Sentry 50 Plus Ground Bond Tester

High Current Testing To 30 Amps

Introduction
The Sentry 50 Plus Ground Bond Tester provides up to 30A for high current testing to even the most stringent standards. The front panel of the Sentry instrument includes a digital display and user friendly control allowing test parameters and limits to be set easily without the high current activated.

Description
Wide Test Current Range: User programmable output current, 3A to 30A AC in 0.01A steps, provides extensive coverage for testing to UL, CSA, VDE, IEC and other agency safety requirements.

Programmable Source Voltage: Limit the voltage to the DUT using the programmable source voltage from 1.0V to 8.0V rms and meet the low voltage requirement of CSA 22.2 No. 0.4 Bonding and Grounding of Electrical Equipment (4V, 30A, 100mΩ limit, 2-minute test) plus many others.

Programmable High and Low Resistance Limits: A resistance measurement range from 0.1mΩ to 510mΩ, plus user programmable high and low resistance limits with Pass/Fail indication, make this tester ideal for production Go/NoGo testing.

Remote Control: Incorporate the Sentry 50 Plus unit into an automated manufacturing environment with remote start and Go/NoGo results output through the rear panel PLC interface.

Hipot Compatibility: The Sentry 50 Plus can be used alone or connected to the Sentry Plus 10, 20 or 30 Hipot Testers for complete product electrical safety testing with the push of one button. When the Sentry 50 Plus has completed a continuity test, with pass indication, it can remotely start the Sentry Plus Series instrument for a hipot test in sequence.

Built-in Calibration via Software: Front panel display of an operator prompted calibration routine makes for no internal adjustments.

For more detailed information on specifications, pricing and special purchase, rent and lease options, contact us at:

www.quadtech.com
800-253-1230

USES:
• Production Testing of Instruments and Appliances
• Testing of Information Technology Equipment, Medical Instrumentation, and other Electrical Products with 3-prong Power Cords
• Electrical Safety Testing of Motors, Generators, and Transformers
• Low Resistance Testing of Electrical Connections

FEATURES:
• Programmable Output Current from 3A to 30A AC
• Programmable Source Voltage from 1.0 to 8.0V rms
• Resistance Measurements from 0.1mΩ to 510mΩ
• Programmable High and Low Limits
• Programmable Test Time
• Storage of 99 Tests Setups with Multiple Steps per Measurement
• Remote I/O Interface
• Graphic LCD
• Front Panel Lockout
• 4-Terminal Kelvin Connection
• Built-in Calibration Software
• Compatible with Sentry & Guardian Series Hipot Testers
## Sentry 50 Plus

### Output Current:
- Range: 3.00A to 30A AC
- Resolution: 0.01A, 3-30A
- Accuracy: ±(1.5% of setting + 0.15A)
- Frequency: 50 or 60 Hz, ±0.1%

### Source Voltage:
- Range: 1.0V to 8.0V rms
- Resolution: 0.1Volt/step

### Resistance:
- Range: 0.1mΩ - 510mΩ
- Accuracy:
  - 10-30A, 10-150mΩ: ±(1% reading +1mΩ)
  - All other ranges: ±(2% of reading +2.6mΩ)
- Limits:
  - High: 0.1mΩ - 510mΩ
  - Low: 0.1mΩ - High Limit, or OFF

### Offset:
- 0 to 100mΩ, user selectable

### Indication:
- Pass/Fail display, LEDs & audible alarm

### Test Time:
- 0.5 to 999s
- Continuous Mode

### Standard Interface:
- Remote
  - Inputs: Start, Stop and Interlock
  - Characteristics: 24V Active Low, Pulse Width >20ms.
  - Outputs: Pass/Fail/Under Test
  - Characteristics: Dry Contact relay
  - Elec Characteristics: 30VAC/60VDC,<0.3A
  - Logic: Closed if True
  - Connector: 9 pin Male D-Series

### Test Setups:
- 99 Memory Locations, 99 Steps, max 500

### Connectors:
- 4-Terminal Kelvin Connection
- 4 Binding/Banana Sockets: Front & Rear
- 1 Chassis Ground Banana Socket

### Front Panel Lockout:
- 11-digit password with or without setup recall

### Display:
- 40x4 Character Graphic LCD

### Hipot Compatibility:
- Sentry & Guardian Series Hipot Testers

### Dimensions:
- (w x h x d):12.5 x 4.5 x 15.5 inches (312.5 x 112.5 x 387.5 mm)

### Weight:
- 34 lbs (15.4kg) net,
- 40 lbs (18.1kg) ship

### Power:
- 100V, 120V, 220V AC ±10%
- 240V AC -10% +5%
- 50 or 60Hz
- 880W max

### Environmental:
- Meets MIL-T-28800E, Type 3, Class 5
  - Specifications: 18°C to +28°C, 70% RH
  - Operating: 0°C to + 40°C, 80% RH
  - Storage: - 10°C to + 60°C, 90% RH

### Ordering Information

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<thead>
<tr>
<th>Sentry 50 Plus Ground Bond Tester</th>
<th>Optional Accessories:</th>
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<tbody>
<tr>
<td>Includes:</td>
<td>Calibration Data</td>
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<tr>
<td>150743  Instruction Manual</td>
<td>S05       Foot Switch</td>
</tr>
<tr>
<td>700070  Power Cable</td>
<td>S15       Interconnection Cable to SPlus Series</td>
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<tr>
<td>G15     Ground Continuity Lead Set</td>
<td>G13     Corded Product Adapter(115V)</td>
</tr>
<tr>
<td>520107  10A 250V Fuse (1)</td>
<td>G15     Ground Continuity Lead Set</td>
</tr>
<tr>
<td>520068  5A 250V Fuse (1)</td>
<td>G16     International Power Strip</td>
</tr>
<tr>
<td>N/A     Calibration Certificate Traceable to NIST</td>
<td>G25     Corded Product Adapter (240V)</td>
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