

Guardian 1050 Ground Bond Tester

High Current Testing To 45 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 45A AC
- Programmable Source Voltage from 1.0V to 8V rms
- Resistance Measurements from 0.1mΩ to 510mΩ
- Programmable High & Low Limits
- Programmable Test Time
- Storage of 99 Tests Setups with Multiple Steps per Measurement
- Standard Remote I/O Interface
- Optional RS232, IEEE and Printer Interfaces
- Graphic LCD
- Front Panel Lockout
- 4-Terminal Kelvin Connection
- Built-in Calibration Software
- Compatible with Guardian & Sentry Series Hipot Testers

Introduction

The Guardian 1050 Ground Bond Tester provides up to 45A for high current testing to even the most stringent standards. The front panel of the Guardian 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 from 3A to 45A AC 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, in conjunction with user-programmable high and low resistance limits with Pass/Fail indication, make this tester ideal for production Go/NoGo testing.

Remote Control: Incorporate the G1050 unit into an automated manufacturing environment with remote start, interlock and Pass/Fail results output through the rear panel PLC interface.

Optional Interfaces: The G1050 unit has optional RS232 and GPIB interfaces for PC connection in automated applications. The Printer interface allows for direct printout of test results.

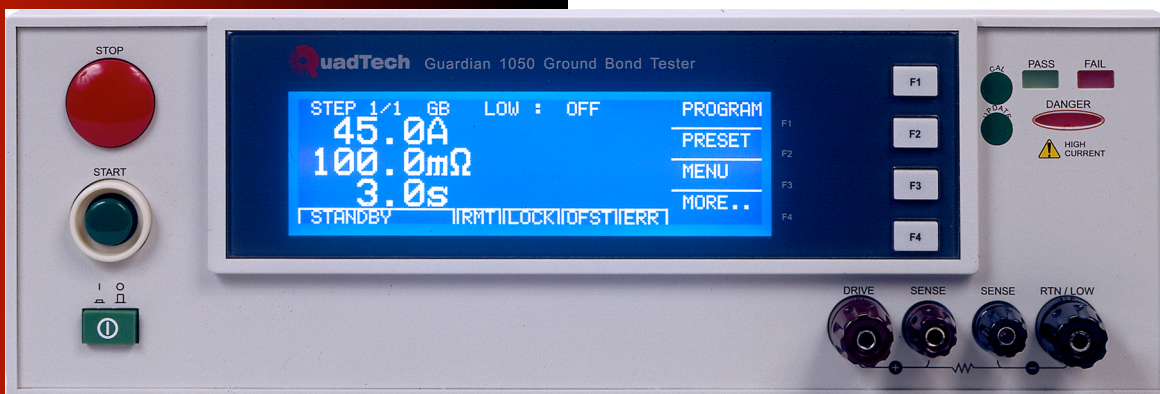
Hipot Compatibility: The Guardian 1050 can be used alone or connected to the Guardian 1010, 1030 or 1030S Hipot Testers for complete product electrical safety testing with the push of one button. When the Guardian 1050 has completed a continuity test, with pass indication, it can remotely start the Guardian 1000 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.

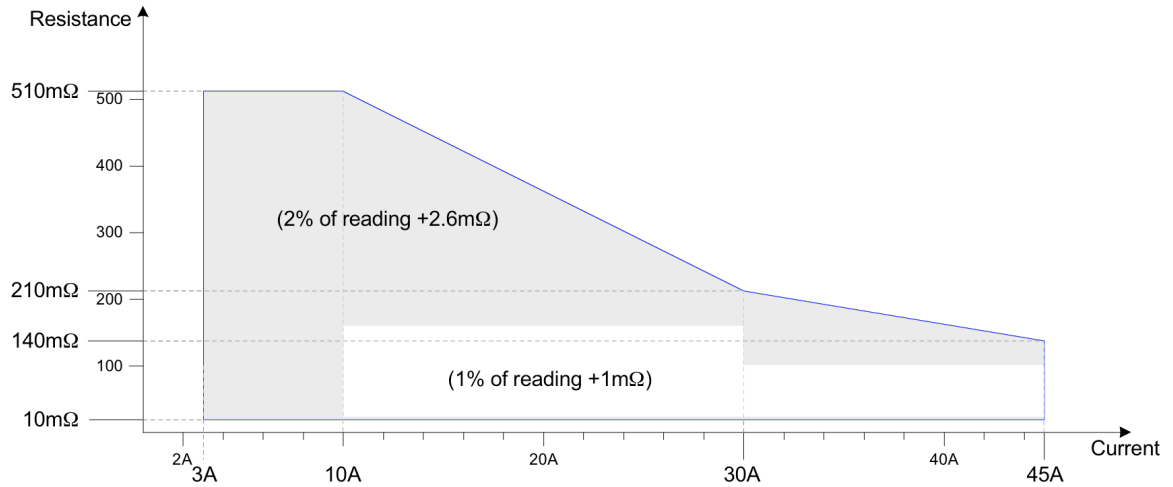
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www.quadtech.com

800-253-1230



Guardian 1050



Output Current:	Range: 3.00A to 45A AC Resolution: 0.01A, 3-30A; 0.1A, 30-45A Accuracy: $\pm(1.5\%$ of setting +0.15A), $I \leq 30A$ Accuracy: $\pm(1.5\%$ of setting +0.2A), $I > 30A$ Frequency: 50 or 60 Hz, $\pm 0.1\%$
Source Voltage:	Range: 1.0V to 8.0V rms Resolution: 0.1Volt/step
Resistance:	Range: 0.1mΩ - 510mΩ Accuracy: 10-30A, 10-150mΩ: $\pm(1\%$ of reading +1mΩ) Accuracy: 30-45A, 10-100mΩ: $\pm(1\%$ of reading +1mΩ) Accuracy: All other ranges: $\pm(2\%$ of reading +2.6mΩ)
Limits:	High: 0.1mΩ - 510mΩ Low: 0.1mΩ - High Limit, or OFF
Offset:	0 to 100mΩ, On/Off
Indication:	Pass/Fail display, LEDs & audible alarm
Test Time:	0.5 to 999s, For $I < 40A$ 0.5 to 120s, For $I > 40A$ Continuous Mode, for $I < 40A$
Standard Interface:	Remote Inputs: Start, Stop and Interlock Characteristics: 24V Active Low, Pulse Width $\geq 20ms$. Outputs: Pass/Fail/Under Test Characteristics: Dry Contact relay Ele. Characteristics: 30VAC, 60VDC, $< 0.3A$ Logic: Closed if True Connector: 9 pin Male D-Series

Optional Interfaces:	RS232, IEEE 488 or Printer
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:	Guardian & Sentry 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

Guardian 1050 Ground Bond Tester

Includes:

150744	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 G1000 Series
G13	Corded Product Adapter (115V)
G15	Ground Continuity Lead Set
G16	International Power Strip
G25	Corded Product Adapter (240V)
G36	RS232 Interface
G38	Printer Interface (replaces IEEE)
G39	IEEE-488 Interface

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