



GE Energy

Functional Testing Specification

*Parts & Repair Services
Louisville, KY*

LOU-GENEVA-IS200ERIO

Test Procedure for an IS200ERIO card.

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REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	R. Johnson	10/5/2012
B	Added section 6.3 to functionally test card in the EX2100 exciter	D. Waddy	6/30/2014
C			

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DATE 10/5/2012	Day 6/30/2014	DATE	DATE 10/6/2012

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Functional test procedure for an IS200ERIO card tested on the GENRAD® GENEVA system

1. SCOPE

1.1 This is a functional testing procedure for the IS200ERIOH1A 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 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 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	H190029	IS200EDGMH1A Test Fixture # G47
1	H190128	EX2100 Cabinet

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6. Testing Process

6.1 Setup

6.1.1 Install fixture H190029 onto Geneva test System.

6.1.2 Install UUT into test fixture.

6.2 Testing Procedure

6.2.1 Load appropriate test program and follow instructions on screen.

6.3 **EX2100 Cabinet Testing**

6.3.1 Power off the cabinet.

6.3.2 Remove test card and install customer card into desired rack.

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 Changes to the electronic GENEVA test are recorded in the following directory;

C:\Geneva Info\Geneva, file name is “Geneva Test Fixture Notes”.

8. Attachments

8.1 None at this time.