GE Digital Energy

FMC-T6 Overhead Line Sensor

Firmware Version 22

Release Notes

Overview

Summary

GE Digital Energy releases Firmware version 22 for the FMC-T6 Overhead Line Sensor. This firmware is specific to the FMC-T6-X-X-X and affects to SNG-Sensor Network Gateway. Both devices belong to Intelligent Line Monitoring System. Highlights of this release include the following:

FMC-T6 Overhead Line Sensor:

- Modification of radio output configuration
- Averaging Algorithm modified for all DC analog channels.
- Sampling frequency increased.
- New default value set to cycle count parameter.

FMC-T6 firmware compatibilities:

⚠ WARNING

- Firmware version of SNG3-X-X-X-X models (SNG-Sensor Network Gateway), which are linked to the FMC-T6-X-X-X that will be updated to the released firmware, must be upgraded to the following firmware versions:
    - SNG-3-X-X-X DSP firmware:
        - Version 15 (Built date: July, 28th 2014) or above
    - SNG-3-X-X-X Main firmware:
        - Version 48 (Built date: March, 27th 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.

    When FMC-T6-X-X-X firmware version is 15 or below:

    1. Upgrade SNG-3-X-X-X Main firmware to version 48.

2. Upgrade FMC-T6-X-X-X firmware to version 22.

3. Check in ILMS server that communication with sensors has been lost before going to the next step.

4. Upgrade SNG-3-X-X-X DSP firmware to version 15.

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

Release Date: May, 12th 2015

NOTE: Upgrading from a previous version of the FMC-T6 firmware to the new 22 firmware version can be done remotely via ILMS server application.

NOTE: Bootcode will be upgraded automatically when firmware is updated from firmware version equal or below 15

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.

FMC-T6 Overhead Line Sensor - Firmware version 22 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 SNG2-0 model (SNG-Sensor Network Gateway), which is linked to the FMC-T6-X-2-X models 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   SNG2-0 Main firmware:

    - Version 6

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

M   **Averaging Algorithm modified for all DC analog channels.**

Increased the number of samples used during Moving Average Filter calculation.

M   **Sampling frequency increased.**

Sampling frequency has been redefined providing greater reliability for filtering 50Hz interferences.

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

Minimum value defined to trigger and release an event. Value set to 3 cycles in case of communicating with SNG3 devices.

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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