

# Sentry 50 Plus Ground Bond Tester

## High Current Testing To 30 Amps

### 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

### 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.

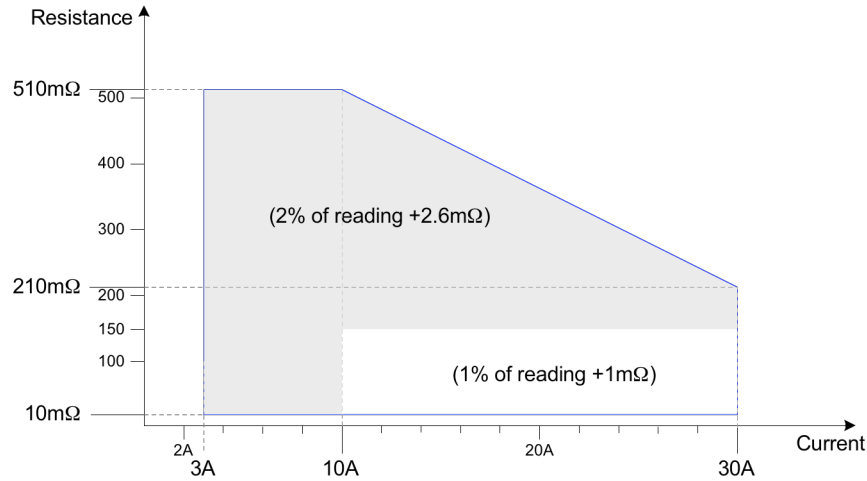
**Built-in Calibration via Software:** Front panel display of an operator prompted calibration routine makes for no internal adjustments.



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## Sentry 50 Plus



<b>Output Current:</b>	Range: 3.00A to 30A AC Resolution: 0.01A, 3-30A Accuracy: ±(1.5% of setting + 0.15A) Accuracy: ±(1.5% of reading + 0.15A) Frequency: 50 or 60 Hz, ±0.1%
<b>Source Voltage:</b>	Range: 1.0V to 8.0V rms Resolution: 0.1Volt/step
<b>Resistance:</b>	Range: 0.1mΩ - 510mΩ Accuracy: 10-30A, 10-150mΩ: ±(1% reading + 1mΩ) Accuracy: All other ranges: ±(2% of reading + 2.6mΩ)
<b>Limits:</b>	High: 0.1mΩ - 510mΩ Low: 0.1mΩ - High Limit, or OFF
<b>Offset:</b>	0 to 100mΩ, user selectable
<b>Indication:</b>	Pass/Fail display, LEDs & audible alarm
<b>Test Time:</b>	0.5 to 999s Continuous Mode
<b>Standard Interface:</b>	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

<b>Test Setups:</b>	99 Memory Locations, 99 Steps, max 500
<b>Connectors:</b>	4-Terminal Kelvin Connection 4 Binding/Banana Sockets: Front & Rear 1 Chassis Ground Banana Socket
<b>Front Panel Lockout:</b>	11-digit password with or without setup recall
<b>Display:</b>	40x4 Character Graphic LCD
<b>Hipot Compatibility:</b>	Sentry & Guardian Series Hipot Testers
<b>Dimensions:</b>	(w x h x d): 12.5 x 4.5 x 15.5 inches (312.5 x 112.5 x 387.5 mm)
<b>Weight:</b>	34 lbs (15.4kg) net, 40 lbs (18.1kg) ship
<b>Environmental:</b>	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
<b>Power:</b>	100V, 120V, 220V AC ±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)

