

Reason RPV311 Distributed Multifunction Fault Recorder

Firmware version FW 15A00.00 Release Notes

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Overview

GE regularly introduces firmware updates to address enhancements in different functional areas. This firmware release includes the following:

- **Compatibility with new CPU version 10 (HW-E);**
- **Cybersecurity improvements;**
- **Bug fixes.**

All users (HW-C and HW-D) are strongly advised to update to this firmware version, which enhances the device's Cyber Security

Firmware Release Date: **November 2024**

Firmware Upgrade Process

Upgrading to firmware 15A00.00 can be done by contacting your local sales representative or Grid Automation Global Contact Center.

HW Compatibility

This firmware is compatible to RPV311 processors model 8 (HW-C), 9 (HW-D) and 10 (HW-E).

Please contact your local sales representative or Grid Automation Global Contact Center for any questions regarding this upgrade.

Release details

In the following release descriptions, a revision category letter is placed to the left of the description. Refer to the Appendix at the end of this document for a description of the categories displayed.

C Network interface names

A bug was fixed in which the product unexpectedly changed the names of its network interfaces. Now, whenever the product is restarted, the network interfaces will be named appropriately.

C Flash Player support

Flash Player support has been removed.

N New alarm

An alarm has been added to notify the end user if the product is started without a previously configured TW link being connected.

E Removal of compromised cryptographic keys

Removal of a pair of compromised cryptography keys (CVE-2021-31477). This removal led to a change in how the auto-upload feature works. Now, RPV311 generates a new key pair and provides the public key in the configuration file. The end user must use this public key to allow RPV311 to publish records to the configured server. This removal also requires the user to update DR Manager software.

E Simulated Sampled Values

The RPV311 did not distinguish between streams of simulated and non-simulated sampled values, which would cause unexpected behavior in scenarios where simulated streams were injected into the product in parallel with non-simulated streams containing the same configuration. Now the product will always ignore simulated Sampled Values.

R Fixing related to .tri files

A bug was fixed that prevented small .tri files from being recognized as CSV files and from being opened by Analyse software.

R Fixing related to 1-element circuits

A bug was fixed in which the primary values of 1-element circuits were not converted according to the configured ratio.

R Fixing related to flicker records

A bug was fixed in which the duration of the records was not included in the file names within .zic files for flicker records.

D Fixing related to HMI

A bug was fixed in which pressing a specific sequence of buttons on the HMI would cause the product to restart.

G Network and NTP configuration

RPV311 will automatically update the NTP server and the network interfaces whenever it receives a new configuration.

G Removal of internal users with hard-coded passwords

The "development" and "maintenance" users have been removed. End users must use the "download" user to log in to the RPV Support Tool. Additionally, the "root" user has been locked.

G Cybersecurity improvements

The product's kernel was updated to a version from early 2024. As a result, several CVEs related to the kernel have been resolved. Additionally, the following CVEs have also been fixed: **CVE-2016-10009, CVE-2016-1908, CVE-2022-22822, CVE-2022-22823, CVE-2022-22824, CVE-2022-23852, CVE-2022-25236, CVE-2022-25315, CVE-2016-0799, CVE-2016-2177, CVE-2016-2182, CVE-2016-6303, CVE-2022-1292, CVE-2015-0235, CVE-2014-9761, CVE-2015-8779, CVE-2023-0687, CVE-2022-23219, CVE-2022-23218, CVE-2019-9169, CVE-2018-6485, CVE-2018-11236, CVE-2017-15804, CVE-2017-15670.**

Appendix

Change categories

This document uses the following categories to classify the changes.

Table 1: Revision Categories

Code	Category	Comments
N	New feature	A separate feature added to the product. Changes to existing features even if they significantly expand the functionality are not in this category
G	Change	A neutral change that does not bring any new value and is not correcting any known problem
E	Enhancement	Modification of an existing feature bringing extra value to the application
D	Changed, incomplete or false faceplate indications	Changes to, or problems with text messages, LEDs and user pushbuttons
R	Changed, incomplete or false product records	Changes to, or problems with product records (syslog, oscillography, demand, fault reports, etc.)
C	Protocols and communications	Changes to, or problems with protocols or communication features
B	Unexpected restart	Product restarts unexpectedly

For further assistance

For product support, contact our Grid Automation Global Contact Center:

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