

# Sentry

## 50 Plus Ground Bond Tester

### 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 0.1m $\Omega$  to 510m $\Omega$
- 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

### 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, 100m $\Omega$  limit, 2-minute test) plus many others.

**Programmable High and Low Resistance Limits:** A resistance measurement range from 0.1m $\Omega$  to 510m $\Omega$ , 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 specifications, visit [www.quadtech.com](http://www.quadtech.com)

For more information about special purchase, rent & lease options, call

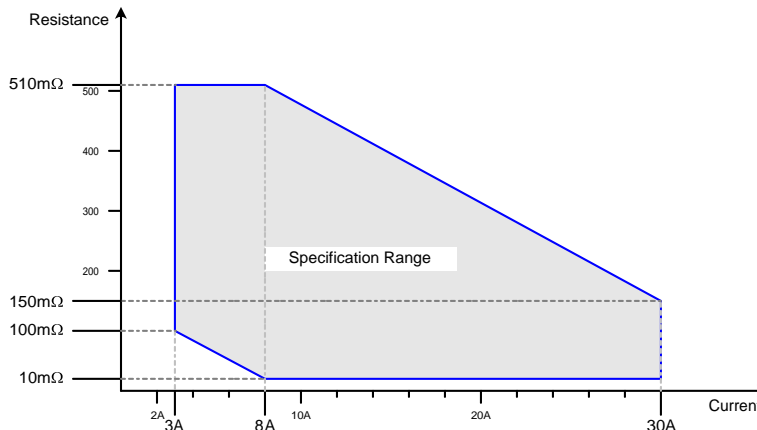
1-800-253-1230

Fax 1-978-461-4295

Intl. 1-978-461-2100



## Sentry 50 Plus



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

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

**Resistance:** Range: 0.1m $\Omega$  - 510m $\Omega$   
Accuracy:  $\pm$  (2% of reading + 2.6m $\Omega$ )

**Limits:** High: 0.1m $\Omega$  - 510m $\Omega$   
Low: 0.1m $\Omega$  - High Limit, or OFF

**Offset:** 0 to 100m $\Omega$ , 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  $\geq 20$ ms.  
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

**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

**Power:** 100V, 120V, 220V AC  $\pm 10\%$   
240V AC -10% +5%  
50 or 60Hz  
880W max

## Ordering Information

Sentry 50 Plus Ground Bond Tester

**Includes:**

150743 Instruction Manual  
700070 Power Cable  
G15 Ground Continuity Lead Set  
520107 10A 250V Fuse (1)  
520068 5A 250V Fuse (1)  
N/A Calibration Certificate Traceable to NIST

**Optional Accessories:**

Calibration Data  
S05 Foot Switch  
S15 Interconnection Cable to SPlus Series  
G13 Corded Product Adapter(115V)  
G15 Ground Continuity Lead Set  
G16 International Power Strip  
G25 Corded Product Adapter (240V)

For more detailed specifications, visit [www.quadtech.com](http://www.quadtech.com)  
For more information about special purchase, rent & lease options, call  
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