Date: October 16, 2012 Classification: General

D200 Substation Controller

## Notification of D200 Chassis design update

## NOTICE

In response to updated requirements in industry standards and feedback from D200 users, GE Digital Energy implemented design enhancements on the chassis for the D200 substation controller. The main enhancements introduced in the new design are:

- Introduction of RoHS compliant components
- Design update in line with ANSO VITA 1-994 VME 64 standard
- Mechanical enhancements for ease of maintenance and improved reliability

### Design update details

Design updates introduced in the D200 Chassis are summarized in the table below:

Change	Existing D200 Chassis	New D200 Chassis	Improvements
Chassis Metal Work	Based on Schroff Europac Rational series	Based on new Schroff Europac Pro / integral series	<ul> <li>Serial back panel mounting extended by 1" (ease of maintenance)</li> <li>EMI gasketing added</li> <li>Backwards compatible with existing models</li> </ul>
Main Backplane	Schroff 23000-469	Based on Schroff Europac Pro / Europac Integral series	<ul> <li>RoHS Compliant</li> <li>Conforms to ANSI/VITA 1-1994 VME64 standard for enhanced reliability and increased capacity for future D20 developments including:         <ul> <li>Larger, 64-bit data path for 6U boards.</li> <li>Larger, 64-bit addressing range for 6U boards.</li> <li>Twice the bandwidth (up to 80 Mbytes/sec).</li> <li>Lower noise connector system.</li> </ul> </li> </ul>
Card Guides	Black plastic rails	New Red plastic rails with grounding option	<ul> <li>Improved design for alignment of removable modules</li> <li>Grounding option available for future upgrades</li> </ul>



Change	Existing D200 Chassis	New D200 Chassis	Improvements
Power Connectors	Used three different connectors types	Standardized in one connector type	<ul> <li>Simplified assembly and maintenance of power connections: cut-outs for multi wire connections facilitates full connector insertion into mating connector</li> <li>Uniform FASTON interconnect system</li> <li>Enhanced connection retention though introduction of mechanical latching mechanism</li> </ul>
Wiring Harness	Crimped Wires	New design with extended wire length required for new backplane. All lugs are crimped and soldered	<ul> <li>All connectors are crimpled and soldered connectors to ensure solid connection</li> <li>Corrects loose connection issues that may be caused by loose crimps</li> </ul>

# New design 100% backwards compatible with all previous versions of D200 chassis.



Figure 1: Existing chassis, Front view



Figure 2: New chassis, Front view

Maintained all connector locations and connection sequences. New version can be used as direct replacement or spare part for previous models



Figure 3: Existing chassis, rear view



Figure 4: New chassis, rear view



Figure 5: Existing chassis, backplane

Upgrade from "through hole" to "surface mount" componentry for increased reliability



Figure 6: New chassis, backplane

Power distribution connections implemented through external connections are now built into printed circuit board design for simplified assembly and increased reliability



Figure 7: Existing chassis, power distribution



Figure 8: New chassis, power distribution (prototype)

New insertion rails with grounding option for future enhancements



Figure 9: Existing chassis, insertion rails



Figure 10: New chassis, insertion rails

# More space between D200 Chassis and backplane for ease of maintenance



Figure 11: Existing chassis, serial panel mounting



Figure 12: New chassis, serial panel mounting

New positive latching mechanism for power connections for increased reliability



Figure 13: Existing chassis, power connector



Figure 14: New chassis, power connector

### Support for earlier versions of D200 Vertical chassis

The design enhancements described in this bulletin are implemented in the four versions of D200 vertical chassis:

Part number	Description	Existing revision	New Revision
		number	Number
500-0306	D200 VME Chassis 6U, 240 VAC Input	14C	15A
500-0307	D200 VME Chassis 6U, 48VDC Input	17C	18A
500-0310	D200 VME Chassis 6U, Dual 48 VDC Input	12B	13A

Existing versions of D200 chassis will be discontinued as of October 31<sup>st</sup>, 2012. New D200 units will be equipped with the new revisions of D200 chassis starting 01-Nov-2012.

#### Frequently Asked Questions

Q: Is there a change in price for the new D200 chassis?A: New D200 chassis will be offered at the same price as the previous models.

#### Additional Information

View the latest version of the **D200 Substation Controller User's Manual** and additional information on D200 Substation Controllers at the GE Digital Energy website:

http://www.gedigitalenergy.com/multilin/energy/catalog/d20-d200.htm

### Product Support

We trust that this information assures you that GE Digital Energy is committed to the continued support of the D20/D200 product line. We appreciate your business and look forward to continuing to grow our relationship. If you need help with any aspect of your GE Digital Energy product, you have a few options:

#### Search Technical Support

The GE Digital Energy Web site provides fast access to technical information, such as manuals, release notes and knowledge base topics.

Visit us on the Web at: <u>http://www.gedigitalenergy.com/</u>

#### Contact Customer Service

The GE Digital Energy Customer Service Center is open 24 hours a day, seven days a week for you to talk directly to a GE representative. In the U.S. and Canada, call toll-free: 1 800 547 8629 International customers, please call: +1 905 927 7070 Or e-mail to: ge4service@ge.com

### **Copyright Notice**

© 2012, General Electric Company. All rights reserved.

The information contained in this online publication is the exclusive property of General Electric Company, except as otherwise indicated. You may view, copy and print documents and graphics incorporated in this online publication (the "Documents") subject to the following: (1) the Documents may be used solely for personal, informational, non-commercial purposes; (2) the Documents may not be modified or altered in any way; and (3) General Electric Company withholds permission for making the Documents or any portion thereof accessible via the internet. Except as expressly provided herein, you may not use, copy, print, display, reproduce, publish, license, post, transmit or distribute the Documents in whole or in part without the prior written permission of General Electric Company. If applicable, any use, modification, reproduction, release, performance, display, or disclosure of the Software Product and Associated Material by the U.S. Government shall be governed solely by the terms of the License Agreement and shall be prohibited except to the extent expressly permitted by the terms of the License Agreement.

The information contained in this online publication is subject to change without notice. The software described in this online publication is supplied under license and may be used or copied only in accordance with the terms of such license.

### Trademark Notice

GE and the GE monogram are trademarks and service marks of General Electric Company.

\* Trademarks of General Electric Company. Other company or product names mentioned in this document may be trademarks or registered trademarks of their respective companies.

#### **Document Revision History**

Version	Revision	Date	Author	<b>Change Description</b>
1.00	0	16 October, 2012	F. Munoz	Initial Release