

# Enerlin'X IFE Switchboard Server

## Firmware Release Notes

DOCA0148EN-05  
05/2024



# Legal Information

The information provided in this document contains general descriptions, technical characteristics and/or recommendations related to products/solutions.

This document is not intended as a substitute for a detailed study or operational and site-specific development or schematic plan. It is not to be used for determining suitability or reliability of the products/solutions for specific user applications. It is the duty of any such user to perform or have any professional expert of its choice (integrator, specifier or the like) perform the appropriate and comprehensive risk analysis, evaluation and testing of the products/solutions with respect to the relevant specific application or use thereof.

The Schneider Electric brand and any trademarks of Schneider Electric SE and its subsidiaries referred to in this document are the property of Schneider Electric SE or its subsidiaries. All other brands may be trademarks of their respective owner.

This document and its content are protected under applicable copyright laws and provided for informative use only. No part of this document may be reproduced or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), for any purpose, without the prior written permission of Schneider Electric.

Schneider Electric does not grant any right or license for commercial use of the document or its content, except for a non-exclusive and personal license to consult it on an "as is" basis.

Schneider Electric reserves the right to make changes or updates with respect to or in the content of this document or the format thereof, at any time without notice.

**To the extent permitted by applicable law, no responsibility or liability is assumed by Schneider Electric and its subsidiaries for any errors or omissions in the informational content of this document, as well as any non-intended use or misuse of the content thereof.**

---

# Table of Contents

Safety Information.....	5
About the Book.....	6
Introduction .....	8
IFE Switchboard Server .....	8
Firmware Release History .....	8
Firmware Update Policy .....	9
Firmware Update with EcoStruxure Power Commission Software .....	9
Firmware Versions.....	10
Firmware Version 005.001.000 .....	10
Firmware Version 003.016.000 .....	11
Firmware Version 003.015.000 .....	11
Firmware Version 003.014.000 .....	11
Firmware Version 003.013.003 .....	11
Firmware Version 003.012.002 .....	11
Firmware Version 003.011.003 .....	12
Firmware Version 003.010.005 .....	12
Firmware Version 003.009.010 .....	12
Firmware Version 003.007.024 .....	13
Firmware Version 003.006.011 .....	14
Firmware Version 003.005.003 .....	14



# Safety Information

## Cybersecurity Safety Notice

### **⚠ WARNING**

#### **POTENTIAL COMPROMISE OF SYSTEM AVAILABILITY, INTEGRITY, AND CONFIDENTIALITY**

- Change default passwords at first use to help prevent unauthorized access to device settings, controls, and information.
- Disable unused ports/services and default accounts to help minimize pathways for malicious attackers.
- Place networked devices behind multiple layers of cyber defenses (such as firewalls, network segmentation, and network intrusion detection and protection).
- Use cybersecurity best practices (for example, least privilege, separation of duties) to help prevent unauthorized exposure, loss, modification of data and logs, or interruption of services.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

# About the Book

## Document Scope

This document provides the firmware version history of IFE Ethernet switchboard server.

## Validity Note

This document is valid only for IFE Ethernet switchboard server.

## Online Information

The technical characteristics of the devices described in this guide also appear online. To access the information online, go to the Schneider Electric country website at [www.se.com](http://www.se.com).

The information contained in this guide is likely to be updated at any time. Schneider Electric strongly recommends that you have the most recent and up-to-date version available on [www.se.com/ww/en/download/](http://www.se.com/ww/en/download/)

## Related Documents for IEC Devices

The following table lists the documents valid for IEC devices that are compatible with an IFE Ethernet switchboard server with the latest firmware version:

Title of documentation	Publication date	Reference number
<i>Enerlin'X IFE – Ethernet Switchboard Server/ Ethernet Interface for One Circuit Breaker – Instruction Sheet</i>	03/2018	<a href="#">QGH13473</a>
<i>Enerlin'X IFE – Ethernet Switchboard Server – User Guide</i>	05/2024	<a href="#">DOCA0084EN</a> <a href="#">DOCA0084ES</a> <a href="#">DOCA0084FR</a> <a href="#">DOCA0084ZH</a>
<i>ULP System (IEC Standard) - User Guide</i>	10/2023	<a href="#">DOCA0093EN</a> <a href="#">DOCA0093ES</a> <a href="#">DOCA0093FR</a> <a href="#">DOCA0093ZH</a>
<i>MasterPacT MTZ – Modbus Communication Guide</i>	05/2023	<a href="#">DOCA0105EN</a> <a href="#">DOCA0105ES</a> <a href="#">DOCA0105FR</a> <a href="#">DOCA0105ZH</a>
<i>MasterPacT NT/NW, ComPact NS - Modbus Communication Guide</i>	05/2023	<a href="#">DOCA0054EN</a> <a href="#">DOCA0054ES</a> <a href="#">DOCA0054FR</a> <a href="#">DOCA0054ZH</a>
<i>ComPact NSX - Modbus Communication Guide</i>	07/2022	<a href="#">DOCA0213EN</a> <a href="#">DOCA0213ES</a> <a href="#">DOCA0213FR</a> <a href="#">DOCA0213ZH</a>

Title of documentation	Publication date	Reference number
<i>ComPact NSX - Modbus Communication Guide</i>	07/2022	<a href="#">DOCA0091EN</a> <a href="#">DOCA0091ES</a> <a href="#">DOCA0091FR</a> <a href="#">DOCA0091ZH</a>
<i>ComPacT NS - Modbus Communication Guide</i>	07/2022	<a href="#">DOCA0220EN</a> <a href="#">DOCA0220ES</a> <a href="#">DOCA0220FR</a> <a href="#">DOCA0220ZH</a>

You can download these technical publications and other technical information from our website at <https://www.se.com/en/download/>

## Related Documents for UL/ANSI Devices

The following table lists the documents valid for UL/ANSI devices that are compatible with an IFE Ethernet switchboard server with the latest firmware version:

Title of documentation	Publication date	Reference number
<i>Enerlin'X IFE – Ethernet Switchboard Server/ Ethernet Interface for One Circuit Breaker – Instruction Sheet</i>	03/2018	<a href="#">QGH13473</a>
<i>Enerlin'X IFE – Ethernet Switchboard Server – User Guide</i>	05/2024	<a href="#">DOCA0084EN</a> <a href="#">DOCA0084ES</a> <a href="#">DOCA0084FR</a> <a href="#">DOCA0084ZH</a>
<i>ULP System (UL Standard) – User Guide</i>	10/2023	<a href="#">0602IB1503EN</a> <a href="#">0602IB1504ES</a> <a href="#">0602IB1505FR</a> <a href="#">0602IB1506ZH</a>
<i>MasterPacT MTZ – Modbus Communication Guide</i>	07/2022	<a href="#">DOCA0105EN</a> <a href="#">DOCA0105ES</a> <a href="#">DOCA0105FR</a> <a href="#">DOCA0105ZH</a>
<i>MasterPacT NT/NW and PowerPact P- and R-Frame – Modbus Communication Guide</i>	07/2022	<a href="#">0613IB1313EN</a> <a href="#">0613IB1314ES</a> <a href="#">0613IB1315FR</a> <a href="#">0613IB1316ZH</a>
<i>PowerPact H-, J-, and L-Frame Circuit Breakers – Modbus Communication Guide</i>	05/2023	<a href="#">0611IB1302EN</a> <a href="#">0611IB1303ES</a> <a href="#">0611IB1304FR</a> <a href="#">0611IB1305ZH</a>

You can download these technical publications and other technical information from our website at <https://www.se.com/en/download/>

# Introduction

## IFE Switchboard Server

When an Intelligent Modular Unit (IMU) contains a circuit breaker equipped with a communicating MicroLogic trip unit, the IFE Ethernet switchboard server (IFE server) enables the IMU to be connected to an Ethernet network. Each circuit breaker has its own IFE server and a corresponding IP address.

The IFE server with part number LV434002 or LV434011 is an Ethernet interface for the circuit breaker in the IMU and a server for Modbus-SL (serial line) connected devices.

**NOTE:** The IFE server with part number LV434002 completely replaces the IFE server with part number LV434011. The part number LV434002 comes with the real time clock (RTC) feature and allows ULP connections up to 20 m (65.6 ft) with the MasterPacT MTZ circuit breakers (LV434011 had a theoretical limitation of 5 m (16.4 ft) over the life of the IFE server).

The IFE server is compatible with the following ranges of circuit breakers:

- MasterPacT MTZ circuit breakers
- MasterPacT NT/NW circuit breakers
- ComPacT NS circuit breakers
- ComPacT NSX circuit breakers
- PowerPacT P- and R-frame circuit breakers
- PowerPacT H-, J-, and L-frame circuit breakers

**NOTE:**

- The information related to the new generation of ComPacT NSX and PowerPacT H-, J-, and L-frame circuit breakers in this document applies to ComPact NSX and PowerPact H-, J-, and L-frame circuit breakers also. The exceptions are mentioned wherever applicable.
- The information related to the new generation of ComPacT NS and PowerPacT P- and R-frame circuit breakers in this document applies to ComPact NS and PowerPact P- and R-frame circuit breakers also. The exceptions are mentioned wherever applicable.

## Firmware Release History

The following table indicates the availability of each firmware version:

Date	Firmware version	Availability
May 2024	005.001.000	Release for manufacturing
July 2022	003.016.000	Obsolete
February 2022	003.015.000	Obsolete
July 2021	003.014.000	Obsolete
April 2021	003.013.003	Obsolete
January 2021	003.012.002	Obsolete
October 2020	003.011.003	Obsolete
December 2019	003.010.005	Obsolete
March 2019	003.009.010	Obsolete
April 2018	003.007.024	Obsolete
July 2017	003.006.011	Obsolete
December 2016	003.005.003	Obsolete



## Firmware Update Policy

Firmware update is recommended to benefit from the latest features and potential bug fixes. Do not update the firmware to the latest version, if the latest features are not required for your application and no bug fixes are provided.

Use this release note to confirm if an update to the latest version of the firmware is relevant for your application.

For more information on the firmware update policy and the firmware compatibility between devices, refer to *MicroLogic Trip and Control Units - Firmware History – DOCA0155EN*.

## Firmware Update with EcoStruxure Power Commission Software

Use the latest version of EcoStruxure Power Commission (EPC) software to update the device with the latest firmware version available.

[Click here](#) for the latest version of EPC software.

For more information on the use of EPC software, refer to *EcoStruxure Power Commission Online Help*.

# Firmware Versions

## Firmware Version 005.001.000

### Security Updates

Enhanced the following Cybersecurity features:

- Enabled the HTTPS mode for the web interface.
- Enabled the FTPS mode for file import.
- Added the Syslog logging service feature.
- Revised the user management configuration rules according to the Role Base Access Control (RBAC) strategy. Added RBAC for MasterPacT MTZ and ComPacT NSX with MicroLogic 5, 6, and 7 trip units.
- Enabled automatic export of datalog file.
- Enabled compatibility with EcoStruxure Cybersecurity Admin Expert (CAE) software.
  - Added Device Specific Settings (DSS) feature that enables the IFE/EIFE interface configurations to be tailored for each individual device.
  - Added signature verification feature to validate the security configuration files received from CAE software.
- Added the Machine-to-Machine (M2M) communication for Modbus communication.
- Strengthened the policies of password security.

### New Features

- Enhanced firmware upgrade feature.
- Improved design for the webpage interface.
- Added the IEC 61850 communication protocol, which is compatible with CET850 configuration software.
- Added the Rapid Spanning Tree Protocol (RSTP).
- Enhanced the Simple Network Time Protocol (SNTP) with the Network Time Protocol (NTP).
- Added BSCM Modbus SL/ULP module.

### Known Issues

The firmware version 005 does not support the following features as compared to the firmware version 003:

- Firmware version 005 supports less devices as compared to the firmware version 003. For more information, refer to the list of supported devices with the firmware version 005 and the firmware version 003 in the DOCA0084, Enerlin'X IFE – Ethernet Switchboard Server - User Guide, page 6, page 176.
- Display of the IO module input/output configuration.
- Adding remote devices.
- Trending graphs.
- Data logging for serial devices.

## Firmware Version 003.016.000

### New Features

Freshness timeout for ULP communication is configurable.

## Firmware Version 003.015.000

### New Features

Enhanced firmware upgrade feature for ComPacT NSX and PowerPacT H-, J-, and L-frame circuit breakers.

## Firmware Version 003.014.000

### Security Updates

Included the patch for IPv6 vulnerabilities.

## Firmware Version 003.013.003

### New Features

Added ComPacT NSX and PowerPacT H-, J-, and L- frame circuit breakers. These new ranges are the evolution of existing ComPact NSX and PowerPact H-, J-, and L-frame range of circuit breakers.

### Bugs Fixed

New administrators were able to perform the control operations without the acceptance of the disclaimer message.

## Firmware Version 003.012.002

### New Features

Added MicroLogic Xi control units. A MicroLogic Xi is a control unit without Bluetooth Low Energy (BLE) communication.

### Bugs Fixed

Time synchronization of IFM interface with IFE server did not happen when the IFE server was in Daylight Saving mode.

---

## Firmware Version 003.011.003

### New Features

- Added the events for internal Current Power Supply (CPS) sensors, available with the MicroLogic X control unit for firmware version 004.105.000 or higher.

### Bugs Fixed

- Treck TCP/IP Vulnerabilities (Ripple20)  
For more information, refer to [SEVD-2020-175-01](#) *Schneider Electric Security Notification*.

## Firmware Version 003.010.005

### New Features

- Added access through Modbus registers to the following data for MasterPacT MTZ circuit breakers:
  - IDMTL protection trip
  - Over/Under frequency trip
  - Directional overcurrent trip
  - Discrepancy between display and MicroLogic

### Bugs Fixed

- Modbus TCP communication was lost due to serial driver issue.
- When IP Filtering was enabled as Read only, the Modbus function *Scattered read* was blocked.

## Firmware Version 003.009.010

### New Features

- Added the following maintenance features, available with a MicroLogic X control unit with firmware version 003.011.000 or higher:
  - New events for contact wear ratio
  - New events for type of preventive maintenance to be performed
- Added access through Modbus registers to the following data for MasterPacT MTZ circuit breakers:
  - Average peak current demand
  - Minimum and maximum values of real-time measurements
  - Energy per phase values
  - Main settings of the active setting group of current protection functions

**NOTE:** The configuration of the connection to EcoStruxure Facility Expert is not available now. You can use Enerlin'X COM'X energy servers to configure the connection to EcoStruxure Facility Expert.

## Bugs Fixed

- IFE server lost its clock master status when SNTP server did not answer.
- IFE server restarted when discovery packet from Satchwell Sigma BMS platform was received.

## Firmware Version 003.007.024

### New Features

Added the following features, available with a MicroLogic X control unit with firmware version 002.000.003 or higher:

- Monitoring of current and power demand values
- Reset of peak demand values
- New events for notification by email:
  - Presence of 24 Vdc power supply
  - Ground-fault alarm/ Earth-leakage alarm (available when Ground-fault Digital Module is installed on MicroLogic X control unit)
- Update of standard dataset with current and power demand values
- Availability of legacy dataset when Modbus Legacy Dataset Digital Module is installed on the MicroLogic X control unit
- Availability of individual harmonics and currents up to rank 40 when Individual Harmonics Analysis Digital Module is installed on the MicroLogic X control unit
- Introduction of new mechanism for activating Digital Modules across Enerlin'X devices
- Modification to management of multiple requests through command interface: reception of new command aborts previous command still in progress.

Added ComPacT NSX circuit breaker with MicroLogic 7 trip unit as discoverable device that can be connected to ULP port of IFE server.

Added Vigirex RHU and Vigirex RMH relays as discoverable devices that can be connected as Modbus slaves on an IFM interface stacked to the IFE server.

## Bugs Fixed

- LV434002: ULP LED was blinking green instead of yellow when IFE server was in Boot mode.

---

## Firmware Version 003.006.011

### New Features

- Added access through Modbus registers to the trip cause data for MasterPacT MTZ circuit breakers
- Added support of alpha-numeric passwords for IFE webpages
- LV434002: Added support for the internal battery that maintains the date and time settings of the real-time clock (RTC) during a power loss
- Added compatibility with ULP cables up to 20 m (65 ft) in length
- Added alarm support for the MicroLogic P and H advanced protection settings, allowing an alarm email to be sent
- Added discovery from IFE webpages of devices equipped with non-communicating trip units, through BCM or BSCM module (For example, NSX non-communicating MicroLogic with BSCM module), for device status display only
- Added compatibility with new MicroLogic 7 trip units for ComPacT NSX circuit breakers
- Added Integration of Acti9 Smartlink SI D as a remote device
- Updated Modbus end-of-line termination default value in webpage for easier default configuration

**NOTE:** The Schneider Electric automatic email profile is not available now. You have to use your own SMTP server.

### Bugs Fixed

- FTP server could not be enabled in Italian language
- BCM firmware update was not performed when IFE device closed connection in DHCP mode.

## Firmware Version 003.005.003

### New Features

- Added the MasterPacT MTZ circuit breakers as discoverable devices.
- Added the integration of secure email.

### Bugs Fixed

- IFE time and date were not well synchronized with the SNTP server.
- Refresh of data on IFE device stopped after a few hours of use.
- IP filtering was disabled after a firmware update of IFE devices.
- IFE device and IO module ULP communication did not share the correct cradle status when powered up with a device in disconnected position.



Schneider Electric  
35 rue Joseph Monier  
92500 Rueil Malmaison  
France

+ 33 (0) 1 41 29 70 00

[www.se.com](http://www.se.com)

As standards, specifications, and design change from time to time,  
please ask for confirmation of the information given in this publication.

© 2024 Schneider Electric. All rights reserved.

DOCA0148EN-05