



GE Energy

## Functional Testing Specification

Parts & Repair Services  
Louisville, KY

LOU-GED-IS200ERDD

### Test Procedure for a card tested in the Geneva Test System and in a EX2100 Panel

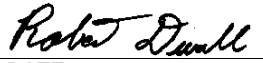
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REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	R. Duvall	05/21/03
B	Added section 6.3 on functional testing of this card in a EX2100 Panel	D. Waddy	6/30/2014
C			

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<b>DATE</b> 05/21/03	<b>DATE</b> 6/30/2014	<b>DATE</b>	<b>DATE</b> 05/21/03

**Functional test procedure for equipment tested on the GENRAD® GENEVA system**

**1. SCOPE**

1.1 This is a functional testing procedure for various circuit boards.

**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 directory 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 the local documented procedures 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 or cracked

4.2.1.2 Terminal strips / connectors broken or cracked

4.2.1.3 Loose wires

4.2.1.4 Components visually damaged

4.2.1.5 Capacitors leaking

4.2.1.6 Solder joints damaged or cold

4.2.1.7 Circuit board burned or de-laminated

4.2.1.8 Printed wire runs 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	H188912	GENRAD Geneva Test System
1	H188731	ERDD #G51
1	H190128	EX2100 Cabinet

<p>LOU-GED-IS200ERDD REV. B</p>	<p><b>g</b></p> <p><b>GE Energy</b> Part &amp; Repair Services Louisville, KY</p>	<p>Page 3 of 3</p>
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## 6. TESTING PROCESS

### 6.1 Setup

6.1.1 Install fixture H188731 onto Geneva test System.

6.1.2 Install UUT into test fixture.

### 6.2 Testing Procedure

6.2.1 Load ERDD\_Louisville test program and follow instructions on screen.

### 6.3 **EX2100 Cabinet Testing Procedure**

6.3.1 Power off the cabinet.

6.3.2 Remove test card and install customer card into desired rack. ***(There are several cables that connect to the ERDD, be careful not to damage any connectors when removing or installing the card into the slot.)***

6.3.3 Apply power to the cabinet and go online on Toolbox.

6.3.4 Verify that all trips and alarms clear and that the status is a green **CONTROL/EQUAL** at the bottom right corner. ***(If the status is not "CONTROL/EQUAL" it may be necessary to perform ACL downloads. To do so go to the DEVICE dropdown, select Download to ACL, select runtime and follow prompts, follow the same steps and select application code, cycle power, once the cabinet has rebooted perform a check/ build/ download.)***

6.3.5 Allow card to burn-in for 12 Hrs.

### 6.4 **\*\*\*TEST COMPLETE \*\*\***

## 7. NOTES

7.1 None at this time.