

# **F-PRO235**

# Firmware v2.6

# **Release Description**

DATE: 2019-07-17

# **FEATURE ENHANCEMENTS**

- Cyber Security:
  - o None.
- General:
  - o Added support for DNP3.0 protocol.
  - o Added support for IRIG-B & Daylight Saving Time settings in LCD-HMI.

## **CORRECTIONS TO ISSUES**

- Cyber Security :
  - o None.
- General:
  - Major: Fixed issue in LCD/HMI where wrong time was displayed when set to Local Time with Daylight Saving Time.

# **COMPATIBILITY:**

F-PRO 2000 Offliner Settings Software:	v2.6 or above
Relay Control Panel Software:	v2.9 or above
RecordGraph Software:	v5.4a or above
ERL 61850 IED Configurator:	v2.2 or above
ICD File Version:	v3.1 Rev 1

Minor releases, designated with a letter suffix (e.g. v3.1a), maintain the same compatibility as the base version (e.g. v3.1=v3.1a).



#### **REVISION HISTORY**

#### v2.5 - 2019-01-28

- Enhancement: Updated ICD, CID and CFG files from v3.0 to v3..1.
- **Enhancement:** Added support for service access facility over Ethernet communication.
- Enhancement: Added support for LCD back-light time-out after the event popup.
- Enhancement: Added support to display SNTP sync status in RecordGraph.
- **Critical**: Fixed issue for relay hangs after a period of time.
- Major: Fixed issue in relay address range for Modbus.
- Major: Fixed issue in 27/59 IT-1 & 2 setting values saving through LCD.
- Minor: Fixed Issue in updating of active setting group dataset in IEC61850.
- Minor: Fixed issue in 59IT-2 General Pickup updating for 59IT-1 instead of 59IT-2 in 61850

### v2.4a - 2018-12-24

- **Critical:** Improved syslog file logging after exception is thrown.
- **Major:** Fixed issue in 27/59 function fault report to IEC61850.

#### v2.4 - 2018-01-02

- **Enhancement:** Implemented SNTP time synchronization.
- **Enhancement:** Implemented single phase LED configuration
- Enhancement: Implemented single phase DO configuration
- **Enhancement:** Implementation of 27/59 protection functions.
- Major: Fixed issue in interfacing time sync status to IEC61850 time quality tag.
- Major: Fixed issue with Implementation of IRIG-B and SNTP indication to Modbus and IEC103.
- Major: Fixed issue in time goes back and forth when SNTP is disabled.
- Major: Enhancement to display of "Rebooting" text in LCD-HMI after IP change.
- Major: Added configurable minimum voltage threshold
- Major: Added time sync LED configuration in LED matrix.
- Major: LCD HMI Date & Time is made non-editable when SNTP / IRIG-B is present.
- Minor: Provided rollover scrolling from Last to First Menu in LCD-HMI
- **Minor:** Provided display of 'Booting' message at start up of the relay.
- Minor: Fixed issue for text capitalization of first letter in menu caption.
- Minor: Provided time sync indication in LCD-HMI
- Minor: Added few other time settings in LCD-HMI as RCP.



#### **CLASSIFICATION OF CHANGES MADE**

The issues fixed in software / firmware upgrades are classified as defined below. While the decision to upgrade installed products is the user's, these classifications provide a guideline for the need and priority of the upgrade.

Critical: Critical changes fix issues/problems that prevent the basic operation of the device and have no workaround. Critical changes merit a product upgrade as soon as possible, if that function is being used under the conditions causing the issue.

Major: Major changes fix problems that prevent the basic operation of the device but do have a workaround. Any major changes merit a product upgrade as soon as possible if the function is being used under the conditions causing the issue and a workaround is not acceptable.

Minor: Minor changes fix non vital issues that do not prevent the basic operation of the device and may or may not have a workaround. Product upgrades for such changes are not necessary unless they apply to and are needed by the user.

Feature Enhancement: Feature enhancements add a capability or extend existing capabilities of the product. Upgrades for such changes need be made only if and when that feature enhancement is desired.