

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.

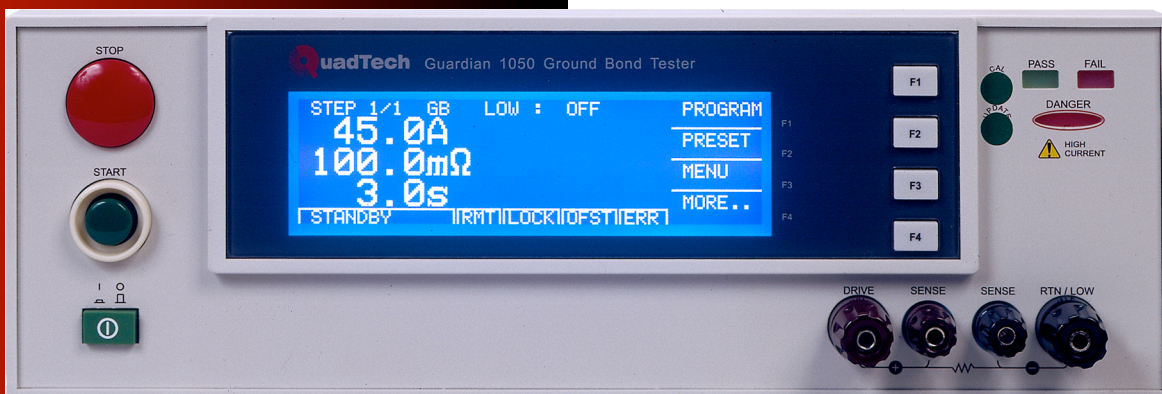
Hipot Compatibility: The Guardian 1050 can be used alone or connected to the Guardian 1010, 1030 or 1030S Hipot Testers for complete product electrical safety testing with the push of one button. When the Guardian 1050 has completed a continuity test, with pass indication, it can remotely start the Guardian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

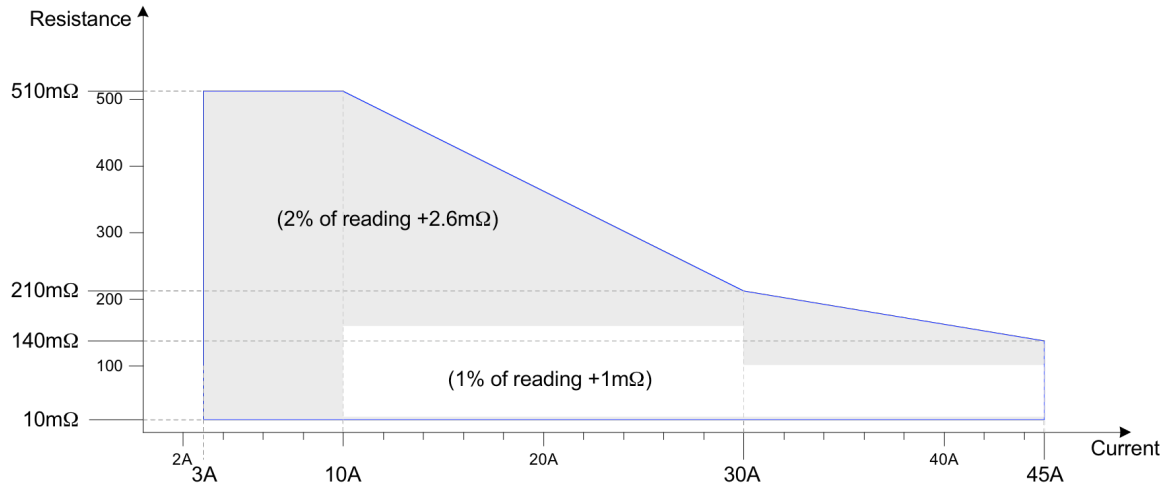
For more detailed information on specifications, pricing and special purchase, rent and lease options, contact us at:

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: ±(1.5% of setting + 0.15A), I ≤ 30A
Accuracy: ±(1.5% of setting + 0.2A), I > 30A
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% of reading + 1mΩ)
Accuracy: 30-45A, 10-100mΩ: ±(1% of reading + 1mΩ)
Accuracy: All other ranges: ±(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 ≥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 ±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