

Ohm Metrics™

Wrist Strap & Footwear Combination Tester GTS600



Instruction Manual

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Description

Ohm Metrics Duel Footwear/Wrist Strap Tester: Model GST 600

The GST 600 tester is a space saving, versatile combo grounding tester that allows for accurate and cost effective testing of ESD ground devices. The dual test circuits in the GTS600 gives the option for both wrist strap and footwear testing and a positive rocker switch makes test mode selection easy.

This tester fully supports the "Compliance Verification Plan" requirements as stated in the ANSI ESD S20.20.

Reliable, Repeatable Results

Accuracy and reliability are key strengths of the GST 600. Test parameters are standard but can be adjusted to match your own specifications. Features include:

- Dual test circuits: test footwear or wrist straps
- Positive rocker switch
- LED's lights and audible alarm signal test results
- Battery powered with low-battery indicator
- Optional AC adapter
- Provided with calibration to NIST traceable standards
- Wrist Strap Range: 750 Kilohms 10 Megohms
- Footwear Range: 750 Kilohms 100 Megohms

Battery Installation

The GST600 monitor requires 1(one) 9volt battery. The battery housing is found on the back of unit. Slide battery cover off and insert only a 9volt battery.

- Only new and valid batteries can be used.
- The "Replace Battery" LED located on the front of unit indicates when battery power is low. When the LED lights, stop testing and replace with fully charged 9v battery.

Stationary Installation

The GTS600 has two options for installation: Stationary installation or Free-standing installation with optional footplate and stand.

- Remove all items from carton and confirm you have received all items contained in the "Parts Included List." located on Page 8.
- 2. Choose a location in the work area that is easily accessible and safe for both test equipment and users.

The GST 600 can be mounted on to any flat, stationary surface. Frequently, the unit is mounted on a table or wall

- 3. **WALL MOUNT:** Two keyhole slots on the back of the unit allow you to attach the unit using two (2) screws. See *figure 1*.
- 4. Install two(2) screws 1 1/2" apart, leaving 1/4" of screw head from mounting surface.
- 5. Mount the tester on the screws, pulling gently down to lock into place.



Figure 1. Mounting Hole Location



Figure2: Mounting Screw Location on wall

Free Standing Installation

NOTE: Free standing installation requires Model: GTS600FP or GTS600k.

The Rugged stainless steel footplate and pedestal allows for both footwear and wrist strap testing in a free standing moveable unit.

Assembly

1. Remove the four screws from the base of unit using included HEX wrench.

Note the pedestal comes in two pieces: One with the base mount that has a length of **23.4**" (**Pedestal A**) and one with unit mount that has a length of **19.6**"(**Pedestal B**).

Free Standing Installation Cont.

- Line up **pedestal A** with four screw base mount on footplate and attach with the four screws. Tighten with HEX wrench.
- 3. Slide **pedestal B** on to **pedestal A**.
- 4. Line up Monitor with mounting screws and gently pull down to lock in place.
- 5. Install the 4" banana plug connector into jack labeled "FOOT PLATE" on the left side of unit.
- 6. Locate the connection screw and two bolts on the underside of monitor mount and unscrew first bolt.
- 7. Place eye of plug connector on screw and return bolt and gently tighten it with fingers.

Testing

The GTS600 safely tests for proper ESD protection. The GTS600 can function as solely a wrist strap tester or in combination with the GTS600FT as duel wrist strap and foot wear tester.

Wrist Strap Testing

- While wearing wrist strap, plug banana plug end of cord in the jack labeled "WRISTCORD"
- 2. Press rocker switch toward "WRISTCORD".
- 3. Press the test button and hold for 2-3 seconds.

Wrist Strap Testing Cont.

- 4. The green LED labeled "PASS" indicates that the wrist strap and cord are functioning properly.
- 5. If either the yellow LED "FAIL LO" or the red LED "FAIL HI" light and audible alarm sound, then check the wrist strap and cord set immediately.



Figure 2. Wrist Strap testing

Figure 3. Wrist Strap testing with foot plate

Footwear Testing

In order to test footwear you will need the GTS600 and GST600FT or the GST600K. For the following testing, one must be wearing foot grounding ESD protection.

- 1. Press rocker switch to "FOOTPLATE"
- 2. Place one foot on the plate. If the floor is conductive, lift the opposite foot off the floor during the test.

NOTE: No cord should be plugged into "WRIST CORD" jack.

Footwear Testing Cont.

- 3. Press the test button and hold for 2-3 seconds
- 4. The green LED labeled "PASS" indicates that the foot ground is functioning properly.
- If either the yellow LED "FAIL LO" or the red LED "FAIL HI" light and audible alarm sound, then check the foot ground set immediately.
- 6. Repeat steps 1-5 with opposite foot.







Figure 4. Footwear testing with out pedestal

CALIBRATION AND PERIODIC TESTING:

The GTS600 is calibrated to NIST traceable standards. We recommend that calibration is performed annually to ensure proper testing standards. Due to duel testing circuits, both test circuits must be calibrated individually. Transforming Technologies offers a calibration unit CAL1000 to perform these tasks.

Product Specifications

Product Number

GTS600	Tester
GTS600K	Tester and Foot Plate
GTS600FP	Foot Plate only

Wrist Strap Circuit

FAIL HI:	10 Megohms
FAIL LO	750 Kilohms

Footwear Circuit

FAIL HI:	100 Megohms
FAIL LO	750 Kilohms

<u>General</u>

- Power 9v Battery or AC adapter Operation Resistance Bridge
- Output Three LED indicators and audio signal
- Accuracy $\pm 10\%$ for wrist strap tester $\pm 10\%$ for anti-static foot wear tester

Product Specifications Cont.

Testing Range 750K-10M for wrist strap 750K-100M for footwear

GST600 Tester only					
Weight	0.44lbs				
Dimensions	5.5" × 3.1" ×1.5"				

<u>GTS600FT</u> Weight Dimensions

15lbs 19.75" x 16" x 2"

Parts Included List

<u>GTS600k</u>

- 1. GTS600 tester.
- 2. GTS600FT foot plate.
- 3. AC adapter
- 4. 2 piece pedestal.
- 5. Connection cord for pedestal.
- 6. Connection cord for Foot plate.

GTS600 only

- 1. GTS600 tester
- 2. AC adapter

Service and Warranty

Transforming Technologies, LLC provides a limited warranty for the Model CM2015. All new products are guaranteed to be free from defects in material and workmanship for a period of one (1) year from the date of shipment. Liability is limited to servicing (after evaluating, repairing or replacing) any product returned to Transforming Technologies. The company does not warrant damage due to misuse, neglect, alteration or accident. In no event shall Transforming Technologies be liable for collateral or consequential damages.

To receive service under warranty, please contact Transforming Technologies Technical Support.

About Transforming Technologies

Since 1998, Transforming Technologies has helped electronic manufacturing facilities to protect their products and processes from the many serious problems associated with static electricity.

Transforming Technologies offers a wide range of unique and outstanding products to detect, protect, eliminate and monitor electrostatic charges. Our products are integral components of an effective static control program.



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