



GE Energy

## Functional Testing Specification

Parts & Repair Services  
Louisville, KY

LOU-GED-IS200TTSA

### Test Procedure for a Trip Server Interface card

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## 1. SCOPE

1.1 This is a functional testing procedure for a Trip Server Interface card.

## 2. STANDARDS OF QUALITY

2.1 Refer to the current revision of the IPC-A-610 standard for workmanship standards.

## 3. APPLICABLE DOCUMENTS

3.1 The following document(s) shall form part of this specification to the extent specified herein. Unless otherwise indicated, the latest issue shall apply.

3.1.1 Check board's electronic folder for more information

## 4. ENGINEERING REQUIREMENTS

### 4.1 Equipment Cleaning

4.1.1 Equipment should be clean and free of debris prior to applying power unless performing an initial check. Refer to site specific SRA's for cleaning guidelines.

### 4.2 Equipment Inspection

4.2.1 Equipment should be visually inspected for any defects prior to applying power. This inspection should include the following as a minimum:

4.2.1.1 Wires - broken, cracked, or loosely connected

4.2.1.2 Terminal strips / connectors - broken or cracked

4.2.1.3 Components - visually damaged

4.2.1.4 Capacitors - bloated or leaking

4.2.1.5 Solder joints - damaged or cold

4.2.1.6 Circuit board - burned or de-laminated

4.2.1.7 Printed wire runs / Traces - burned or damaged

## 5. EQUIPMENT REQUIRED

5.1 The following equipment is required to perform the process requirements. Equipment may be substituted provided that all accuracy's and test ratios are equivalent or better.

Qty	Reference #	Description
1		Fluke 87 DMM (or Equivalent)
1		15 VDC Power Supply

## 6. Modifications/Upgrades

6.1 None at this time.

## 7. Testing Process

7.1 Setup: Place properly numbered TB screw terminals on TB1 and TB2 to make locating terminal number easier.

### 7.2 Testing Procedure

7.2.1 Use the following three tables for checking resistance values.

Table 1

CHECK FOR <1 ohm	
FROM	TO
TB1-20	TB1-21
TB1-22	TB1-23
TB2-28	TB2-29
TB2-30	TB2-31
TB2-36	TB2-37
TB2-38	TB2-39
TB2-44	TB2-45
TB2-46	TB2-47

Table 2

CHECK FOR 5K OHMS +/-5%	
FROM	TO
TB1-20	TB1-2
TB2-28	TB1-2
TB2-36	TB1-2
TB2-44	TB1-2
TB1-22	TB1-11
TB2-30	TB1-11
TB2-38	TB1-11
TB2-46	TB1-11

Table 3

CHECK FOR 2.2K OHMS +/-5%	
FROM	TO
TB1-20	D2 CATHODE
TB2-28	D7 CATHODE
TB2-36	D3 CATHODE
TB2-44	D5 CATHODE
TB1-22	D1 ANODE
TB2-30	D8 ANODE
TB2-38	D4 ANODE
TB2-46	D6 ANODE

**7.2.2** Set up power supply for 15 VDC. Connect a meter set to measure dc volts, Positive lead to TB1-2 and Negative lead to TB1-11. Perform the checks in the following table.

15 VDC		
POS	NEG	READINGS +/- 5%
TB1-3	TB1-4	~14.35 VDC
TB1-4	TB1-3	~0 VDC
TB1-5	TB1-6	~14.35 VDC
TB1-6	TB1-5	~0 VDC
TB1-7	TB1-8	~14.35 VDC
TB1-8	TB1-7	~0 VDC
TB1-9	TB1-10	~14.35 VDC
TB1-10	TB1-9	~0 VDC

**7.3 \*\*\*TEST COMPLETE \*\*\***

## 8. Notes

**8.1** None at this time.