GE Digital Energy

SNG-2-0 Sensor Network Gateway

Firmware Version 6

Release Notes

Overview

Summary

GE Digital Energy releases Firmware version 6 (Built date: June, 24th 2015) for the Sensor Network Gateway. This firmware is specific to the SNG2-0 and affects to FMC-T6 Overhead Line Sensor. Both devices belong to Intelligent Line Monitoring System (ILMS). Highlights of this release include the following:

SNG-2-0 Sensor Network Gateway:
- Modification of radio power output configuration
- DNP3 Protocol available
- Modification of connection to the server module
- New default value set to cycle count parameter for ODV.
- Modification of cycle count parameter in FMC-T6 Overhead Line Sensor over the radio

SNG-2-0 Sensor Network Gateway compatibilities:

⚠ **WARNING**

- Firmware version of FMC-T6-X-X-X models (FMC-T6 Overhead Line Sensor), which are linked to the SNG2-0 Sensor Network Gateway that will be updated to the released firmware, must be upgraded to the following firmware versions to be compliance with new standard EN 300 328 v.1.8.1.
    - Version 22 (Built date: March, 6th 2015) or above

⚠ **WARNING**

UPGRADING FIRMWARE PROCEDURE:
- Firmware upgrading process for the complete ILMS must be performed by following the next steps in the order listed below.
    - Upgrade SNG-2-0 Main firmware to version 6.
    - Check in ILMS server that SNG-2-0 has been properly updated.

- o Upgrade FMC-T6-X-X-X firmware to version 22 or above.

- o Check in ILMS server that FMC-T6-X-X-X firmware has been properly updated

- o Go to the "SNG configuration" in server and save the entire configuration in Intelligent Line Monitoring System.

- Detailed instructions, which are described in the document **GET-20032-ILMSUpgradingFirmware,** must be followed to upgrade the firmware

Release Date: Jun, 29th 2015

NOTE: Upgrading from a previous version of SNG2-0 Sensor Network Gateway to the new 6 firmware version can be done remotely via ILMS server application.

Please contact your local GE sales representative or Customer Service Department (CST) 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.

SNG-2-0 Sensor Network Gateway - Firmware version 6.00 Release Details:

C **Modification of radio output configuration**

Radio configuration modified and default value updated to be compliance with new standard EN 300 328 v.1.8.1.

Firmware version of FMC-T6-X-X-X models, which are linked to the SNG-2-0 model (SNG-Sensor Network Gateway) that will be updated to the released firmware, must be upgraded to the following firmware versions to be compliance with new standard EN 300 328 v.1.8.1.

- o FMC-T6-X-X-X firmware:
  - Version 22 or above

Instructions, which are described in the document **GET-20032-ILMSUpgradingFirmware**, must be followed to upgrade the firmware.

C **DNP3 protocol added.**

This communication protocol is now available in SNG-2-0 Sensor Network Gateway device. This allows SNG-2-0 to be integrated in SCADA systems where this protocol is used. This protocol shares point lists with DNP protocol, also available on SNG-2-0 devices. DNP3 is available on Ethernet, cellular and RS232 ports. One master is supported.

C **Modification of connection to the server module**

Connection interface has been separated from the TCP connection to the ILMS server.

- 1 socket available for ILMS server protocol and 1 socket available for DNP3
- Active and passive TCP sockets are supported for DNP3 communication

E **New default value set to cycle count parameter for ODV.**

Value defined to trigger and release an event. Value set to 3 cycles by default.

E **Modification of cycle count parameter in FMC-T6 Overhead Line Sensor over the radio**

Value defined to trigger and release an event in FMC-T6-X-X-X Overhead Line Sensor can be changed through SNG-2-0 over the radio. Value set to 3 cycles by default. This value can be modified with SNG2 Toolset version 3.10 only if FMC-T6-X-X-X firmware version is 22 or above in devices linked to the SNG-2-0.

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 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
D	Changed, incomplete or false faceplate indications	Changes to, or problems with text messages, LEDs and user pushbuttons
R	Changed, incomplete or false relay records	Changes to, or problems with relay records (oscillography, demand, fault reports, etc.)
C	Protocols and communications	Changes to, or problems with protocols or communication features
M	Metering	Metering out of specification or other metering problems
P	Protection out of specification	Protection operates correctly but does not meet published specifications (example: delayed trip)
U	Unavailability of protection	Protection not available in a self-demonstrating way so that corrective actions could be taken immediately
H	Hidden failure to trip	Protection may not operate when it should
F	False trip	Protection may operate when it should not
B	Unexpected restart	Relay restarts unexpectedly

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

Multilin technical support

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