GE

Grid Solutions

Power Quality Meters

EPM 9700 Firmware v5.0004

Release Notes

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Overview

Summary

GE Multilin has released an update to EPM 9700 Meter firmware (v5.0004) which introduces the following:

- Enhancements
 - o DNP3 Communications Log Index Block
- Fixes
 - Security
 - o GE EGD Communications
 - o Vca RMS issue

The EPM 9700 firmware version release v5.0004 is a general production release.

Release Date: Dec 13, 2024

Release Details

In the following 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.

EPM 9700 F/W v5.0004 - General Production Release

Enhancement – DNP3 Communications – Added Log Index Block

Added Log Index Block (line=498/499, points=0~8) for DNP3 Object #30.

Fixes

- Removed PHP package to address potential software security vulnerability.
- Fixed issue with GE EGD communications transferring packet with random gapping and burst pattern.
- Fixed Vca RMS random fluctuation with Delta wiring hookup.

EPM 9700 F/W v5.0003 – GE Hybrid only

Enhancement – Updated Frequency Accuracy

Updated algorithm for calculating multiple cycle frequency reading provided by GE EGD from block window average to sliding window average.

EPM 9700 F/W v5.0002 - GE Wind only

E Enhanced Frequency, Fundamental Reactive Power, Power Factor Calculation

• Support cycle based high resolution frequency calculation; cycle based fundamental reactive power and power factor calculation.

E COMTRADE file download

Support download COMTRADE waveform files directly from EPM 9700 meter through web restful API access.

E Real Time Clock (RTC) Alternate Support

• Support alternate equivalent RTC component

E Firmware Update Signature Verification

 Device support for firmware update signature verification in addition to existing GE Communicator firmware signature verification.

E Waveform Trigger

 Support waveform trigger through IEC61850 GOOSE messaging. Requires GE Communicator software v5.00.0214 and up.

E IEC 61850 SCL Files

• Support IEC 61850 SCL files

E Static IPv6 address

• Allow assignment of static IPv6 address in Profile Setting

Fixes

- EPM 9700 Webpage updates:
 - Updated branding to show EPM9700 and Software Options.
 - Updated Power Factor (PF) label on webpage. Previously showed "Show Vas" instead of "Show PF"
 - Clarify oldest and newest time record when PQ, Digital Inputs, and waveform logs do not have any log records on them (with zero logs)
 - Updated tab label to "Energy/Demand" instead of "Energy" only as Energy tab also contains demand readings
 - o Corrected several written errors observed in the EN50160 Webpage Report
 - The Voltage Harmonic Phase B and Phase C for TDD & THD has no values, observed only in Delta 2CT system

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 relay. 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
С	Protocols and communications	Changes to, or problems with protocols or communication features

The revision category letter is placed to the left of the change description.

For Further Assistance

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