the human body (STM 97.1) |

## Mechanical

- Dimensions: 180 mm H x 100 mm W x 44 mm D (7” H x 4” W x 1.75” D)
- Weight: Approximately 0.5 kg (1 lb.) with battery

## Operating Conditions

- Temperature: 15°C to 35°C (59 °F to 95 °F)
- Relative Humidity: 5% to 80%, non-condensing
- Altitude: To 2000 m (6561.68 ft.)

## Power Requirements

- Battery Operation: Two (2) 9-Volt batteries (NEDA 1605 Alkaline, or equivalent) provide approx 6 hrs of power
- AC Line Operation: The use of an AC battery eliminator allows for AC line operation. The eliminator output connector is a female type 2.1 mm, DC power plug

## Included Accessories

- Operator’s Manual: PN: 23426
- Ground Cord: PN: N9044
- Universal AC Adapter: PN: F5054R

## Optional Accessories

- Test Plate Set: PN: 17530
- Carrying Case: PN: 43378
- Walking Test Adapter Kit: PN: 1K039

## Notes

*The Model 152-CR-1 will operate with the previous Model 152 resistivity meter in “surface” mode, just as the Model 152-CR probe did. The 152-CR will operate with the Model 152-1 Resistance Meter with the measurement being in “ohms,” not “ohms/sq.”

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