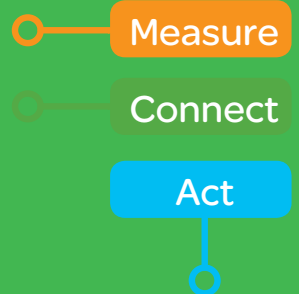




Configuration and Commissioning Guide for Connected Devices and Software

Guide for for New Commercial and
Industrial Buildings for North America

0100DB1902
2019



se.com/facilityexpert

Life Is On

Schneider
Electric

Hazard Categories and Special Symbols

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service or maintain it.

The following special messages may appear throughout this bulletin or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of either symbol to a "Danger" or "Warning" safety label indicates that an electrical hazard exists, which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

DANGER indicates a hazardous situation which, if not avoided, **will result in death or serious injury**. Failure to follow these instructions will result in death, serious injury, equipment damage, or permanent loss of data.

WARNING

WARNING indicates a hazardous situation which, if not avoided, **can result in death or serious injury**. Failure to follow these instructions can result in death, serious injury, equipment damage, or permanent loss of data.

CAUTION

CAUTION indicates a hazardous situation which, if not avoided, **can result in minor or moderate injury**. Failure to follow these instructions can result in injury or equipment damage.

NOTICE

NOTICE is used to address practices not related to physical injury. The safety alert symbol shall not be used with this signal word.

Please note

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction, operation and installation of electrical equipment, and has received safety training to recognize and avoid the hazards involved.

Before you begin

Electrical monitoring and control equipment and related software are used in a variety of the buildings. The type or model of electrical monitoring and control equipment suitable for each application will vary depending on factors such as the system dependability level, unusual conditions and government regulations etc.

Only the user can be aware of all the conditions and factors present during setup, operation and maintenance of the solution. Therefore, only the user can determine the electrical monitoring and control equipment and the related safeties and interlocks which can be properly used. When selecting electrical monitoring and control equipment and related software for a particular application, the user should refer to the applicable local and national standards and regulations. The National Safety Council's Accident Prevention Manual also provides much useful information.

Ensure that appropriate safeties and mechanical/electrical interlocks protection have been installed and are operational before placing the equipment into service. All mechanical/electrical interlocks and safeties protection must be coordinated with the related equipment and software programming.

Safety Messages

Start up and test

Before using electrical control and automation equipment for regular operation after installation, the system should be given a start-up test by qualified personnel to verify correct operation of the equipment. It is important that arrangements for such a check be made and that enough time is allowed to perform complete and satisfactory testing.

Follow all start-up tests recommended in the equipment documentation. Store all equipment documentation for future references.

Software testing must be done in both simulated and real environments.

Verify that the completed system is free from all short circuits and grounds, except those grounds installed according to local regulations (according to the National Electrical Code in the U.S.A., for instance). If high-potential voltage testing is necessary, follow recommendations in equipment documentation to prevent accidental equipment damage.

Before energizing equipment:

- Remove tools, meters, and debris from equipment.
- Close the equipment enclosure door.
- Perform all start-up tests recommended by the manufacturer.

Operation and adjustments

The following precautions are from the NEMA Standards Publication ICS 7.1-195 (English version prevails):

- Regardless of the care exercised in the design and manufacture of equipment or in the selection and ratings of components, there are hazards that can be encountered if such equipment is improperly operated.
- It is sometimes possible to misadjust the equipment and thus produce unsatisfactory or unsafe operation. Always use the manufacturer's instructions as a guide for functional adjustments. Personnel who have access to these adjustments should be familiar with the equipment manufacturer's instructions and the machinery used with the electrical equipment.
- Only those operational adjustments actually required by the operator should be accessible to the operator. Access to other controls should be restricted to prevent unauthorized changes in operating characteristics.

Safety precautions

The following safety messages apply to installation, configuration and operation of SmartStruxure Building Operation, Power Monitoring Expert, Facility Expert, and Power Manager software connected to Smart Panels.

▲ DANGER

HAZARD OF ELECTRIC SHOCK, BURN OR EXPLOSION

- Only qualified personnel familiar with low and medium voltage equipment are to perform work described in this set of instructions. Workers should understand the hazards involved in working with or near low and medium voltage circuits.
- Perform such work only after reading and understanding all of the instructions contained in this bulletin.
- Turn off all power before working on or inside equipment.
- Use a properly rated voltage sensing device to confirm that the power is off.
- Before performing visual inspections, tests, or maintenance on the equipment, disconnect all sources of electric power. Assume that all circuits are live until they have been completely de-energized, tested, grounded, and tagged. Pay particular attention to the design of the power system. Consider all sources of power, including the possibility of back feeding.
- Handle this equipment carefully and install, operate, and maintain it correctly in order for it to function properly. Neglecting fundamental installation and maintenance requirements may lead to personal injury, as well as damage to electrical equipment or other property.
- Beware of potential hazards, wear personal protective equipment and take adequate safety precautions.
- Do not make any modifications to the equipment or operate the system with the interlocks removed. Contact your local field sales representative for additional instruction if the equipment does not function as described in this manual.
- Carefully inspect your work area and remove any tools and objects left inside the equipment.
- Replace all devices, doors and covers before turning on power to this equipment.
- All instructions in this manual are written with the assumption that the customer has taken these measures before performing maintenance or testing.

Failure to follow these instructions will result in death or serious injury.

⚠ WARNING

UNINTENDED EQUIPMENT OPERATION

- Do not use the software to control time-critical functions because communication delays can occur between the time a control is initiated and when that action is applied.
- Do not use the software to control remote equipment without securing it with an authorized access level, and without including a status object to provide feedback about the status of the control operation.

Failure to follow these instructions can result in death or serious injury.

⚠ WARNING

INACCURATE DATA RESULTS

- Do not incorrectly configure the software, as this can lead to inaccurate reports and/or data results.
- Do not base your maintenance or service actions solely on messages and information displayed by the software.
- Do not rely solely on software messages and reports to determine if the system is functioning correctly or meeting all applicable standards and requirements.
- Consider the implications of unanticipated transmission delays or failures of communications links.

Failure to follow these instructions can result in death, serious injury, equipment damage, or permanent loss of data.

NOTICE

LOSS OF DATA

- Be sure to activate product and component licenses prior to the expiry of the trial license.
- Ensure that you activate sufficient licenses for the servers and devices in your system.
- Backup or archive any SQL Server database data before adjusting any database memory options.
- Only personnel with advanced knowledge of SQL Server databases should make database parameter changes.

Failure to follow these instructions can result in loss of data.

NOTICE

UNAUTHORIZED OR UNINTENDED ACCESS TO CUSTOMER DATA

- Personnel setting up third-party authentication of the software must be aware that links to data are not secure.
- Do not setup access links to sensitive or secure data.

Failure to follow these instructions can result in unauthorized or unintended access to sensitive or secure customer data.

NOTICE

NETWORK INOPERABILITY

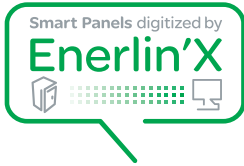
Do not make unauthorized changes in the network configuration.

Failure to follow these instructions can result in an unstable or unusable network.

Introduction

Asset and Energy management have never been simpler

Smart Panels connect you to energy savings in three steps.



0 Digitize

- > Easily collaborate and share switchboard documents
- > Attach preventative maintenance plans

1 Measure

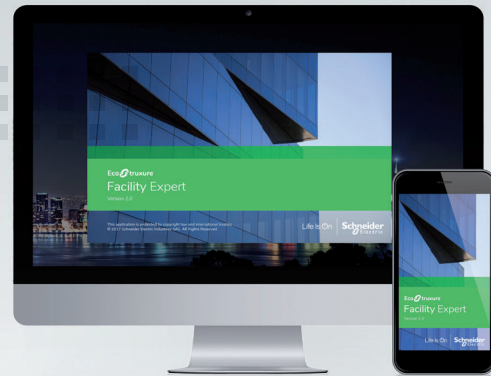
- Embedded and stand-alone metering and control capabilities
- > Embedded and stand-alone metering
- > Control capabilities

2 Connect

- > Integrated communication interfaces
- > Ready to connect to EcoStruxure™ Facility Expert

3 Act

- > Data-driven energy efficiency actions
- > Real time monitoring and control
- > Access to energy and asset management through on-line services



- Tested, Validated, Documented Smart Panels architecture
- Smart Panels have been certified via Schneider Electric's "guide" quality process
- Tested in performance labs by experts, in the most common configuration
- Validated full functional compatibility of devices
- Documented, with user guide, predefined CAD panel designs and wiring diagrams

Smart Panels overview

Smart Panels are key components of energy management in buildings.

You can only manage what you measure and see. Schneider Electric Smart Panels form the basis of a simple solution for understanding how a building functions in terms of energy consumption and technical performance.

Smart Panels are the first step in creating an energy management strategy. Combined with Schneider Electric Energy Management Services, they form a complete solution for real energy savings.

Smart Panels are based on the Ethernet network. Ethernet is widely used in domestic and industrial applications, allowing easy, transparent access to electrical devices from any location.

















Purpose

The purpose of this guide is to provide methodology on how to configure Smart Panels - electrical distribution switchboards featuring full digital connectivity. This is achieved through one main reference switchboard architecture which has been fully tested, validated, and documented in Schneider Electric laboratories.

EcoStruxure™ Facility Expert Smart Power License

To purchase a license for EcoStruxure Facility Expert, please contact your local Schneider Electric representative.

EcoStruxure Facility Expert Smart Power license combines the operations and energy features detailed below.

EcoStruxure Facility Expert – Operations 	EcoStruxure Facility Expert – Energy 
 Data trends on assets	 Energy consumption monitoring
 Smart alerts with actionable data	 Overconsumption alerts & easy identification of overload contributors
 Equipment status	 Monthly scorecards and KPIs
 Maintenance status and localization at a glance*	 Manual readings collection and storage
 Collaboration features*	 Energy consumption benchmark by aggregated or multisite comparison view
 Edition and automatic storage of intervention reports*	 Costs allocation for budget optimization
 Asset details available from the field*	
 Actionable task manager with long term maintenance schedules & reminders*	

* This feature is available without subscription

Prerequisites

To better understand and benefit from this guide, familiarity with LV electrical distribution components is required.

Scope of Smart Panels

The first release of this guide covers LV switchboards for non-critical, medium and small buildings:

- School
- Gymnasium
- Small Hotel
- Bank
- Office
- Hotel
- Supermarket
- Retail

Only new buildings are covered by this document. For revamping projects, verify the compatibility of existing devices with the new Enerlin'X system using the EcoStruxure Power Commission configuration tool, or with the help of your local Schneider Electric support.

Introduction

Smart Panels: power management has never been simpler

3 Act On the panel > On local network > On internet



I-Line Smart cell



Devices web pages

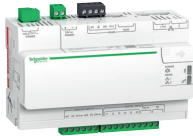


EcoStruxure™ Facility Expert



EcoStruxure Power Commission

2 Connect



Com'X



Acti9 Smartlink SI B



Acti9 Smartlink SI D



IFM



IFE / IFE Gateway

1 Measure



PowerPact™ H/J/L breaker



PowerTag NSX



Sepam™ 20



MasterPact™ NT



MasterPact NW



MasterPact MTZ



Energy meter



PowerTag



IO module



Power meter

Introduction

Then IP addresses of electrical devices are provided in DHCP mode by the Com'X (E2 Ethernet port) to Enerlin'X Acti9 Smartlinks and IFEs devices.

D0386016.eps

IFE-NS3	10.25.1.66
IFE-NS1	10.25.1.71
IFE-NT	10.25.1.68
IFE-NS2	10.25.1.65
IFE-SD	10.25.1.73
Incomer-MTZ	10.25.1.72
SLIP-SD	10.25.1.69
ComX510_F958E2	10.25.1.1
SmartLink SI	10.25.1.67

IP addressing table

Modbus communication network

The Enerlin'X devices ensure auto-adaptation of the Modbus communication parameters, except for the setting of the Modbus address. The table below shows the Modbus addresses used in this guide:

Device type	Name	Location	Modbus address
Smartlink SL	SLSL1	Market Switchboard	1
Smartlink SL	SLSL2	Market Switchboard	2
EM3150	EM_MS	Market Switchboard	3
Smartlink SL	SLSL1	Warehouse Switchboard	1
Smartlink SL	SLSL2	Warehouse Switchboard	2
EM3150	EM_WD	Warehouse Switchboard	3
PowerTag	PT1	Warehouse Switchboard	150
PowerTag	PT2	Warehouse Switchboard	151
PowerTag	PT3	Warehouse Switchboard	152
PowerTag	PT4	Warehouse Switchboard	153

Smartlink SL and PowerTag *Coming Soon!*

Smartlink SL and PowerTag devices will soon be available in North America.

I configure devices

1

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EcoStruxure™ Power Commission

1

1.1. Introduction

Smart Panels' system configuration and monitoring tools include the following:

- a. EcoStruxure Power Commission software for LV circuit breakers setting and monitoring (IFE - IO module - Acti9 communication system - electrical protection settings, etc.).
- b. Com'X device webpages setting and monitoring.

1.1.1. Prerequisites

The Smart Panels electrical switchboards and the Enerlin'X devices should be powered on. The following sections detail the addressing of Modbus serial line devices, the project creation with EcoStruxure Power Commission software and the device discovery. Then, the configuration of LV breaker digital system and Acti9 communication system is presented.

1.1. Device Modbus addressing

In this section, the basic hardware settings are retained for each type of communication device included in the Smart Panels. These single settings should be applied before the system is configured.

1.1.1. Acti9 Smartlink system

First step is the installation of the Acti9 system, then depending on Acti9 Smartlink type, the hardware settings of communication are detailed below.



Modbus version

Modbus slave addressing with rotary switch (Modbus address should be unique).

1.1.2. IFM

Modbus addresses:

Modbus addresses should be set with the two rotary switches (X1 and X10 symbols). The X10 symbol refers to the tens and the X1 symbol to the units.

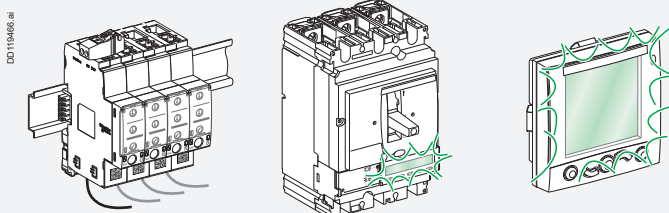
Example:

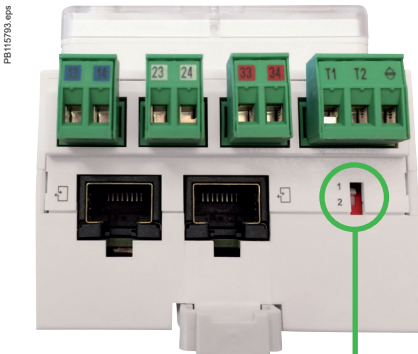
To set the Modbus address to 4, proceed as follows:

IFM rotary switch:

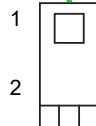
- c. Set the **X10** switch to 0.
- d. Set the **X1** switch to 4.
- e. Turn the padlock switch to the unlocked position.

Verify the connection between the Enerlin'X IFM and the circuit breaker: press the test button on the IFM and visually check that the associated MicroLogic trip unit flashes simultaneously (ON: 1000 ms/OFF: 1000 ms):

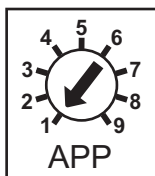
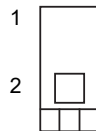




Dip switch in position 1 for IO module 1 (factory setting).



Dip switch in position 2 for IO module 2.



1.1.3. IO module application

The IO module provides predefined applications for circuit breaker management. It is an Input/Output interface for PowerPact and MasterPact circuit breakers. In this guide, one IO module is used for most of the main circuit breakers with cradle management (Connected – Disconnected – Test Positions).

IO Module Identification Setting

Two IO modules can be used for the same breaker connected to a ULP system (IO Module 1 or IO Module 2).

When 2 IO modules are connected in the same ULP network, the 2 IO modules are differentiated by the position of the dip switches located on the bottom of the IO module:

IO Module Predefined Application

The application rotary switch is used to select predefined applications. The switch has 9 positions with each position assigned to a predefined application. The factory set position is application 1.

The Predefined Applications are summarized in the table below:

Application rotary switch position	Predefined application	Description
1	Cradle management	Monitors the position of the circuit breaker in the cradle
2	Circuit breaker operation	Controls the opening and closing of the circuit breaker by using the control mode (local or remote) and the close inhibit order
3	Energy Reduction Maintenance Setting (ERMS)	For additional information on ERMS, refer to bulletin no. NHA67346
4	Light and load control	Controls the light and load application
5-8	Spare	Future evolution
9	Custom	Performs the user-defined applications with the IO module

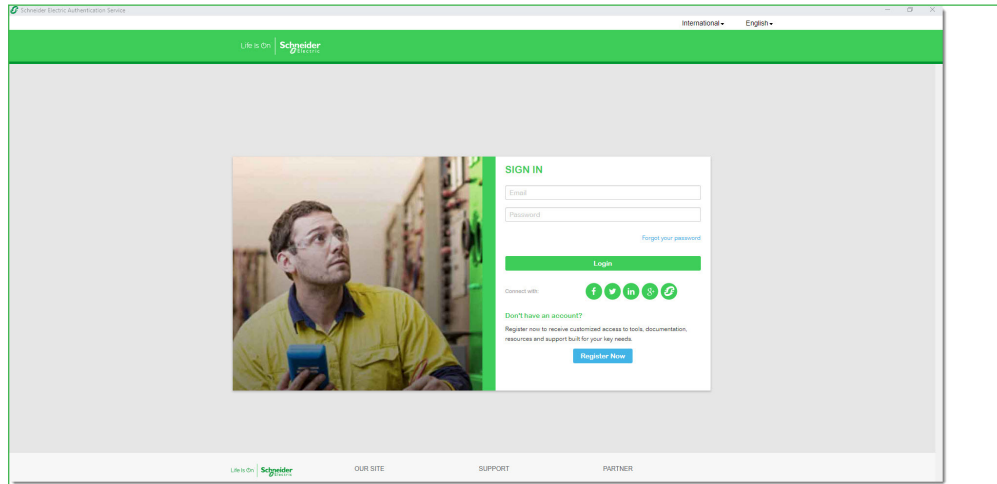
To validate the change of application, press the front face button "T" for 5 s or power cycle the module.

On IO module 2 application 9 should be selected.

1.1.4. EcoStruxure Power Commission introduction

EcoStruxure Power Commission software is the main system configuration tool for Smart Panels. EcoStruxure Power Commission assists different types of users throughout the life cycle of your electrical installation:

- f. Panel builders: for factory commissioning, EcoStruxure Power Commission provides communication reports and enables to check the correct cabling of the digital components.
- g. Installer: on site commissioning, electrical protection settings.
- h. Operator and maintenance team: monitoring, advanced diagnosis, system upgrade.



EcoStruxure Power Commission software

1.1.5. How to get EcoStruxure Power Commission software

To get EcoStruxure Power Commission configuration software, go to <https://www.schneider-electric.com/en/work/products/product-launch/ecostruxure-power-commission/> and look for EcoStruxure Power Commission in product search bar.

DD-03021 logo

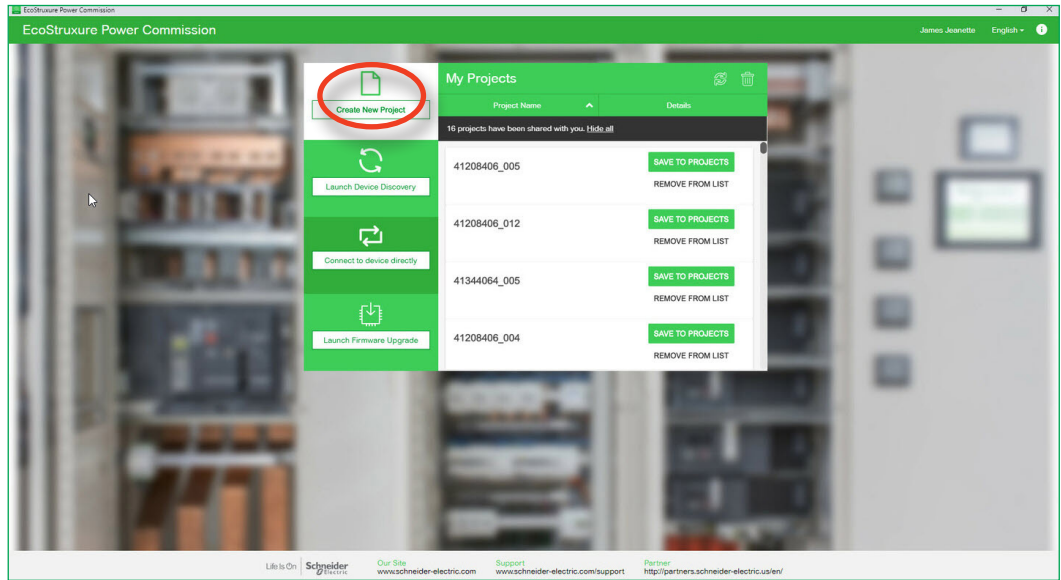


1.2. Project creation

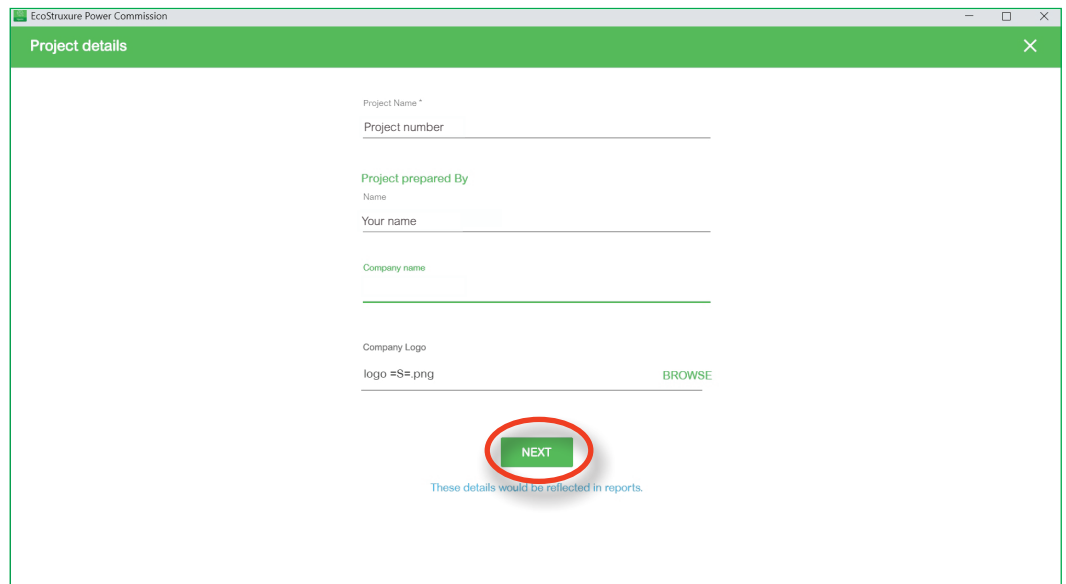
EcoStruxure Power Commission configuration software saves all electrical assets of the building with contextualization of loads. The software allows origination of assets and panels into projects or locations (IP addresses) for devices on a network.

The following section details the EcoStruxure Power Commission features (project creation after device discovery, check operation of circuit breaker, firmware upgrade maintenance operation).

How to create a project with EcoStruxure Power Commission



1. Click on "Create New Project."




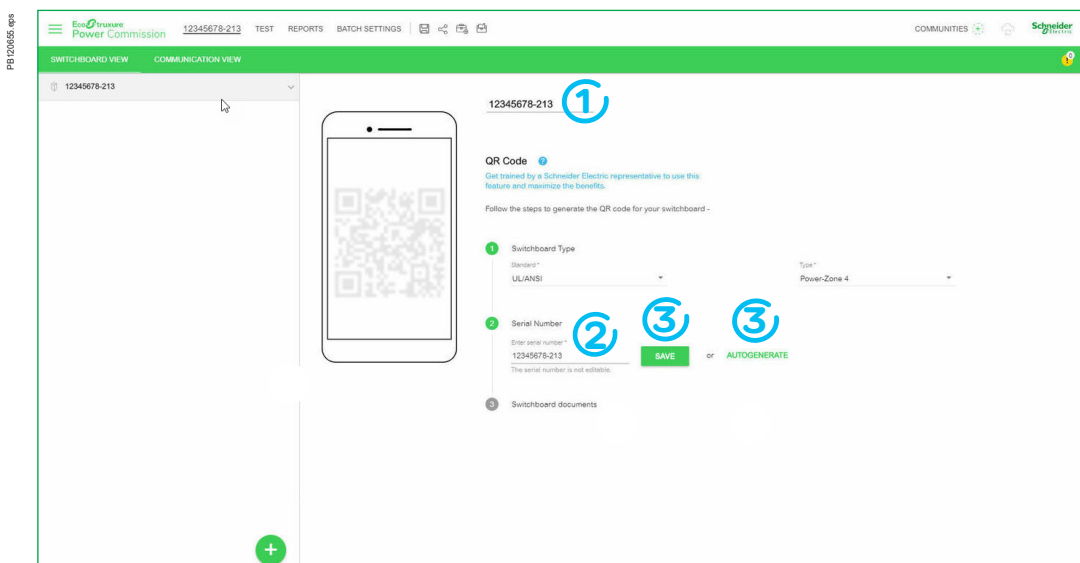
2. Enter all the information related to your project, then click on "NEXT."

EcoStruxure™ Power Commission

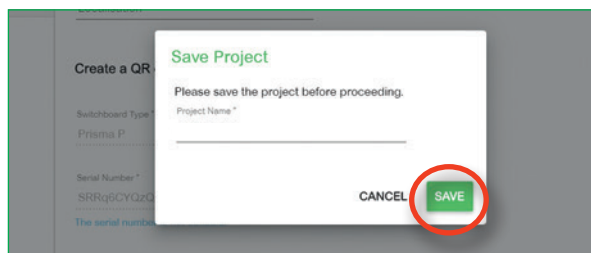
1

3. Enter all the information related about end user site details and select "CONTINUE."

4. Click on .
5. Click on "Switchboard."



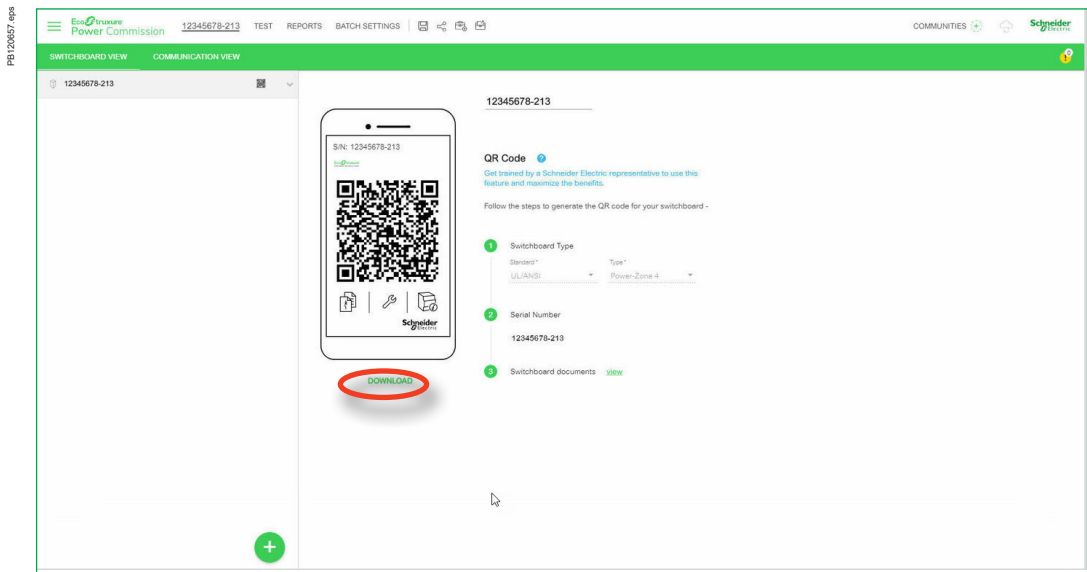
6. Enter all the information related about the location of your switchboard (1).
7. Then, you can create a QR code for your switchboard:
 - a. Enter your serial number (2).
 - b. Then, click on "SAVE" (3).
 - c. Or, click on "AUTOGENERATE" (3).



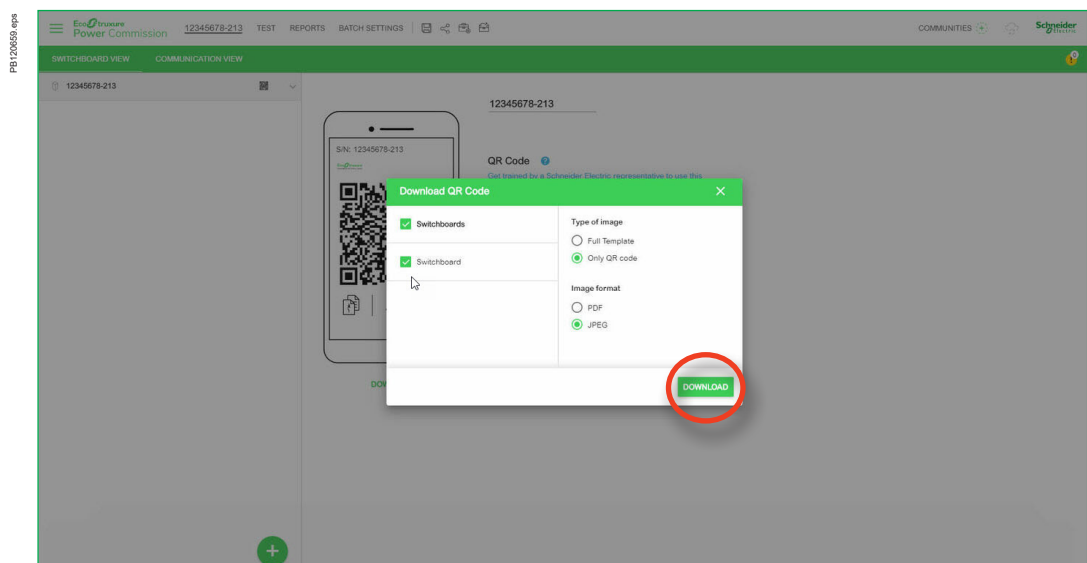
8. The QR code is now generated. Hit "SAVE". Hit "SAVE" to save your project.

EcoStruxure™ Power Commission

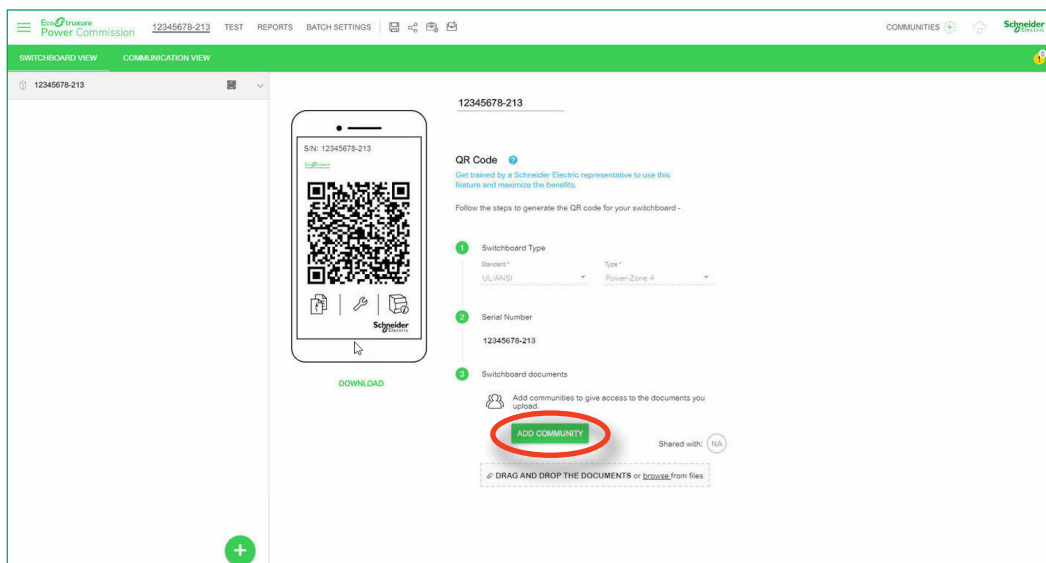
1



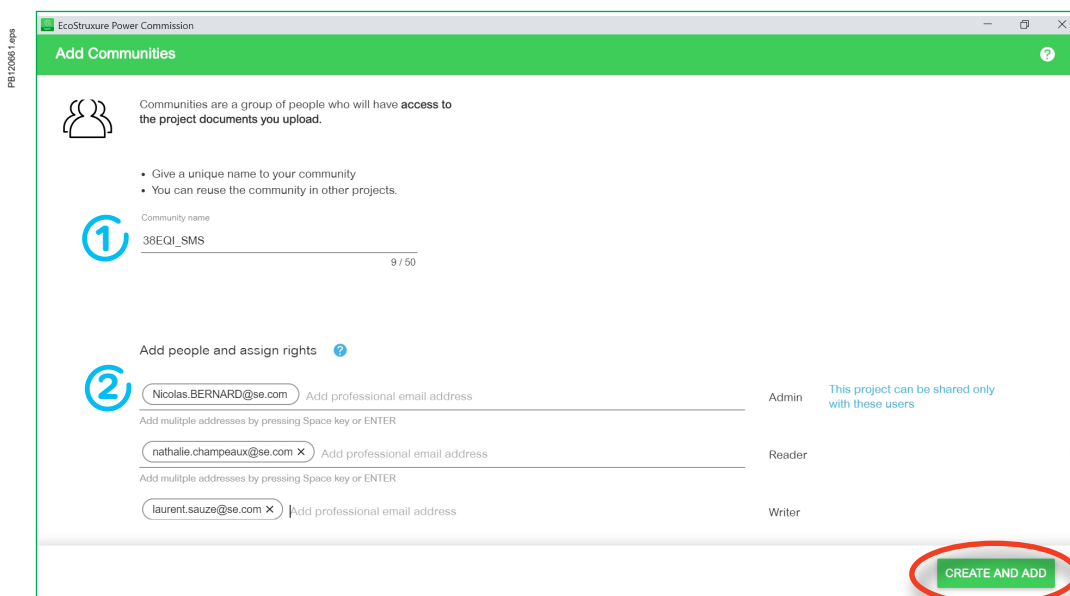
9. Click on "DOWNLOAD" to download the unique QR code linked to this panel.



10. Select type of image and image format, then click on "DOWNLOAD."
11. Check that the file is downloading.
12. Close window.



13. Then, click on "ADD COMMUNITY" to share your project.



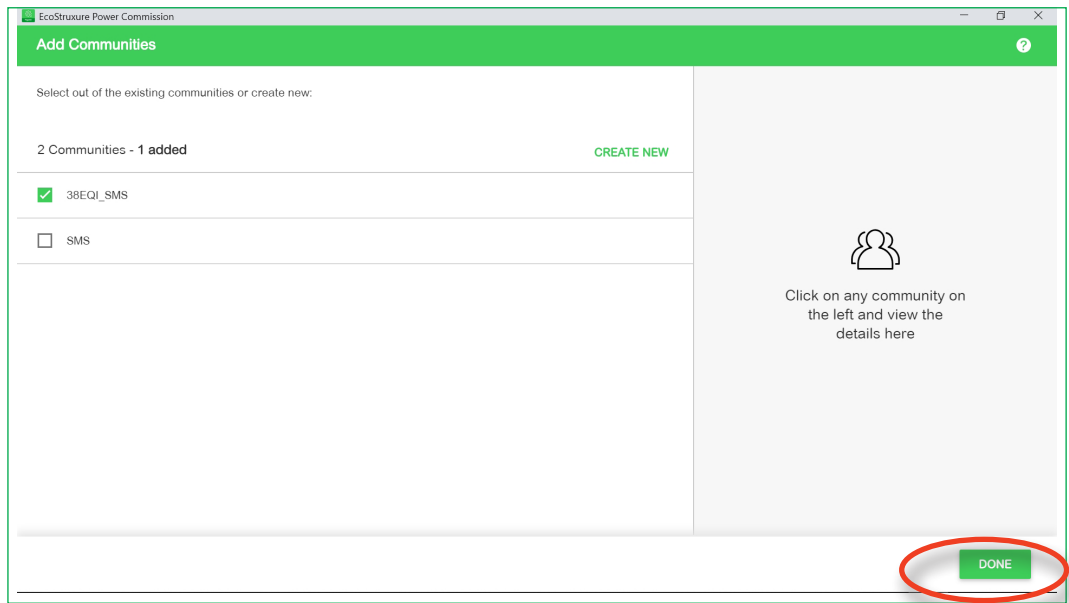
14. Enter the name of your community ①.

15. Add people and assign permissions (Admin, Reader, Writer) ②.

16. Then, click on "CREATE AND ADD."

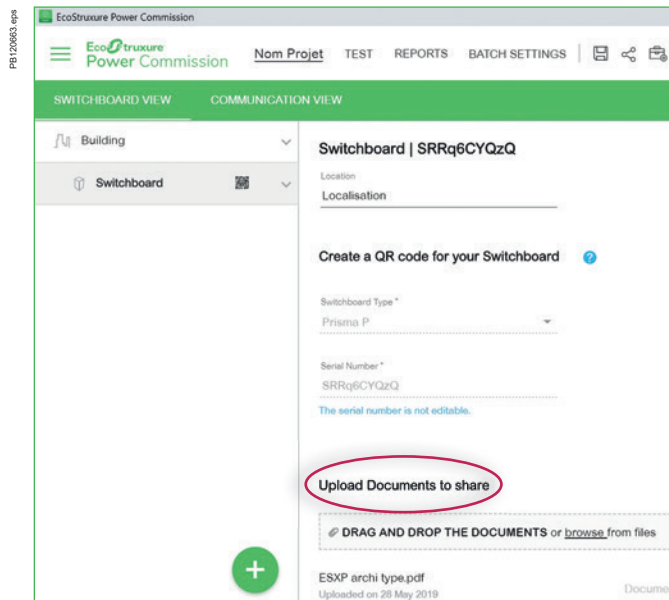
EcoStruxure™ Power Commission

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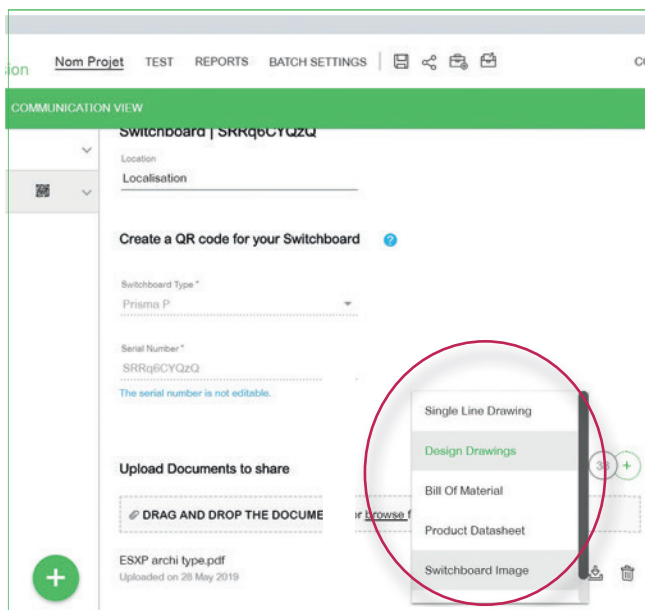


17. The new community is added.

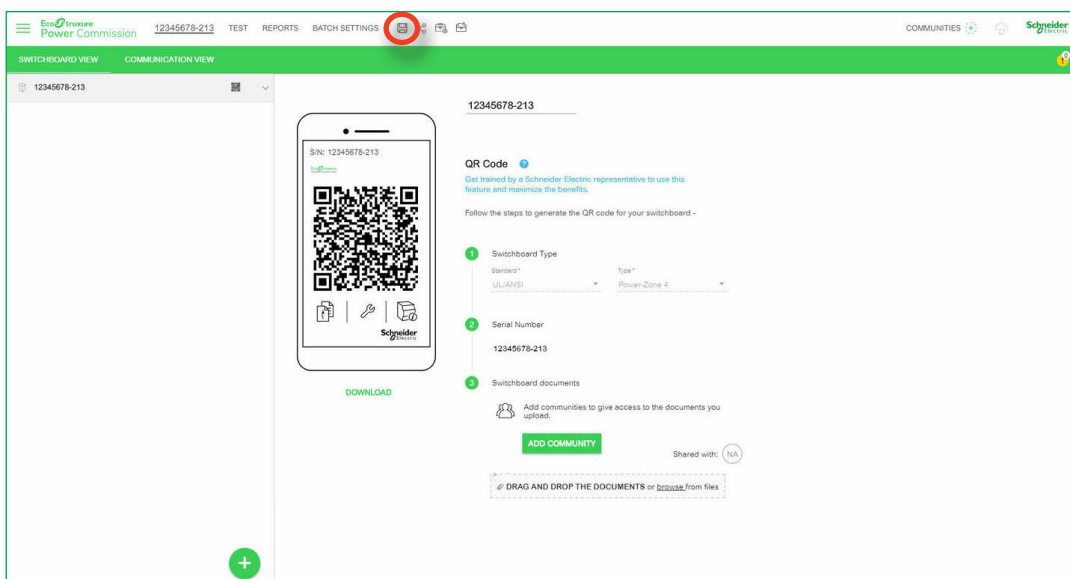
18. Then, click on "DONE."




19. Then, upload the documents to share.



20. You can define the type of document.



21. Click on  to save.

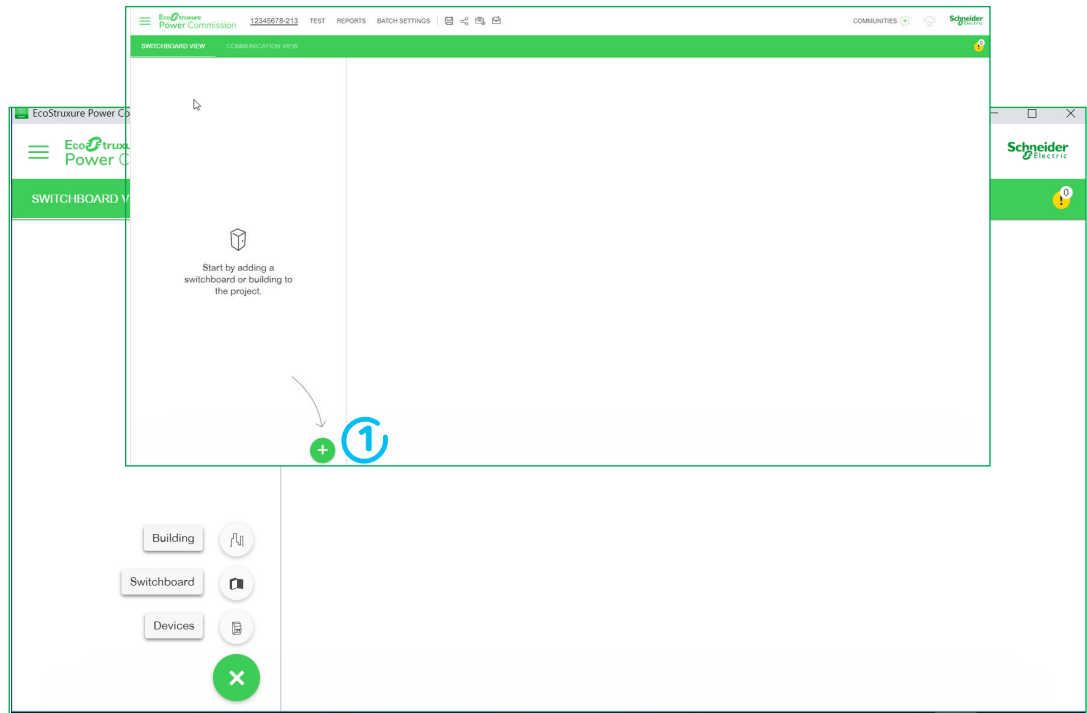
1.3. Device discovery

1.3.1. Advanced project creation

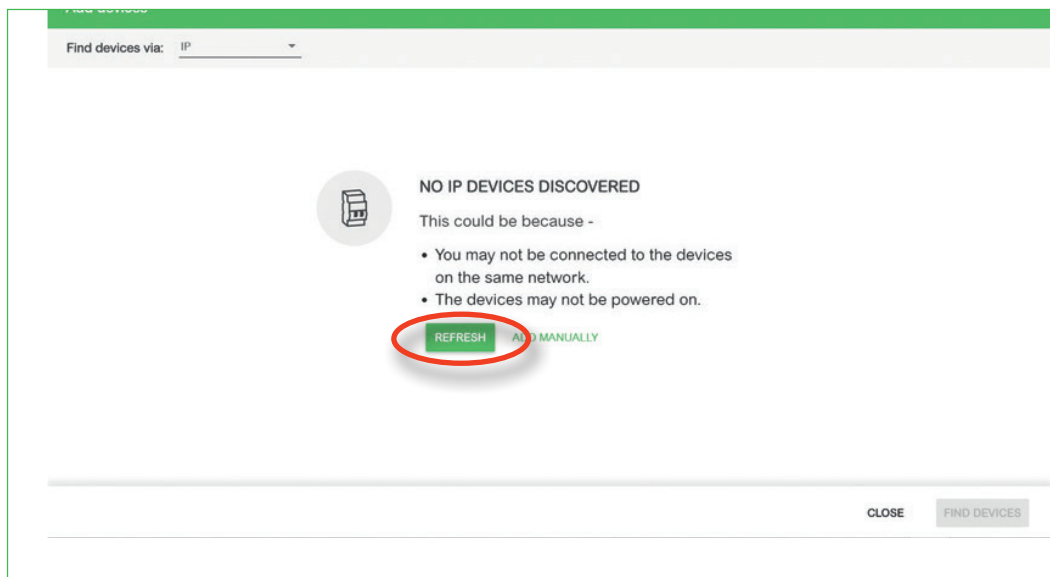
EcoStruxure Power Commission (EPC) software allows you to create a project by device discovery. Device discovery enables you to discover the devices in the network. It also provides an option to generate and save the report for the devices discovered in the network in PDF format. Connect your laptop to the local Ethernet network of the Smart Panels and click the Discovery button. NOTE: Alternatively, you can also discover devices from the home page of the EPC software by clicking on "Launch Device Discovery."

The software also allows you to uniquely identify your switchboard and share documentation linked to the switchboard with a community.

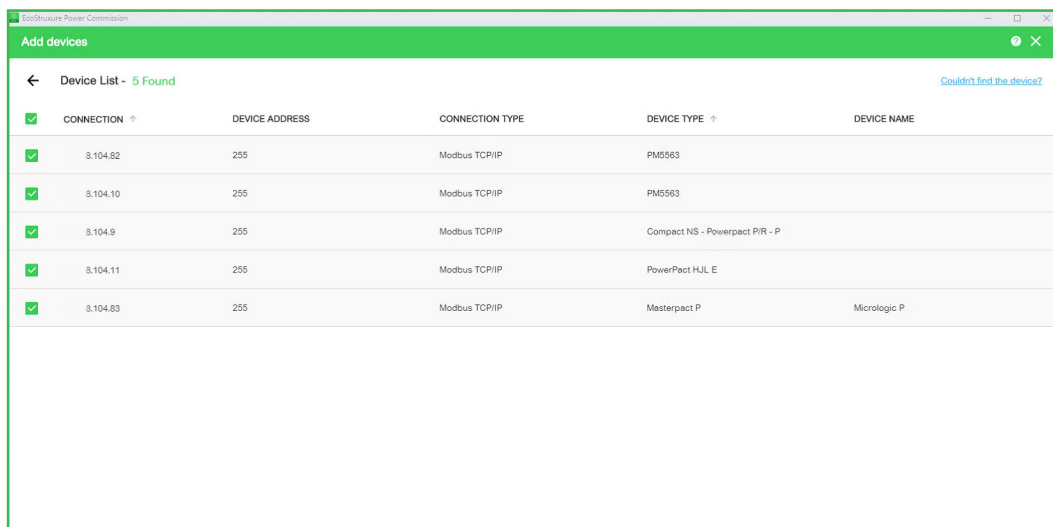
How to discover electrical devices directly connected to the Ethernet with EcoStruxure Power Commission



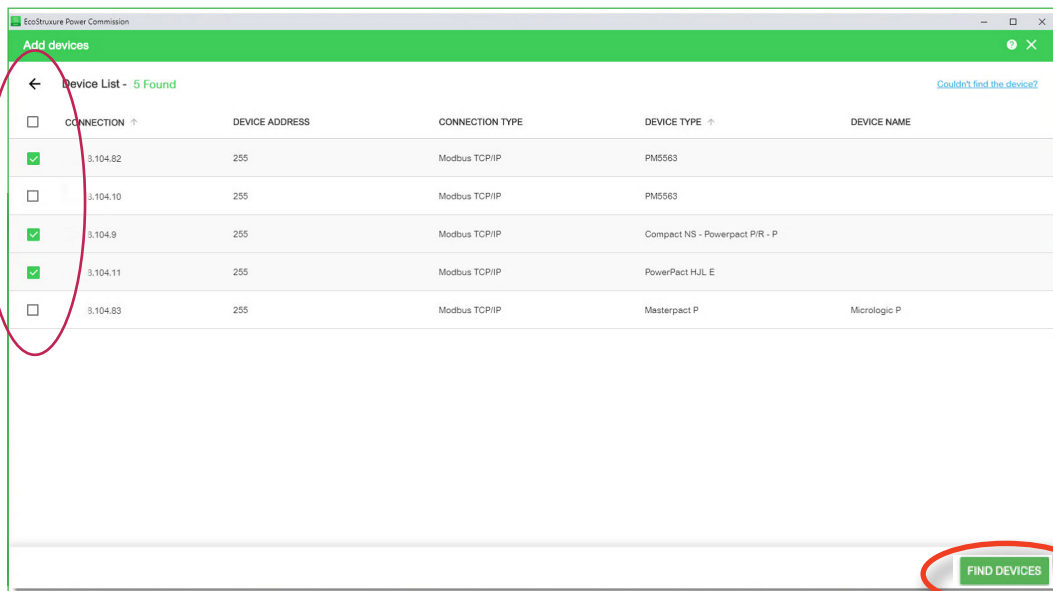
1. Click on **+**.
2. Click on "Devices." **2**



3. Click on "REFRESH."



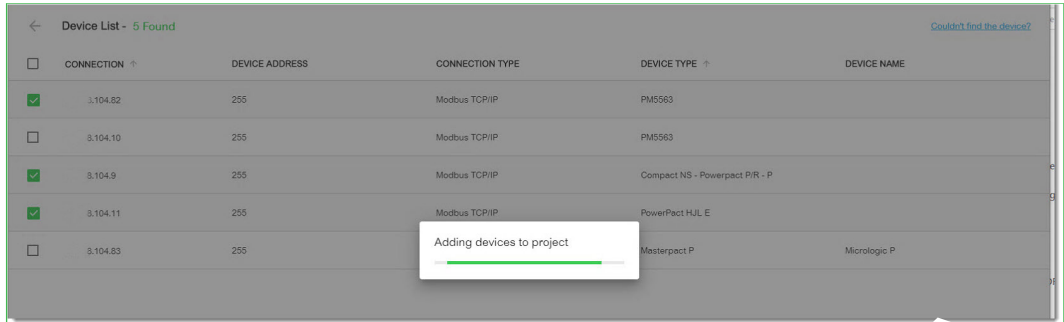
4. Auto discovery in progress.
5. By default, all devices are selected. Deselect all devices.



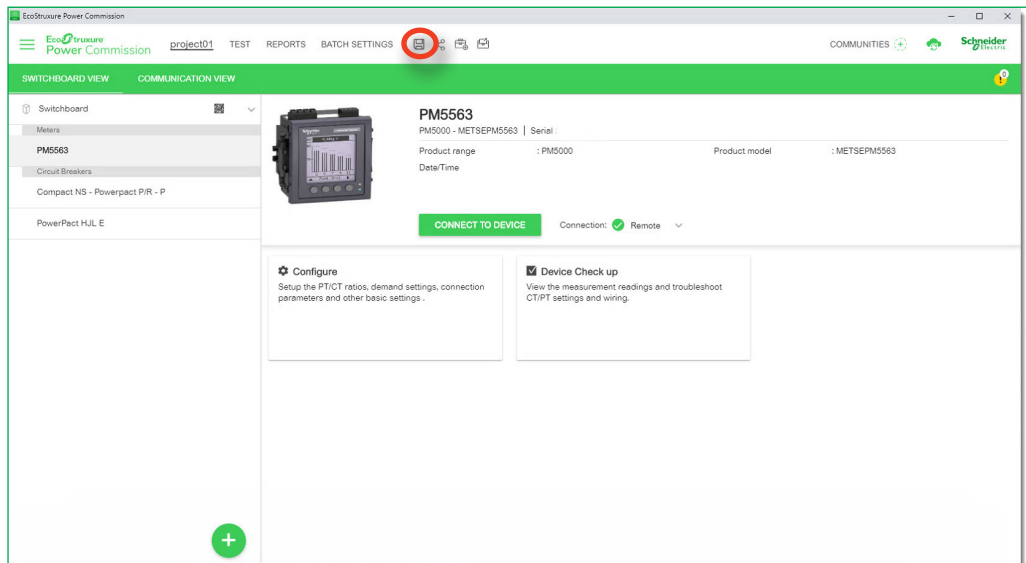
6. Select the devices of your choice.
7. Then, click on "FIND DEVICES."


EcoStruxure™ Power Commission

1

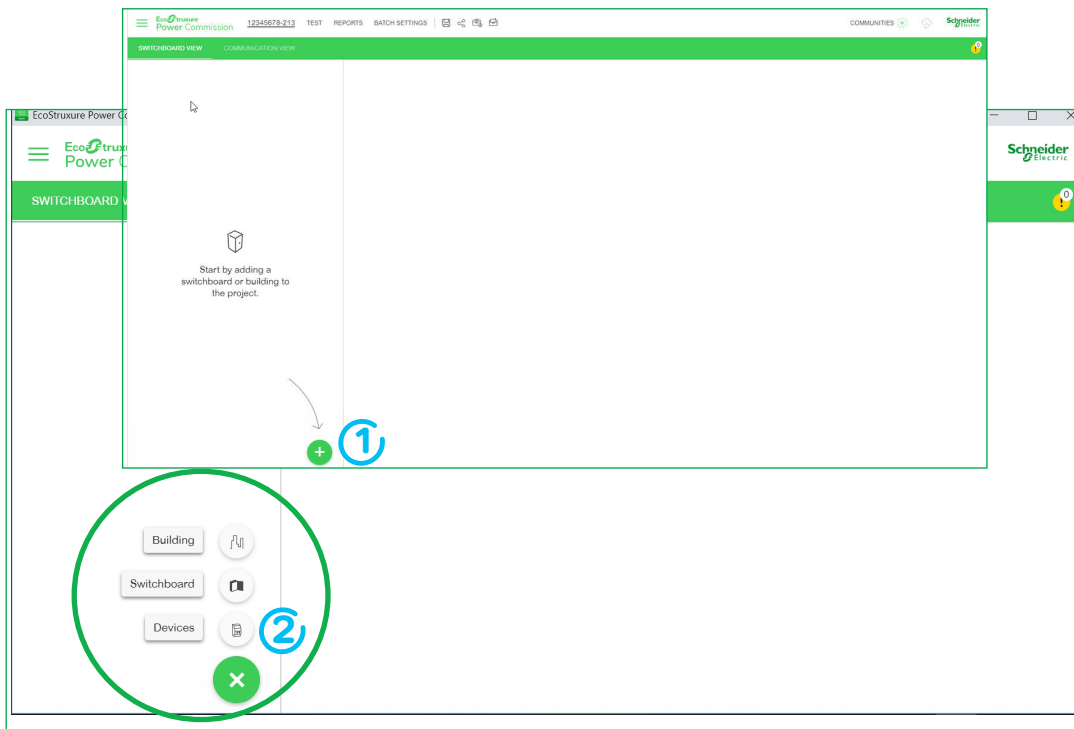


8. Auto discovery of devices selected.
9. Then, click on "ADD DEVICE."
10. Adding devices in progress.

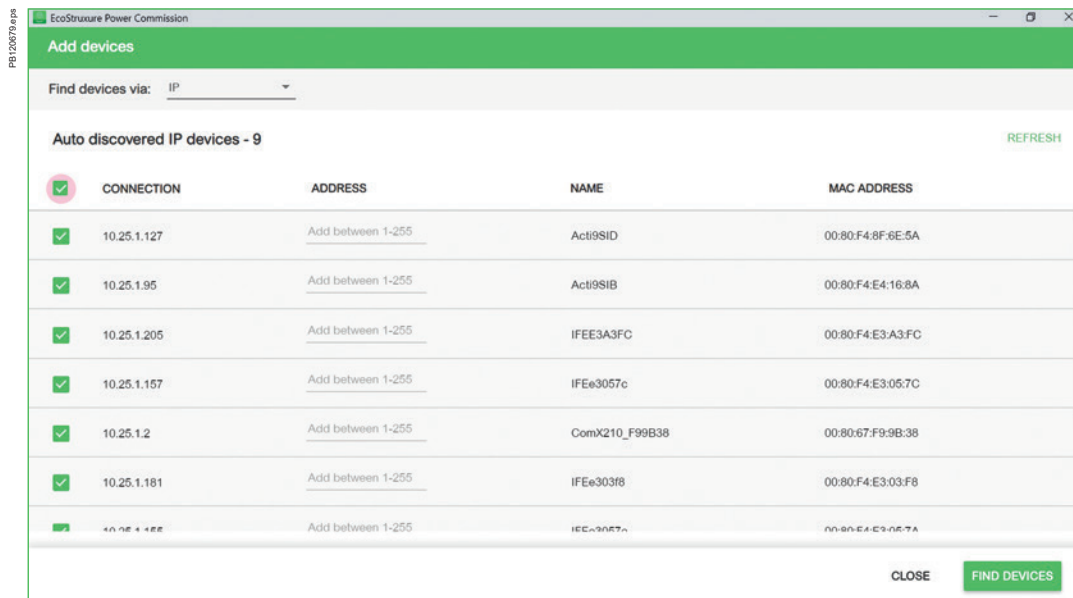


11. At the end of the process, this window appears.
12. Click on  to save the project.

How to discover electrical devices connected through Modbus gateways with EcoStruxure Power Commission



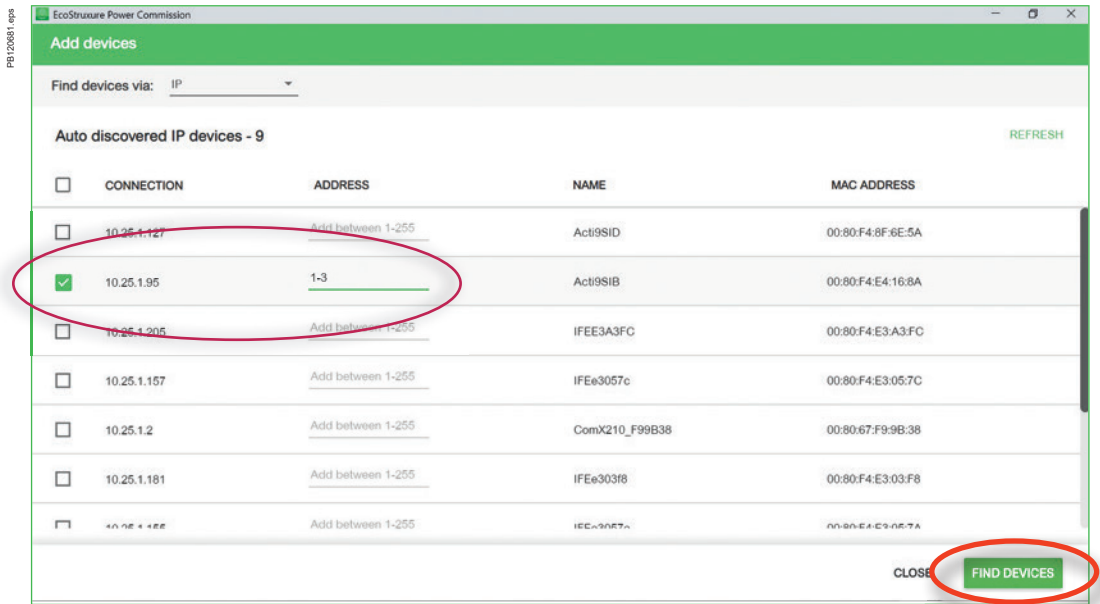
1. Click on **+**.
2. Click on "Devices."



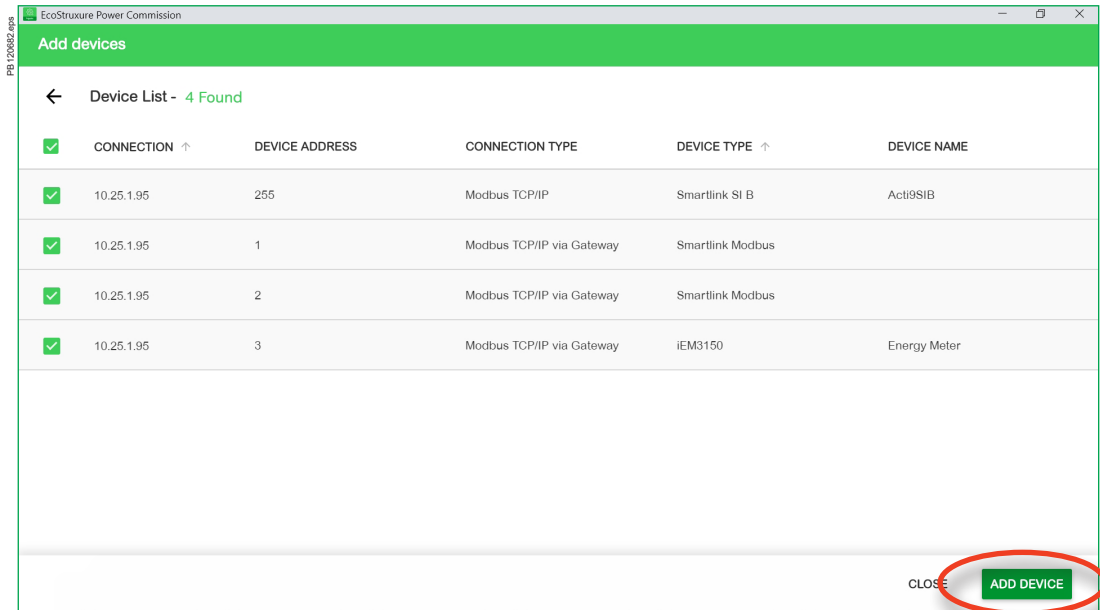
3. Auto discovery in progress.
4. By default, all devices are selected. Deselect all devices.

EcoStruxure™ Power Commission

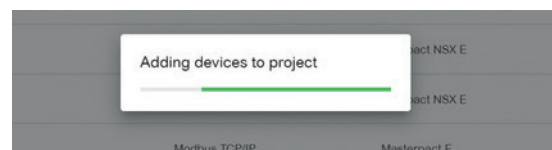
1

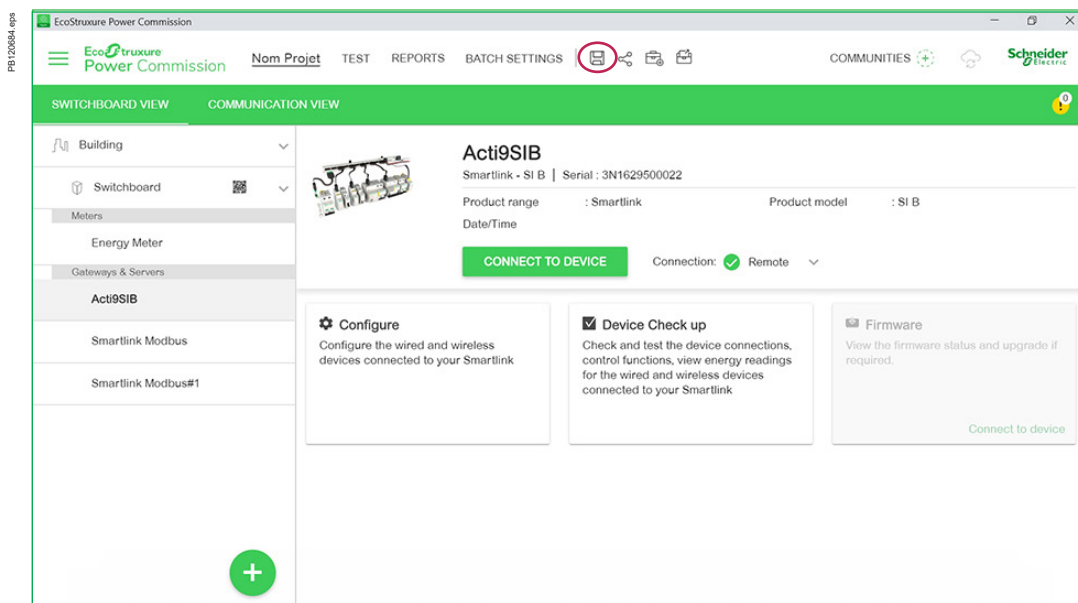


5. Select the device of your choice.
6. Add the Modbus address.
7. Then, click on "FIND DEVICES."




8. Auto discovery of devices selected.
9. Then, click on "ADD DEVICE."
10. Adding devices in progress.

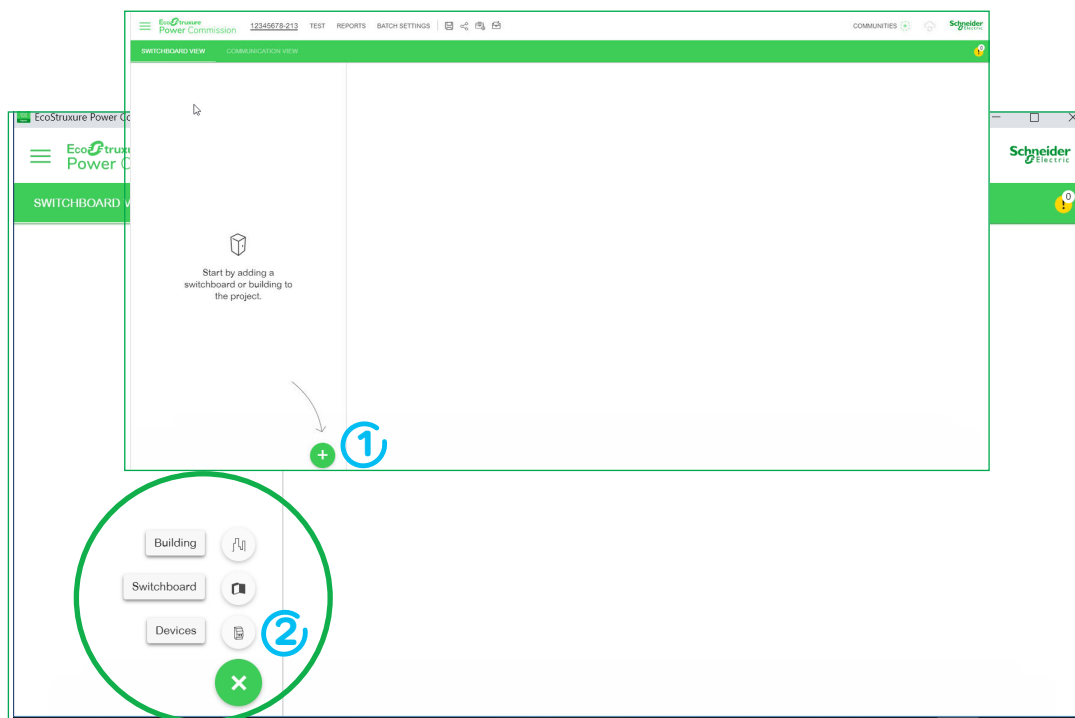





11. At the end of the process, this window appears.

12. Click on  to save the project.

How to discover PowerTag sensors with EcoStruxure Power Commission

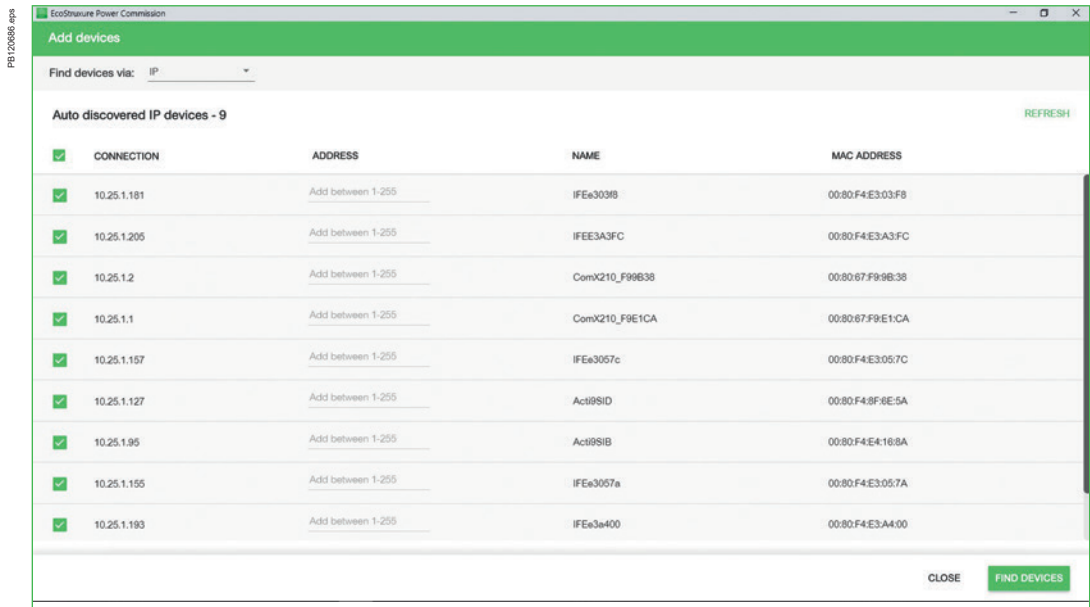


1. Click on .

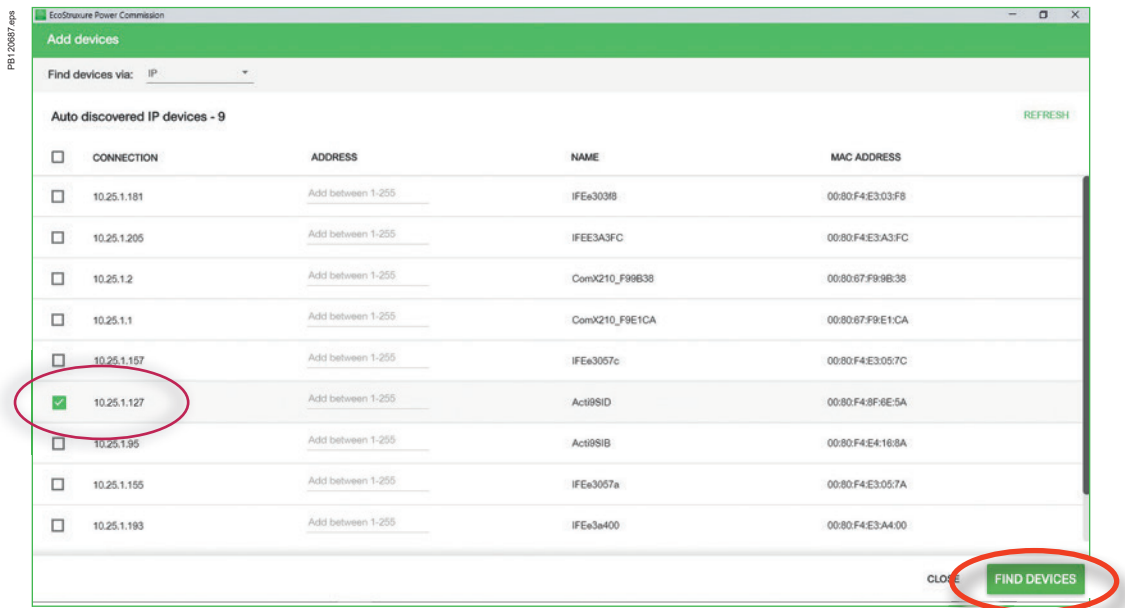
2. Click on "Devices."

EcoStruxure™ Power Commission

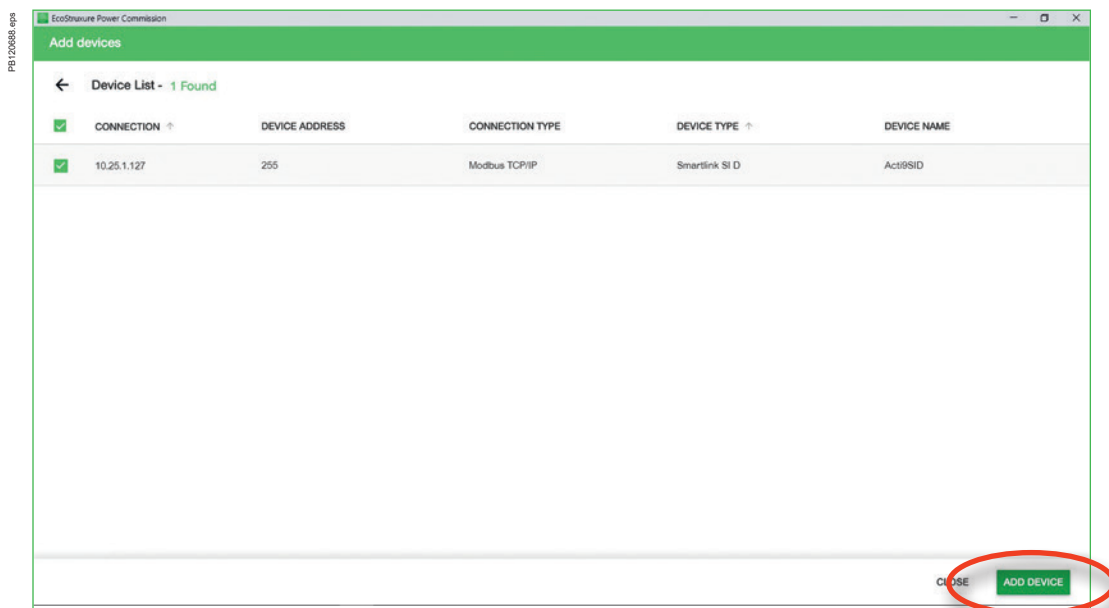
1



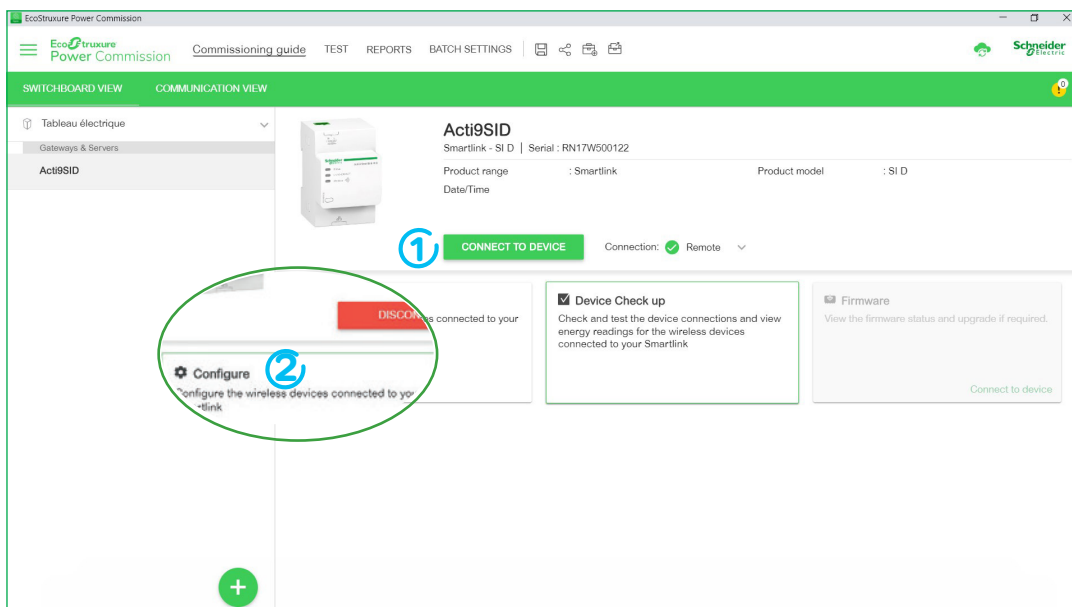
3. Auto discovery in progress.
4. By default, all devices are selected. Deselect all devices.



5. Select the Acti9SID device.
6. Then, click on "FIND DEVICES."



7. Then, click on "ADD DEVICE."

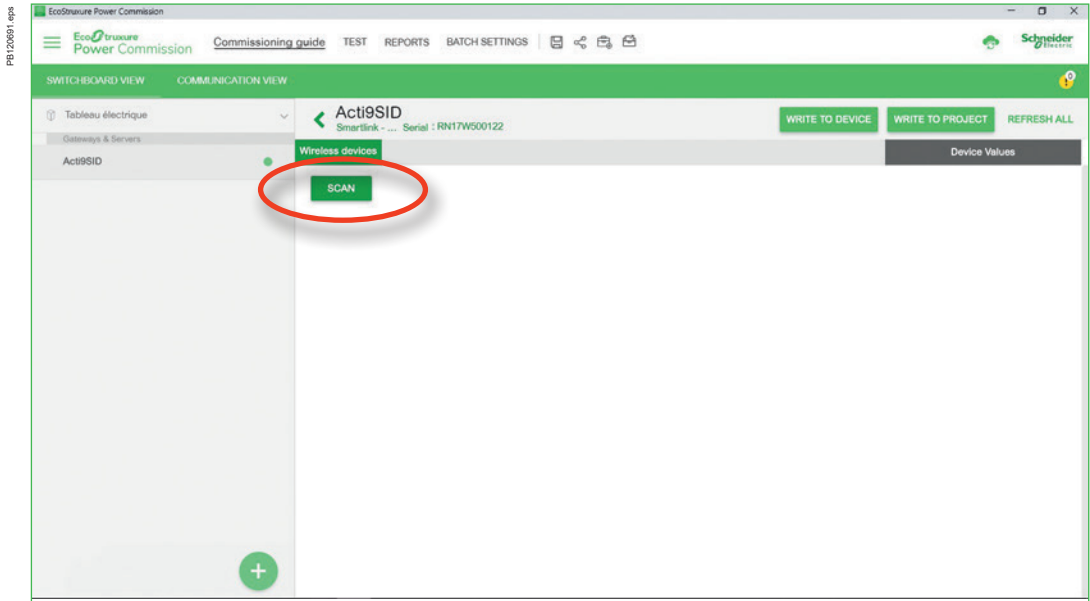


8. Then, click on "CONNECT TO DEVICE."

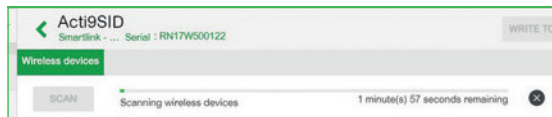
9. Click on "Configure."

EcoStruxure™ Power Commission

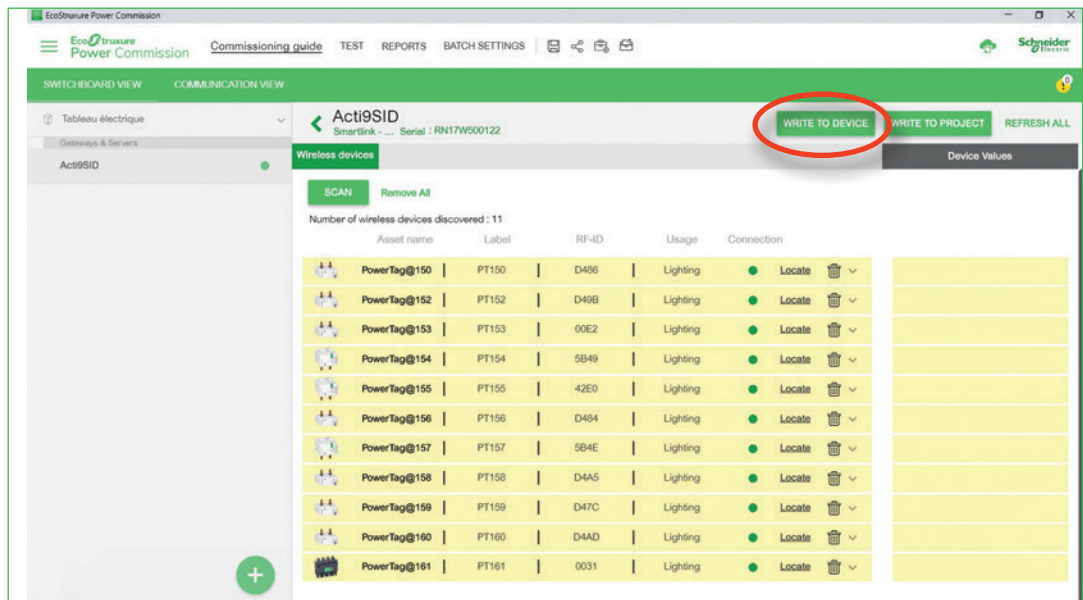
1



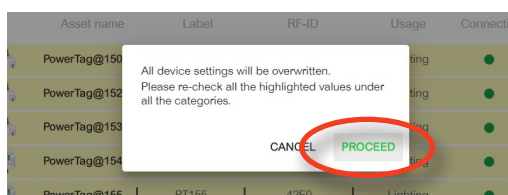
10. Click on "SCAN."



11. The scan has started. Wait two minutes for scan to complete.



12. After editing, click on "WRITE TO DEVICE."

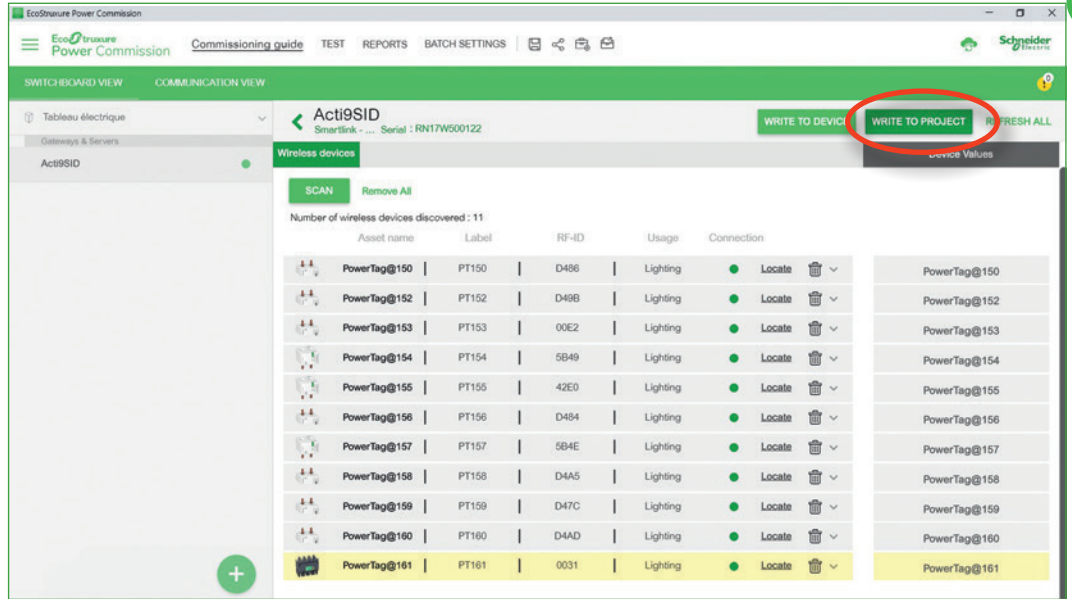


13. Click on "PROCEED."

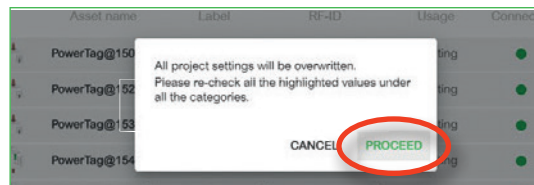
EcoStruxure™ Power Commission

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FB120858.epg

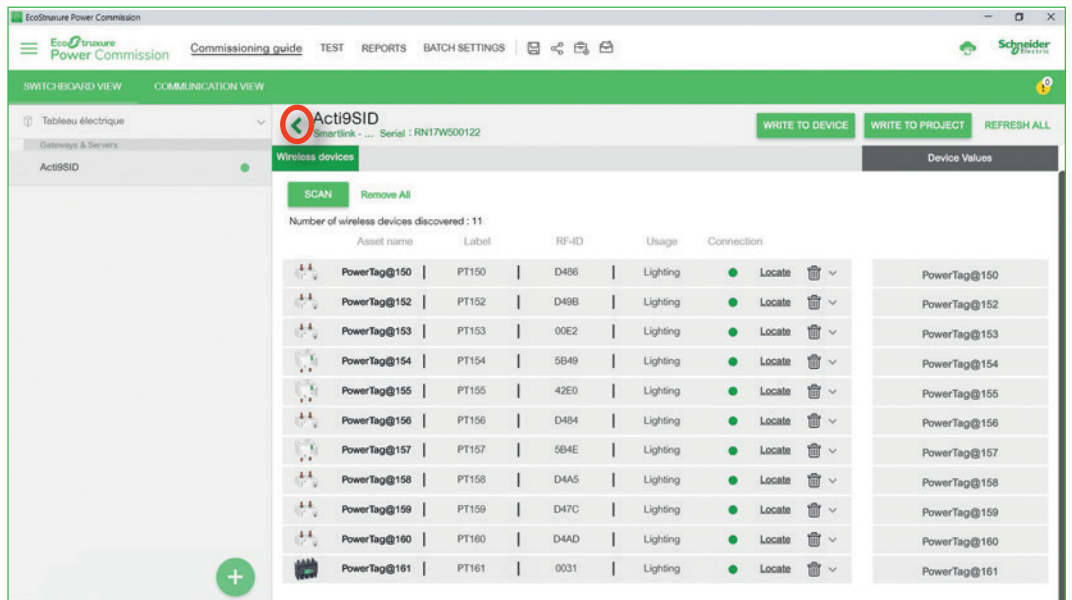


14. Then, click on "WRITE TO PROJECT."



15. Click on "PROCEED."

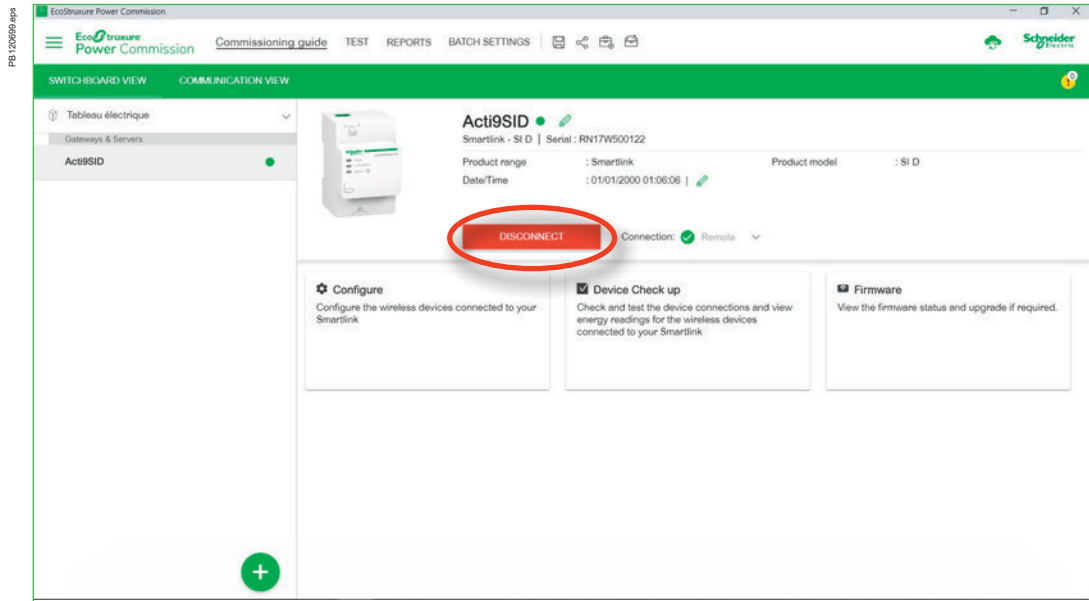
FB120858.epg



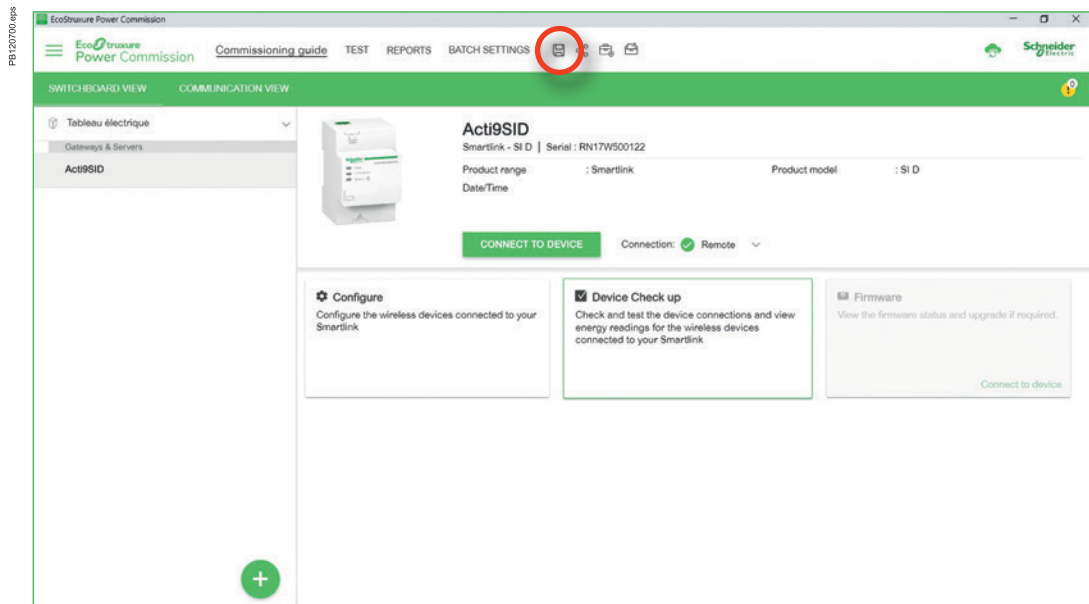
16. Click on .


EcoStruxure™ Power Commission

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17. Click on "DISCONNECT."



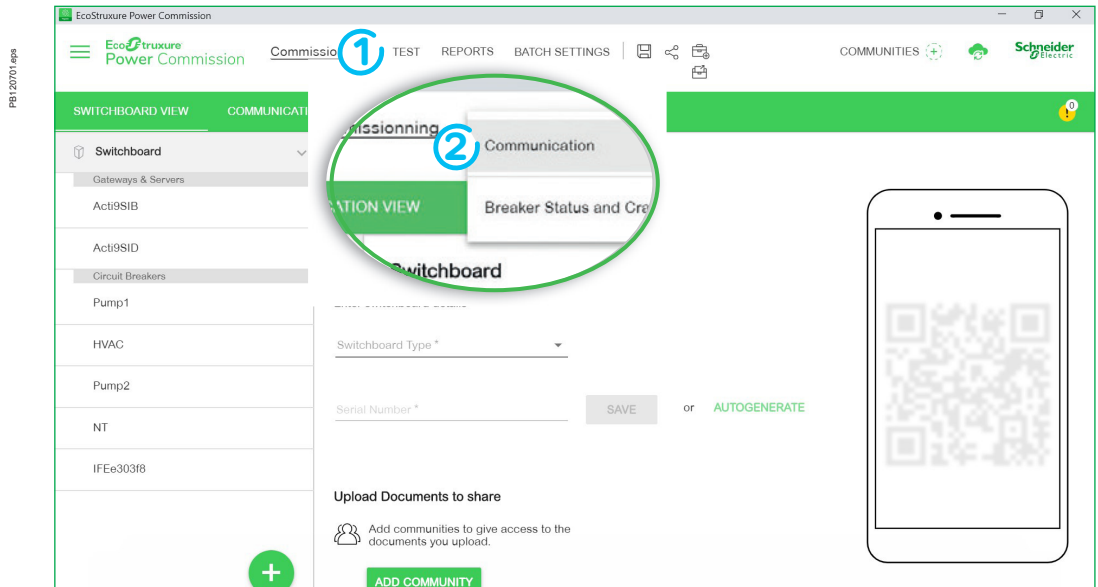
18. Click on  to save the project.

EcoStruxure Power Commission software two different displays for the electrical installation:

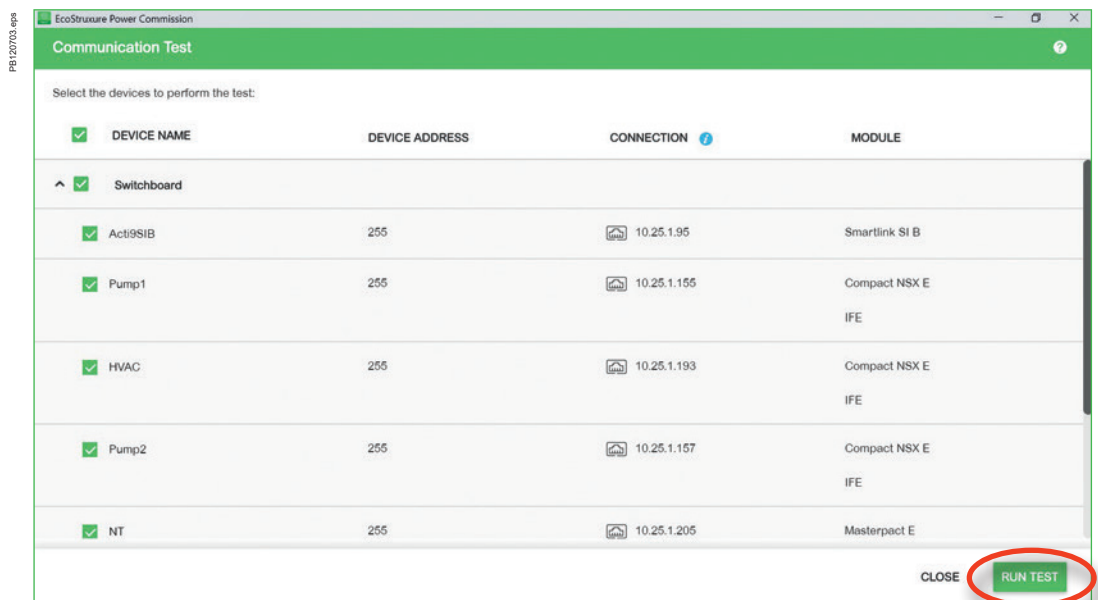
- Switchboard view: shows the electrical topology of the installation.
- Communication view: shows the communication network architecture.

1.3.2. Communication test report

EcoStruxure Power Commission software provides an easily accessible communication test report to verify that communication links, device hardware settings, and cabling have been correctly installed. This can be used to confirm communication setting conformity in the inspection report on the building of the electrical panel. This test report feature is available without an Internet connection.



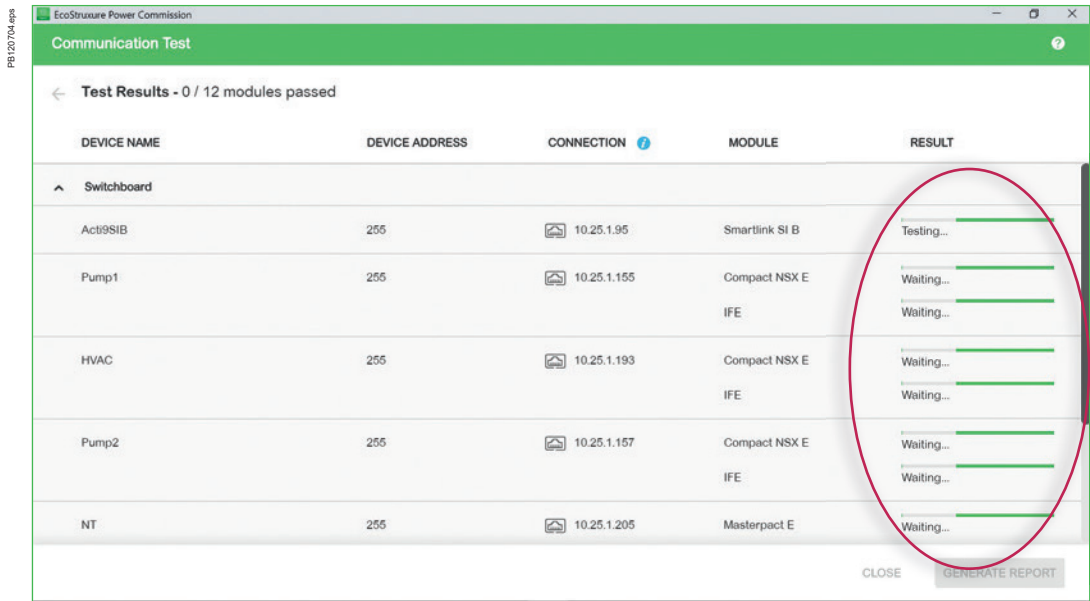
1. Click on "TEST."
2. Click on "Communication."



3. Click on "RUN TEST."

EcoStruxure™ Power Commission

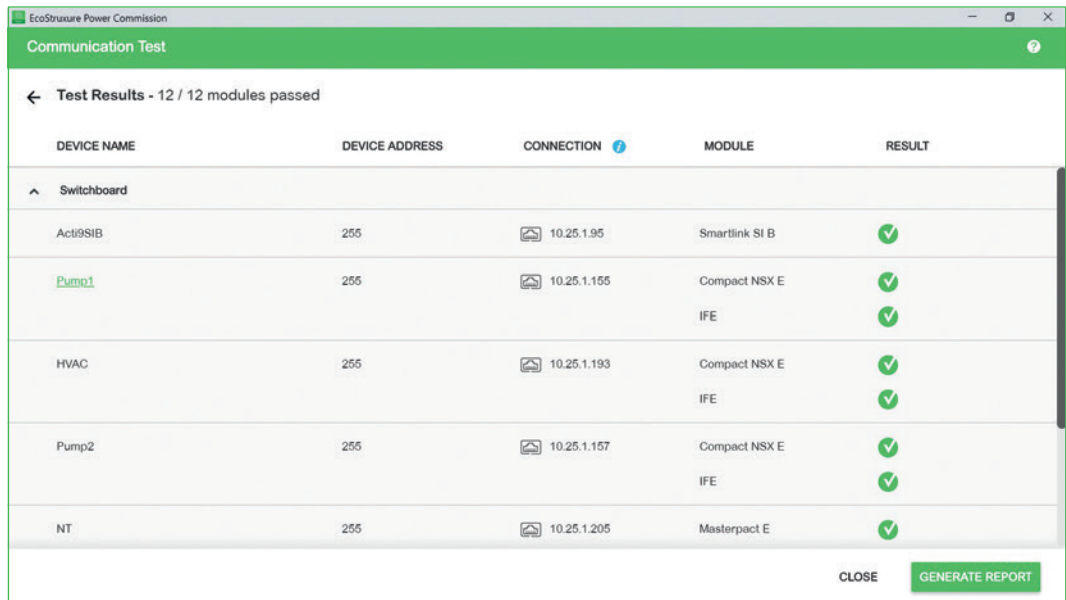
1



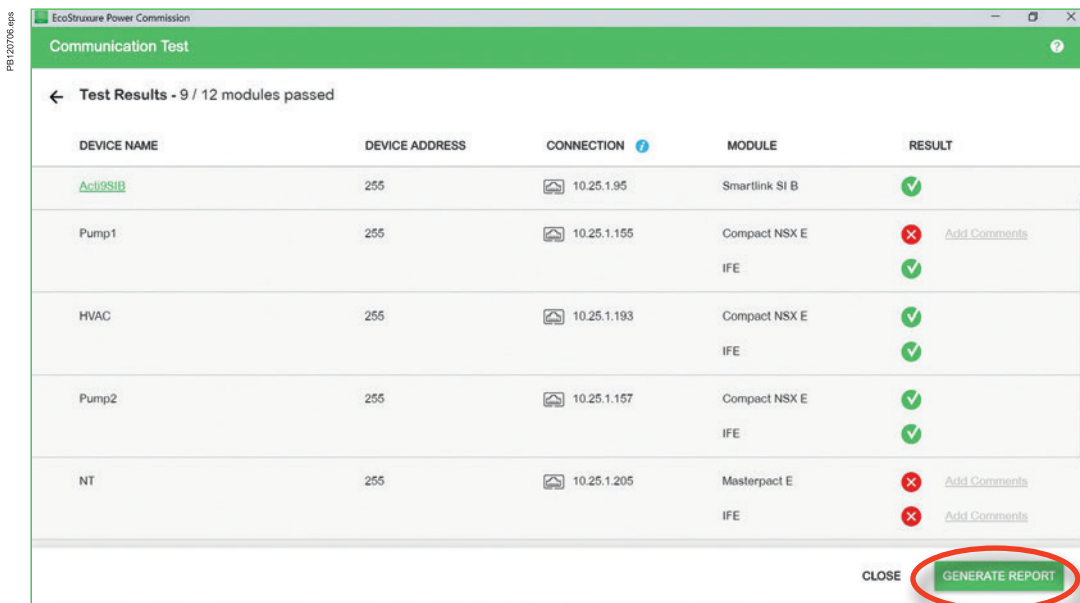
4. Wait until the test is completed.

Once the test is done, you will receive one of two reports:

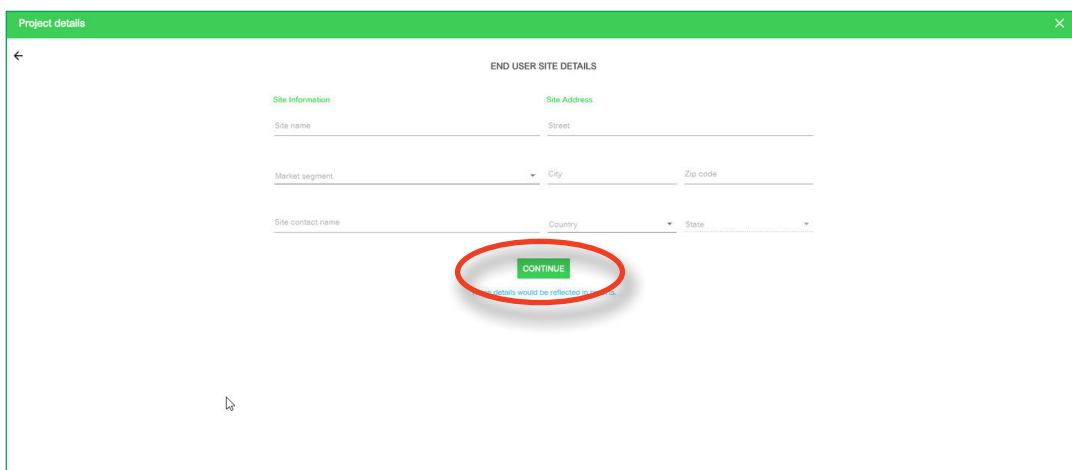
- Report with no errors:



- Report with errors:



5. If you have an error, check the connection of ULP and Ethernet cables.
6. After resolving the error, click on "GENERATE REPORT."



7. Click on "CONTINUE."

EcoStruxure™ Power Commission

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Report showing PASSED:

Successful.pdf

Device Name	Device Address	Connection	Module	Parameter Read	Result
Act95B	255	10.25.1.95	Smartlink Si B	Serial number 3N162950022	PASSED
Pump1	255	10.25.1.155	Micrologic 6.3 E LSIG 630 A	Serial number 3N142730307	PASSED
			IFE	Serial number HL140750127	PASSED
HVAC	255	10.25.1.193	Micrologic 6.3 E LSIG 630 A	Serial number 3N142730312	PASSED
			IFE	Serial number 0000HL1720150047	PASSED
Pump2	255	10.25.1.157	Micrologic 6.3 E LSIG 630 A	Serial number 3N142730313	PASSED
			IFE	Serial number HL140750128	PASSED
NT	255	10.25.1.205	Micrologic 5.0 E LSI 1000 A	Serial number 07332938	PASSED
			IFE	Serial number 0000HL1720150048	PASSED
IFEx303B	255	10.25.1.181	Micrologic 5.0 X LSI 2500 A MCC	Serial number Serial_Number	PASSED
			eIFE	Serial number 0000HL1617260179	PASSED

Report showing FAILED:

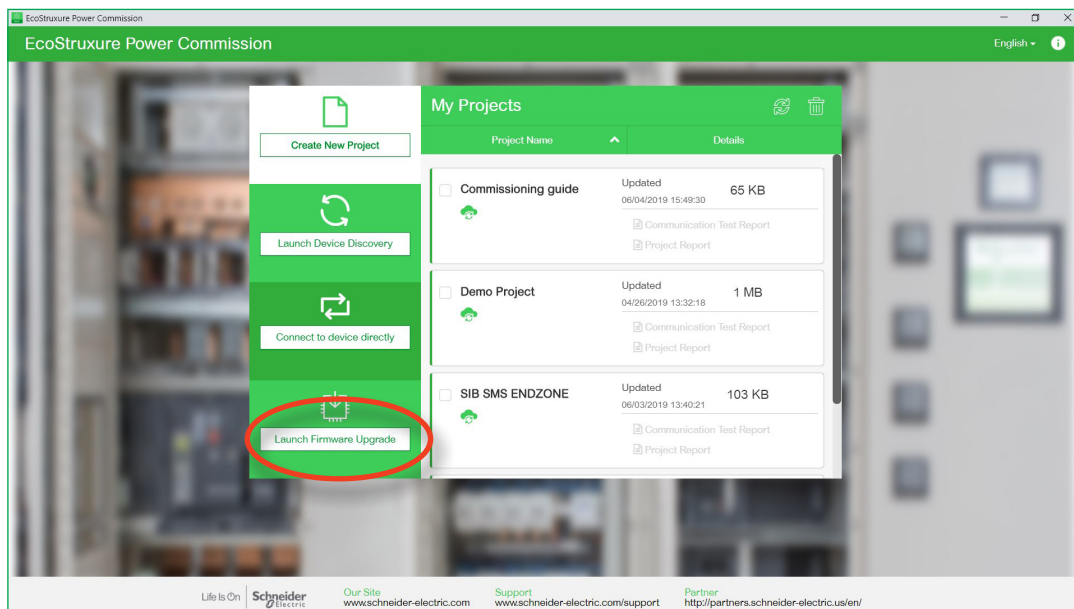
Failed.pdf

PASSED: 5
FAILED: 2

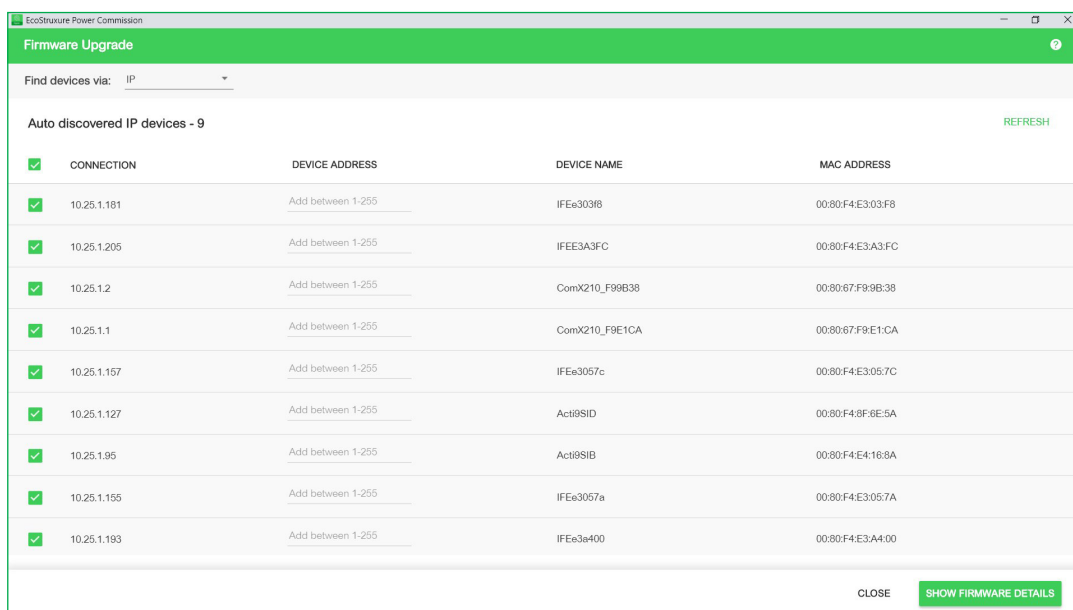
Device Name	Device Address	Connection	Module	Parameter Read	Result
Act95B	255	10.25.1.95	Smartlink Si B	Serial number 3N162950022	PASSED
Pump1	255	10.25.1.155	Micrologic 6.3 E LSIG 630 A	Serial number 3N142730313	FAILED
			IFE	Serial number HL140750127	PASSED
HVAC	255	10.25.1.193	Micrologic 6.3 E LSIG 630 A	Serial number 3N142730312	PASSED
			IFE	Serial number 0000HL1720150047	PASSED
Pump2	255	10.25.1.157	Micrologic 6.3 E LSIG 630 A	Serial number 3N142730313	PASSED
			IFE	Serial number HL140750128	PASSED
NT	255	10.25.1.205	Micrologic 5.0 E LSI 1000 A	Serial number 07332938	FAILED
			IFE	Serial number 0000HL1720150048	FAILED
IFEx303B	255	10.25.1.181	Micrologic 5.0 X LSI 2500 A MCC	Serial number Serial_Number	PASSED
			eIFE	Serial number 0000HL1617260179	PASSED

1.3.3. Check firmware versions

How to check devices firmware baseline with EcoStruxure Power Commission



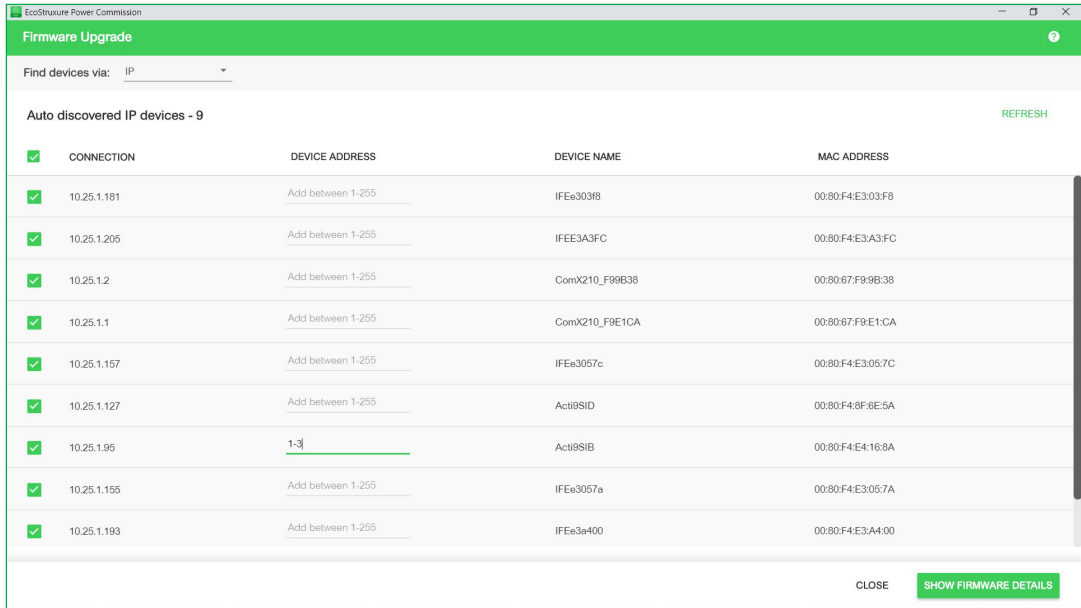
1. Click on "Launch Firmware Upgrade."



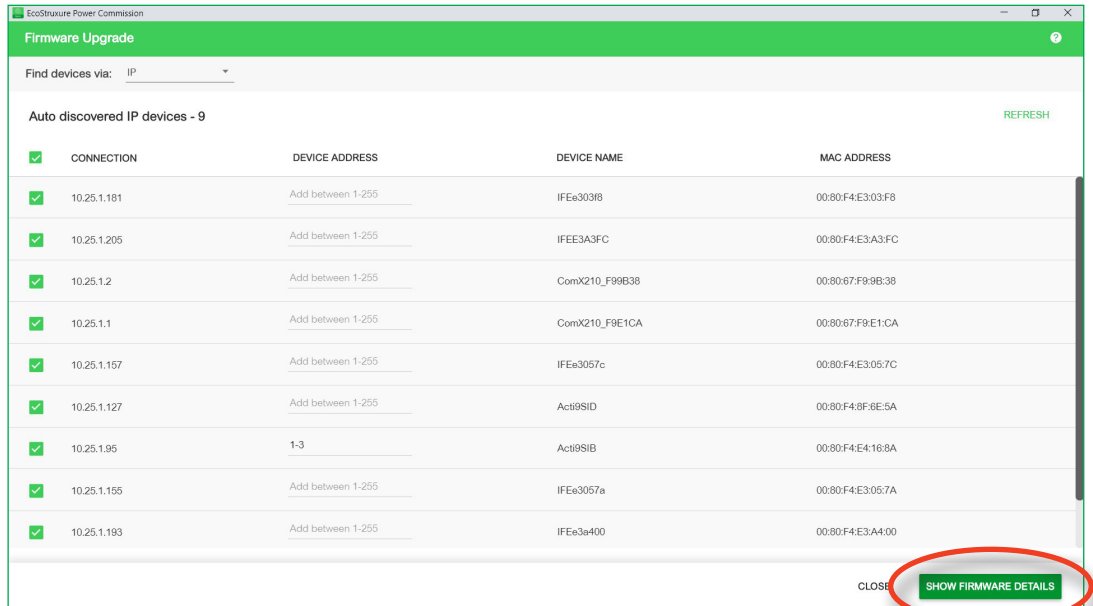
2. By default, all the devices are selected.

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3. Type the range of addresses for the device(s) that you want to see firmware details on (for example, 1-3 for the Acti9SIB).



4. Click on "SHOW FIRMWARE DETAILS."

Connection	Modbus address	Module	Status	Device Version	Available Version	Recommended Action
10.25.1.2	255	COMX210	✓		5.6.9	UPGRADE
10.25.1.127	255	Smartlink SI D	✓	V2.2.7	V2.2.7	None
10.25.1.95	1	Smartlink Modbus	✓	V1.3.7	V1.3.7	None
10.25.1.95	2	Smartlink Modbus	✓	V1.3.7	V1.3.7	None
10.25.1.205	255	BCM_ULP	✓	V4.1.9	V4.1.9	None
		IO 1	✓	003.003.011	003.004.005	UPGRADE None
		IFE	✓	003.007.024 V003.007.024	003.009.010 V003.009.010	UPGRADE None
10.25.1.95	255	Smartlink SI B	✓	V2.2.6	V2.2.7	UPGRADE None

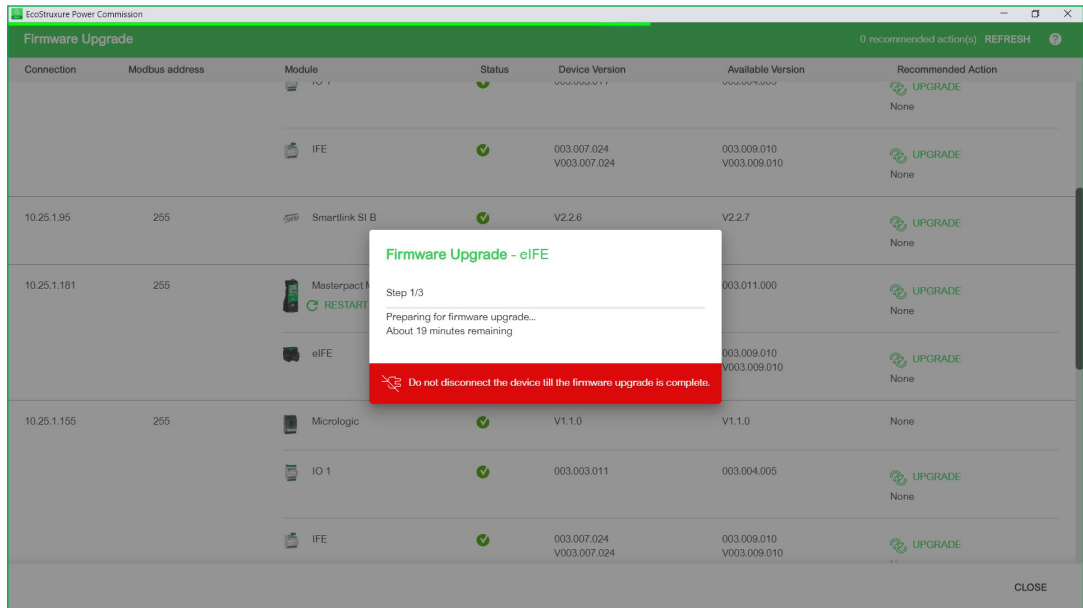
- 5. If you want to upgrade the firmware of a device, you can click on “UPGRADE.”
- 6. Enter password.

Connection	Modbus address	Module	Status	Device Version	Available Version	Recommended Action
			✓	V003.007.024	V003.009.010	UPGRADE None
10.25.1.95	255	Smartlink SI B	✓	V2.2.6	V2.2.7	UPGRADE None
10.25.1.181	255	Masterpact MTZ	✓	002.000.002	003.011.000	UPGRADE None
		eIFE	✓		003.009.010 V003.009.010	UPGRADE None
10.25.1.155	255	Micrologic	✓		V1.1.0	None
		IO 1	✓	003.003.011	003.004.005	UPGRADE None
		IFE	✓	003.007.024 V003.007.024	003.009.010 V003.009.010	UPGRADE None
		BSCM	✓	V2.2.7	V2.2.7	None

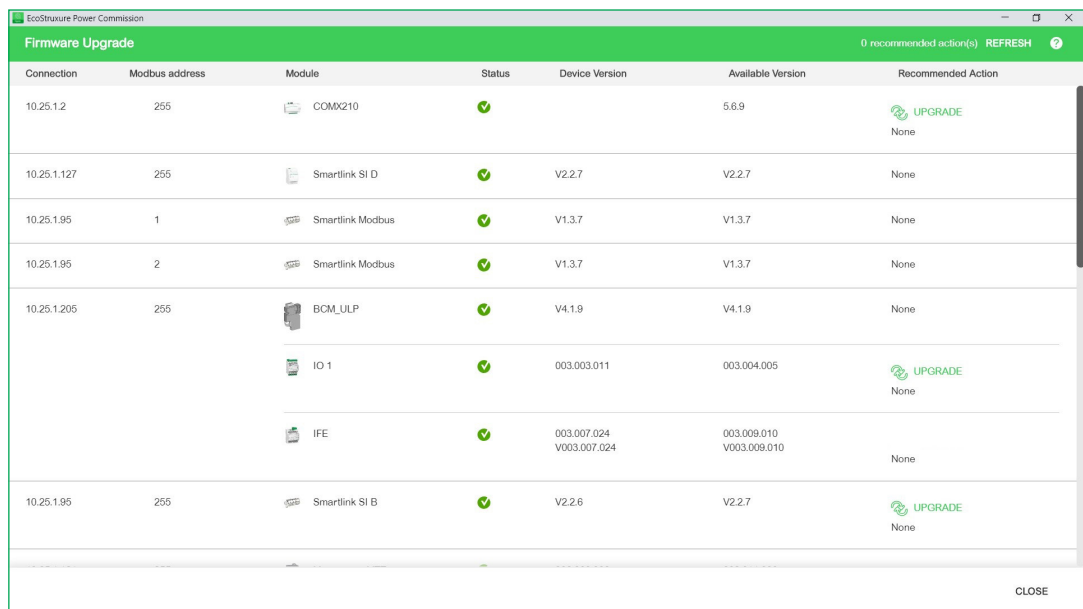
- 7. Click on “OK.”

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8. The upgrade is in process.

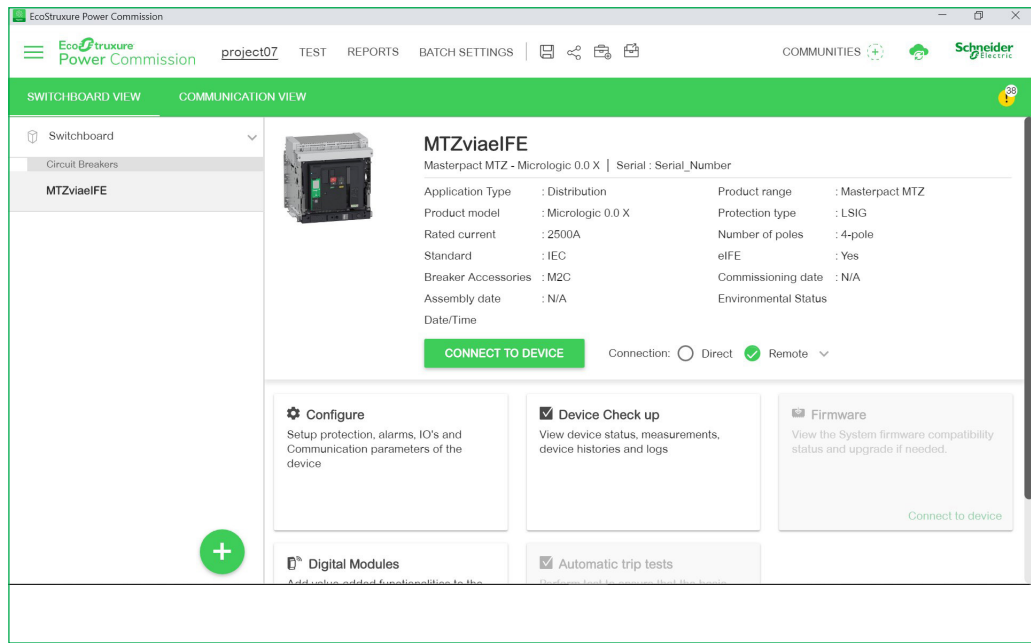


9. The upgrade is successfully complete.

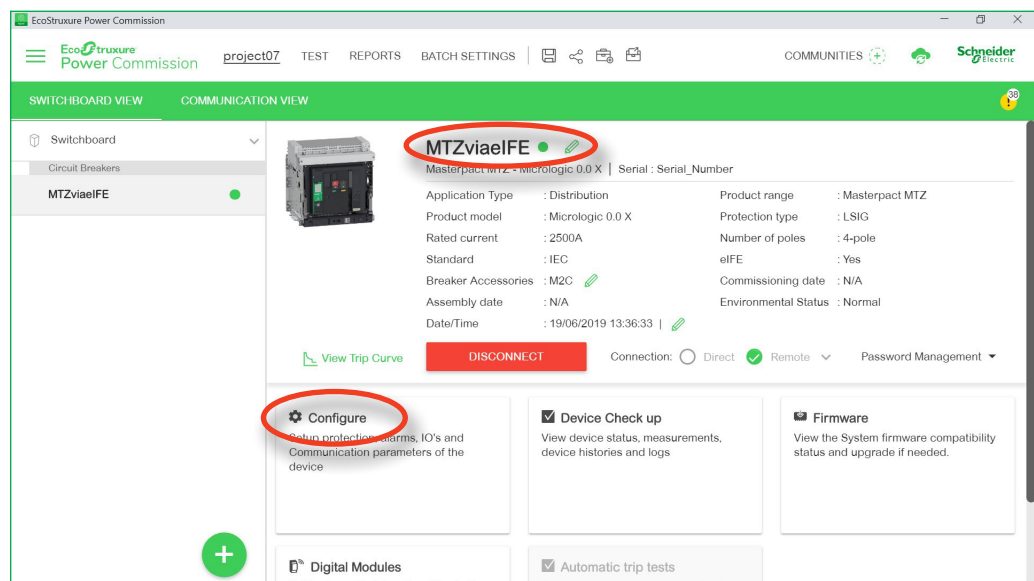
1.4. LV circuit breaker system


The IFE and IO Module can be configured and tested using EcoStruxure Power Commission or via webpages embedded in the IFE device. The IFE and IO Module devices should be connected with correct addressing to operate effectively. The following steps are for the configuration with EcoStruxure Power Commission for a MTZ circuit breaker.

How to configure MasterPact MTZ with EcoStruxure Power Commission



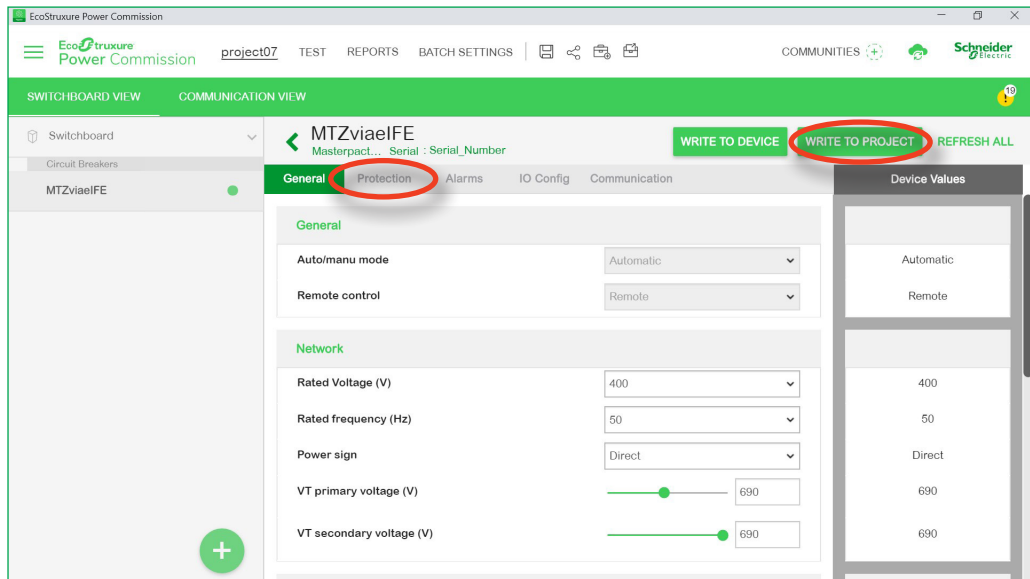
1. Select the desired circuit breaker and the attached IFE component to connect to.
2. Click on "CONNECT TO DEVICE."



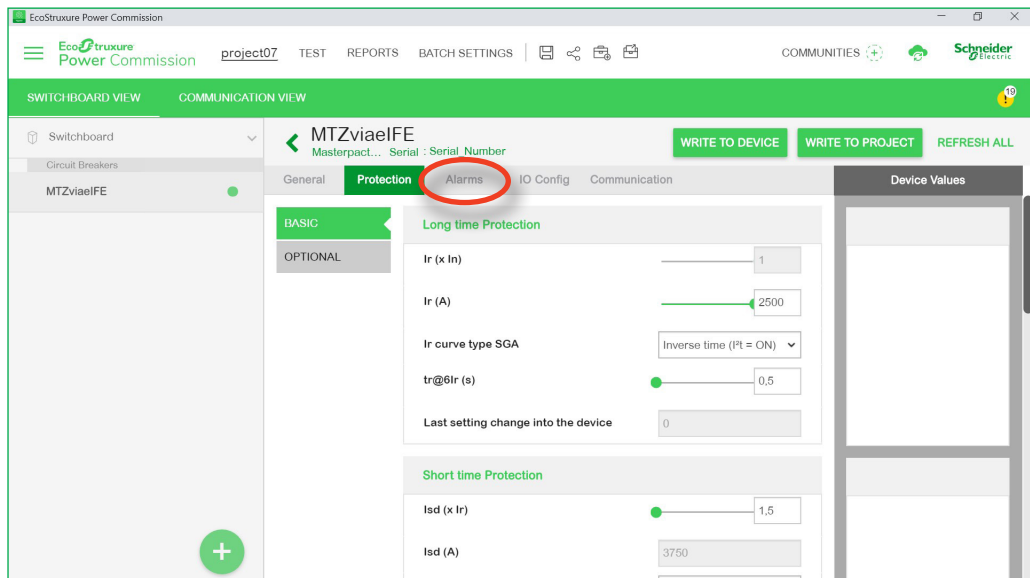
3. Click on  to rename the product title to something more specific to the location (examples: "Feeder 3" or "Generator Disconnect").
4. Next, click on "Configure."

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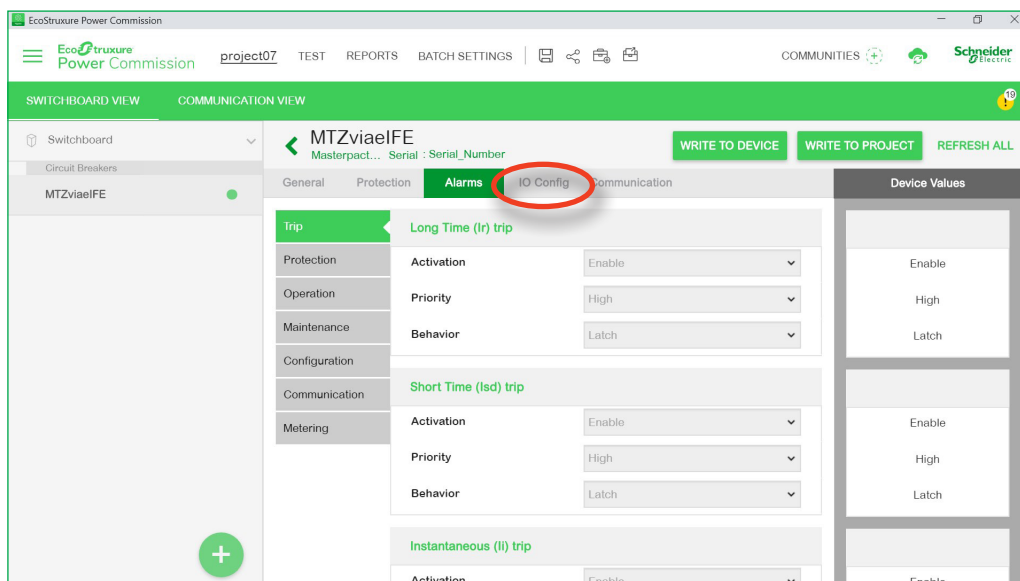
1



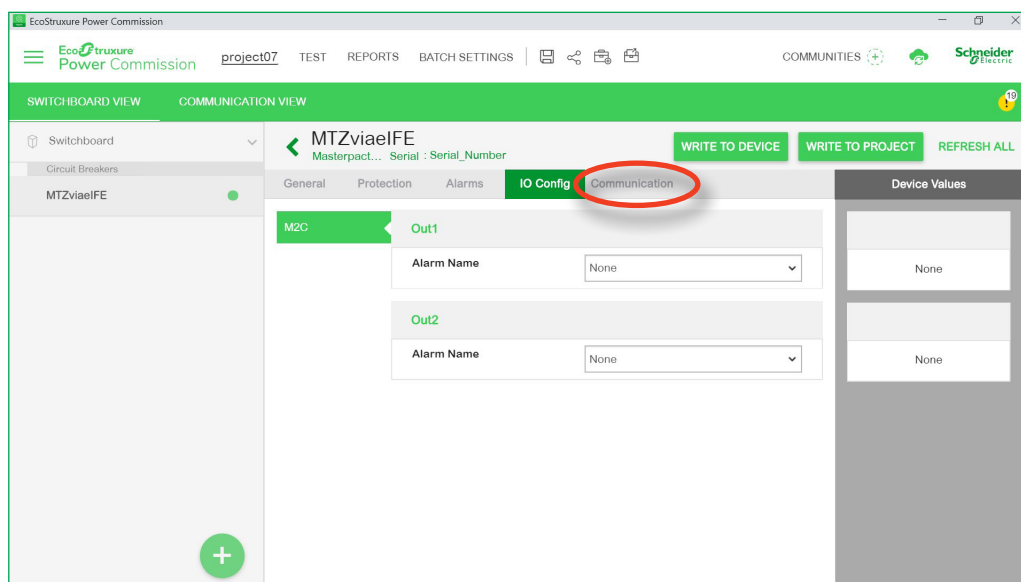
5. Click on "WRITE TO PROJECT." Now, you can configure Voltage, Frequency, and Mode (Automatic or Manual).
6. After configuring, select "Protection."



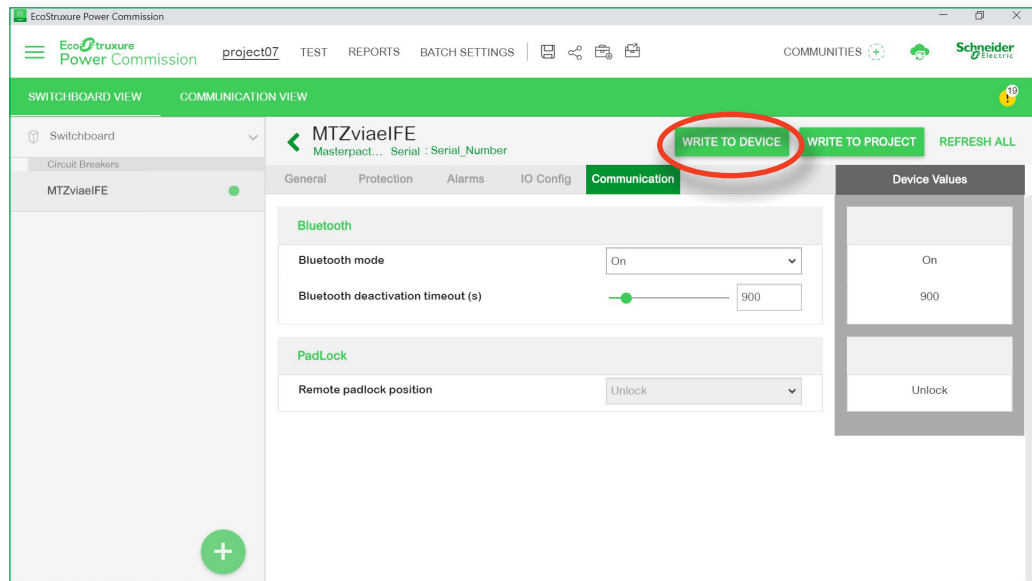
7. You can configure the long time protection and the short time protection.
8. After that, select "Alarms."



- 9. Configure the different alarms.
- 10. Then, select "IO Config."



- 11. You can configure alarms on Out1 or Out2.
- 12. Then, select "Communication."



13. You can configure Bluetooth and padlock.

14. After the configuration for MasterPact is finished, select "WRITE TO DEVICE."

Additional operations:

- "Refresh" updates all settings related to the connected device. This is a global operation for the full set of device parameters.
- "Write to Project" allows the user to apply the settings from the device to the project. This function is used for partial operations, depending on the sections involved¹.
- "Write to Device" allows the user to send the parameters to the connected device. This function is used for partial operations, depending on the sections involved¹.

1) For instance, only Protection can be read from or written to the device. During the first connection, the full set of parameters is read from the device.

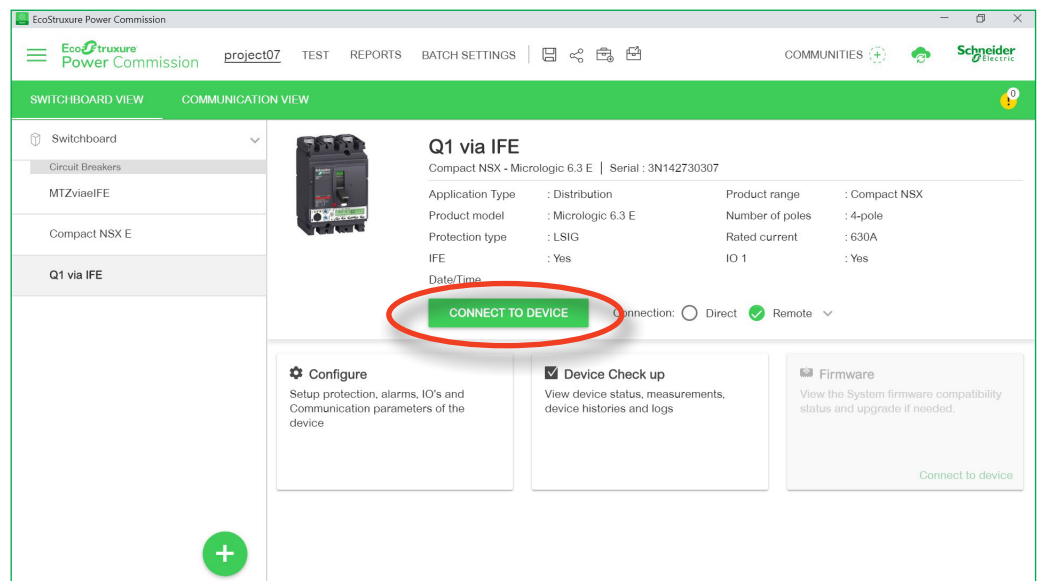
1.4.1. Input Output assignment

The IO module provides predefined applications (cradle management, breaker operation, load control, etc.) and allows the user to customize some inputs and/or outputs. To do this, the user should first assign the selected inputs/outputs s/he wishes to use in EcoStruxure Power Commission.

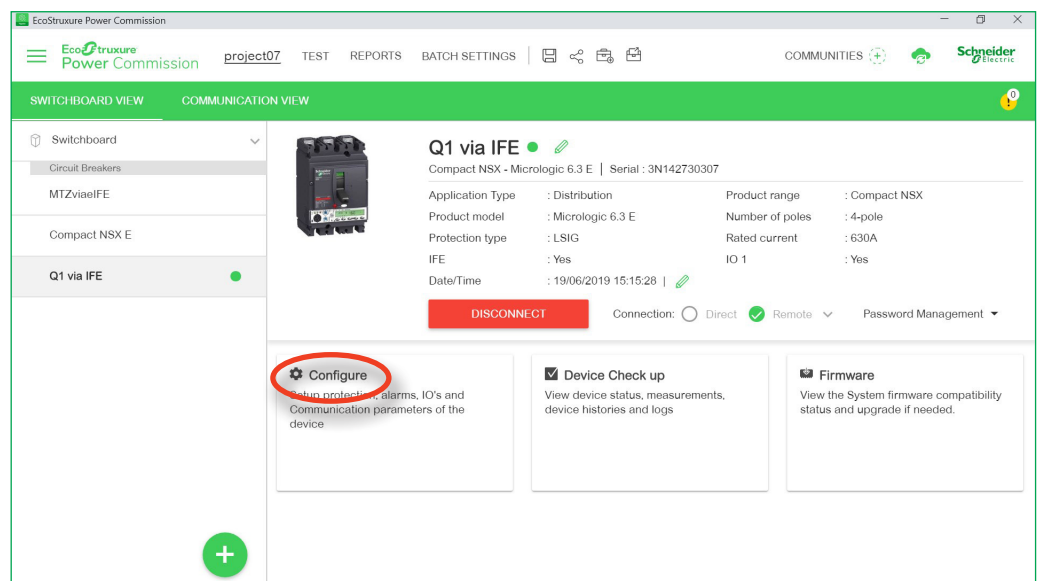
How to assign input of IO module application with EcoStruxure Power Commission

The IO module of the HVAC is used for the cradle application (predefined application 1). The digital input 4 is assigned to a piece of contact information showing the availability status of the MV/LV Power at the hypermarket transformer station. A temperature sensor which monitors the outside ambient air temperature is added to the Analog input of the IO module.

Note: A second IO module can be added to the circuit breaker communication system. In this case, predefined application 9 should be used to add user-defined applications (door contact information, fuse health, etc.).



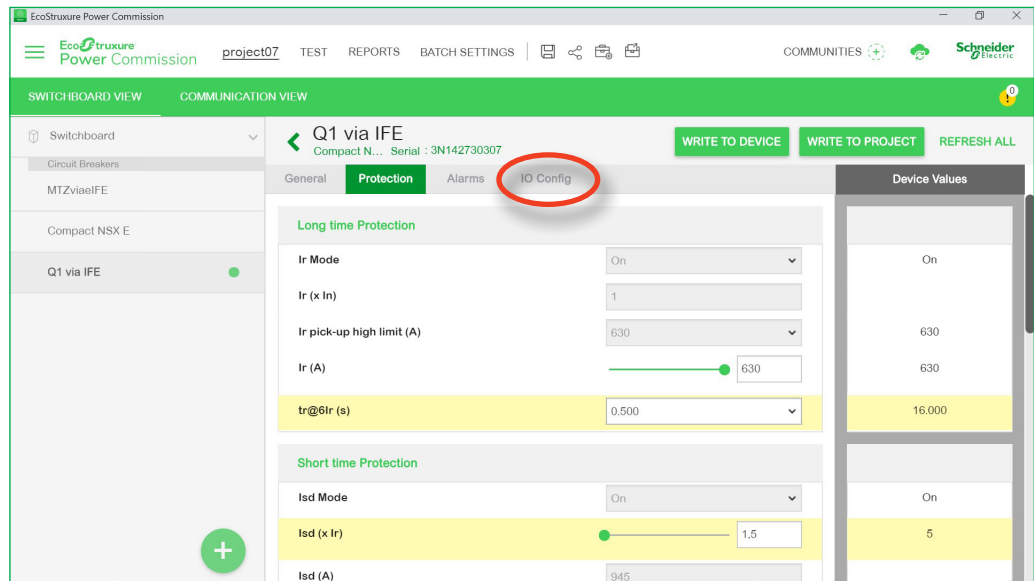
1. Click on "CONNECT TO DEVICE."



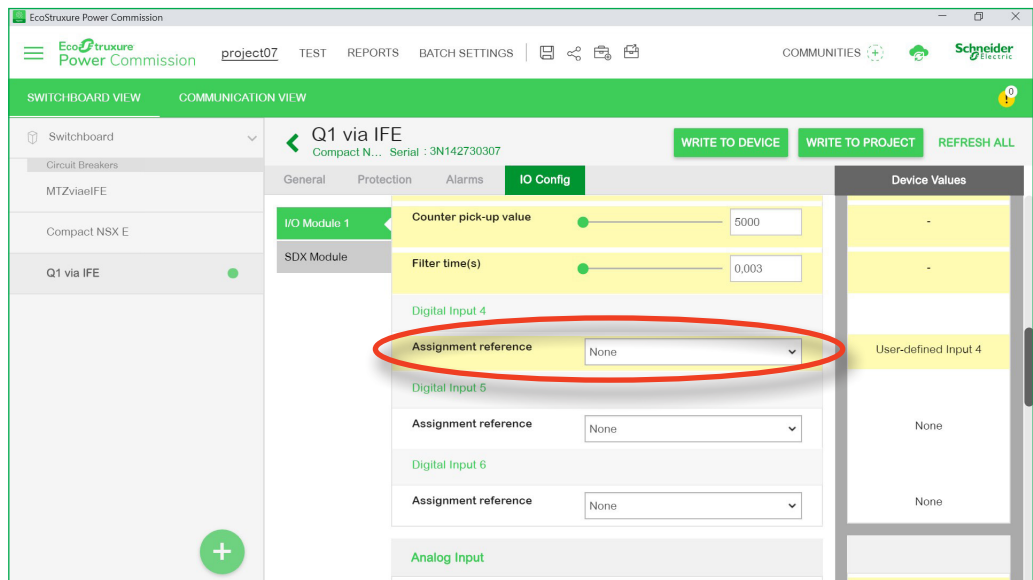
2. Click on "Configure."

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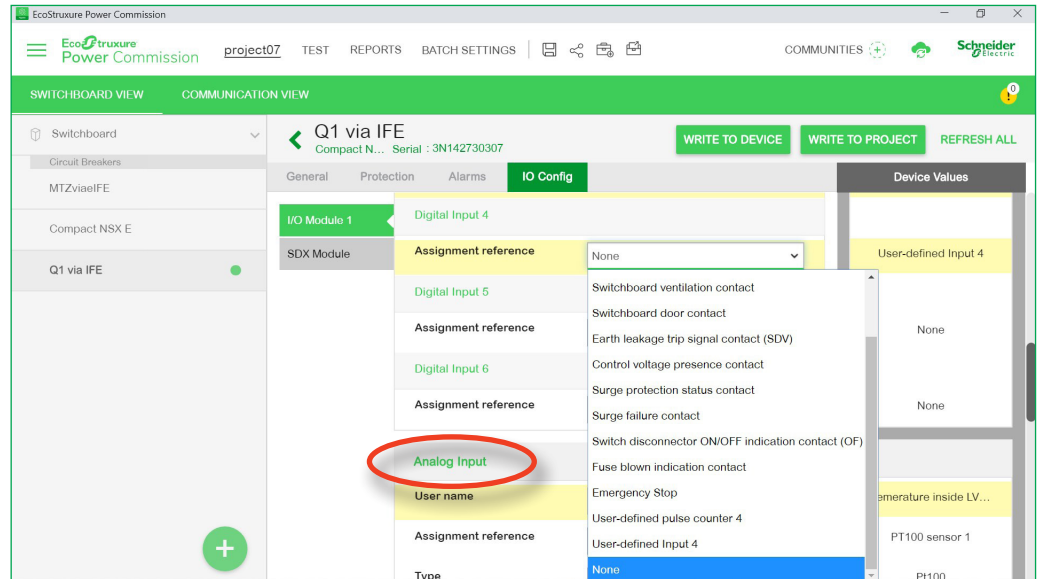
1



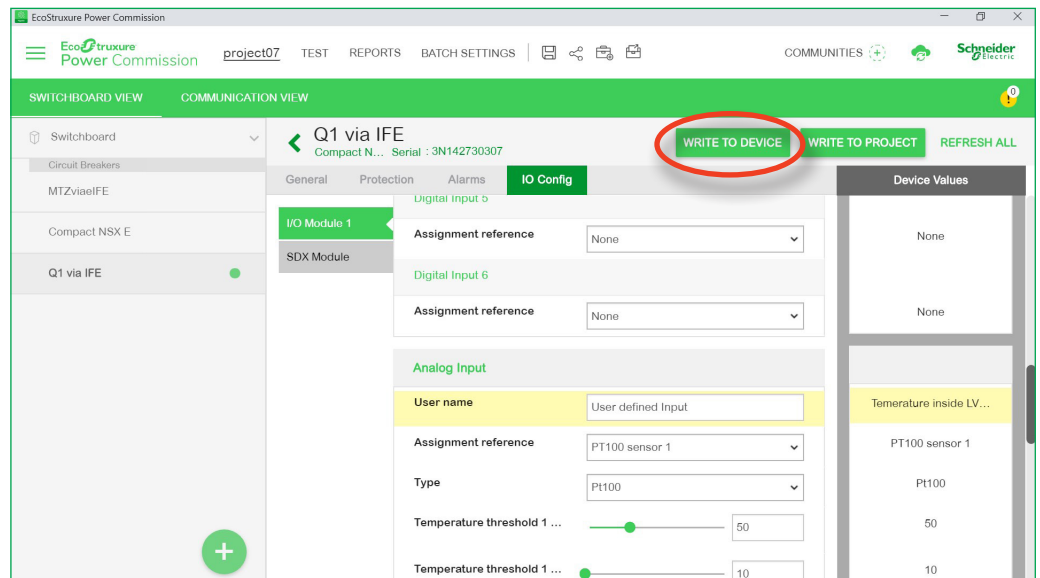
3. Click on "WRITE TO PROJECT." Then, click on "IO Config."



4. Click on the "Assignment reference" of your digital input and choose what you have connected on the digital input.



5. After that, do the same with the Analog input.



6. Then, click on "WRITE TO DEVICE."

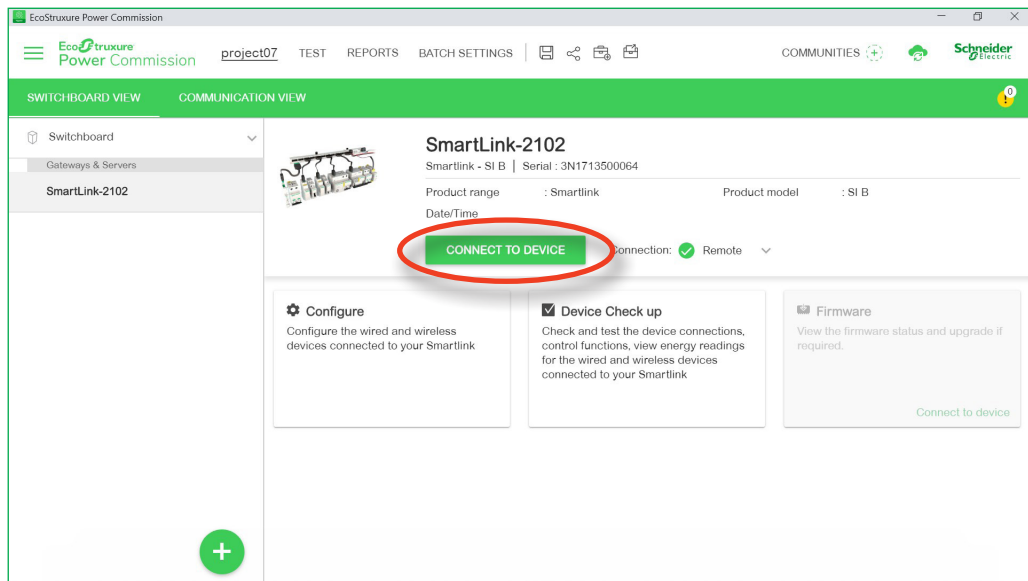
1.5. Acti9 Smartlink system

The Acti9 Smartlink can be configured and tested using EcoStruxure Power Commission. Smartlink devices should be connected with correct addressing to operate effectively.

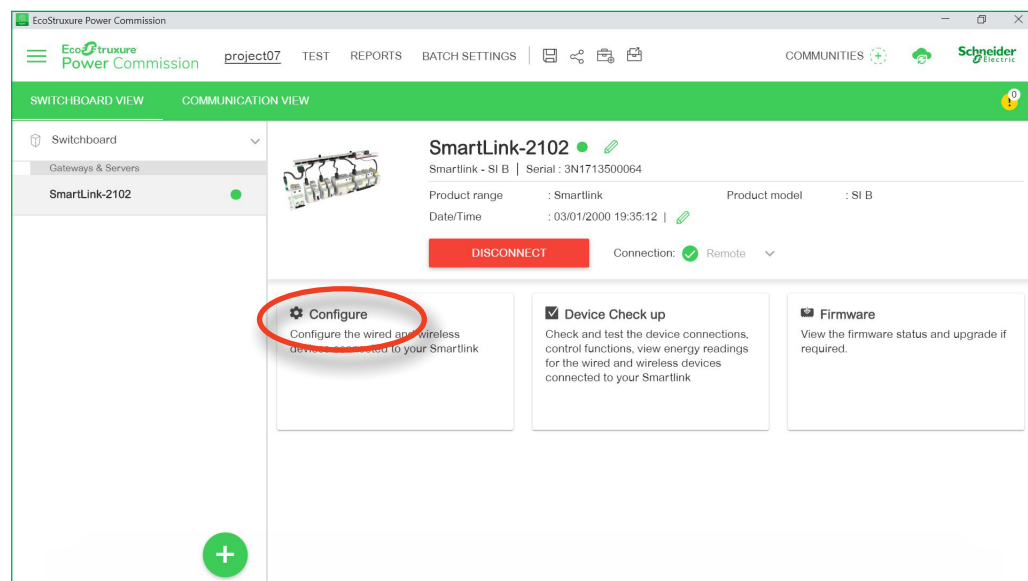
1.5.1. Wired configuration

The following steps show the configuration with EcoStruxure Power Commission.

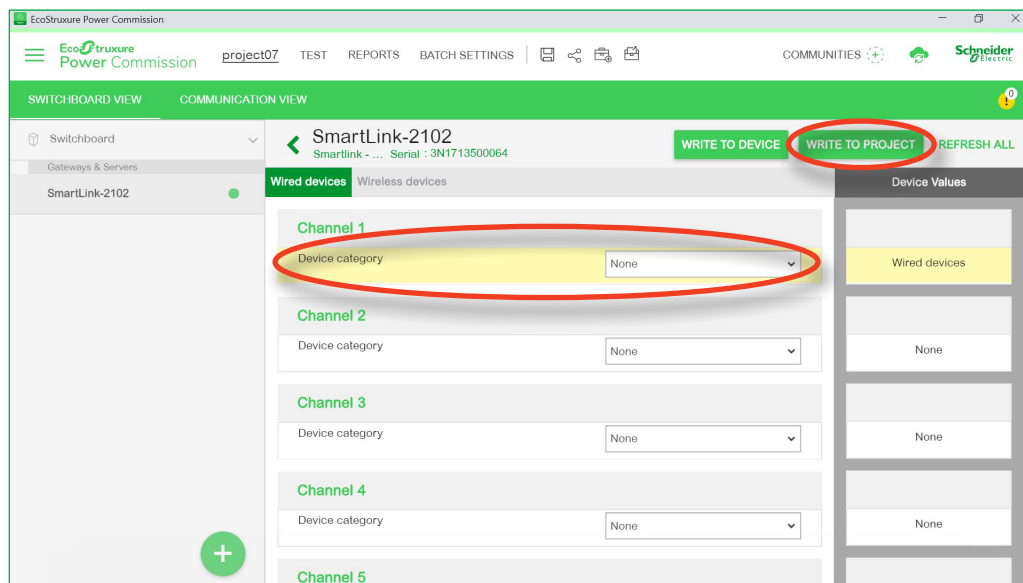
How to configure Acti9 Smartlink OF/SD accessories with EcoStruxure Power Commission



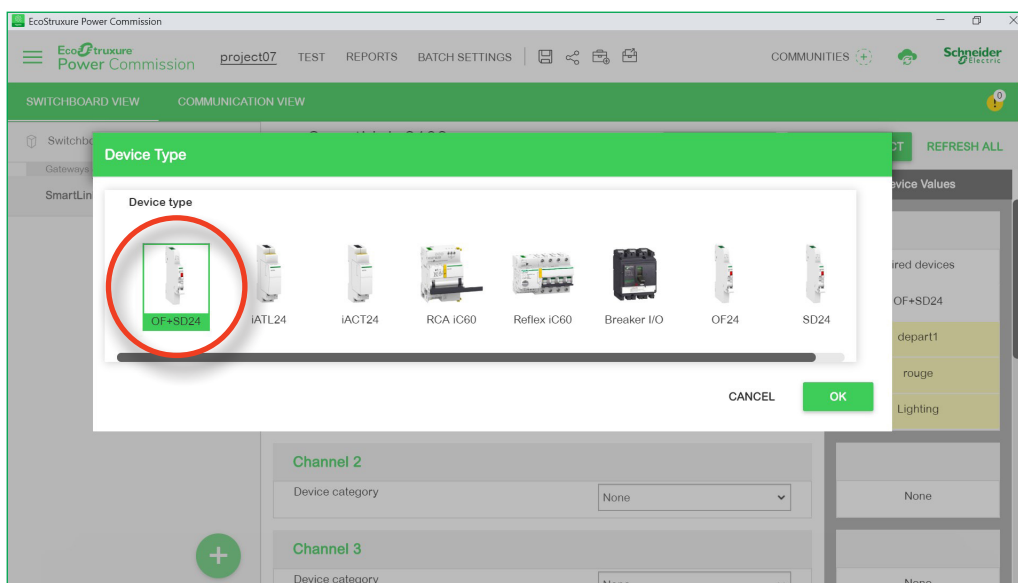
1. Click on "CONNECT TO DEVICE."



2. Click on "Configure."



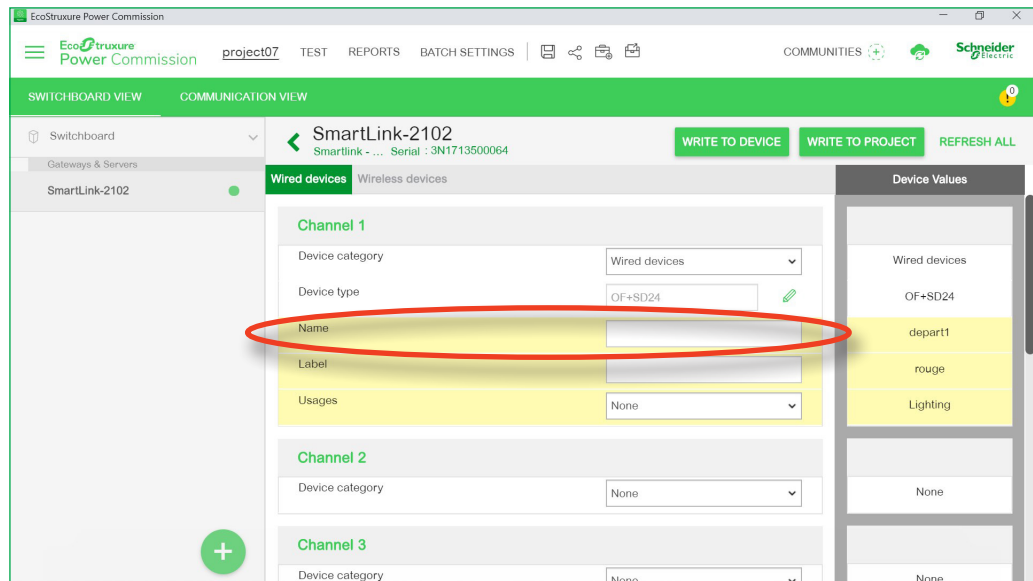
3. Click on "WRITE TO PROJECT." Then, click on the device category of your channel.
4. Click on the arrow to select the category.



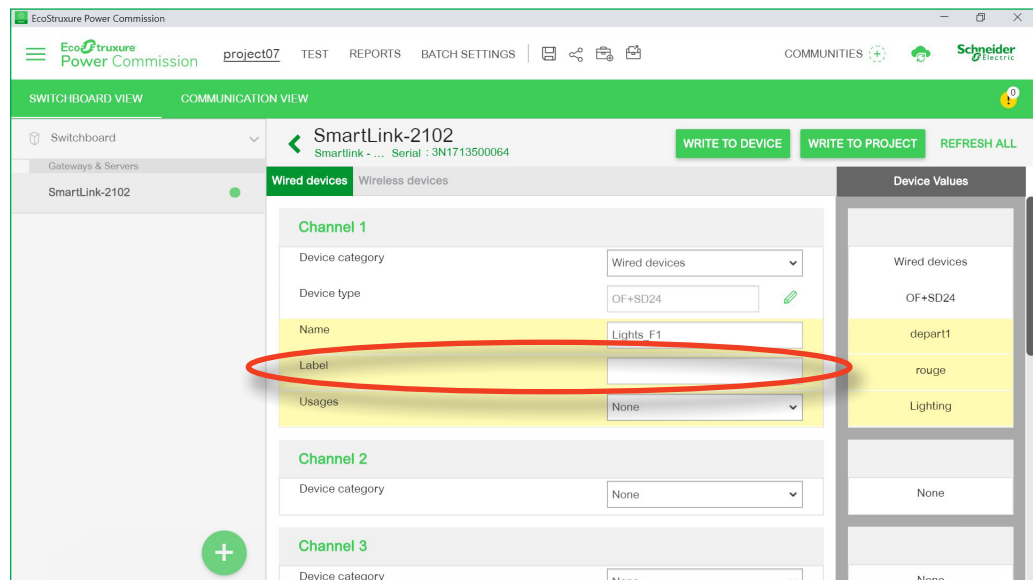
5. Select "OF+SD24."
6. Click on "OK."

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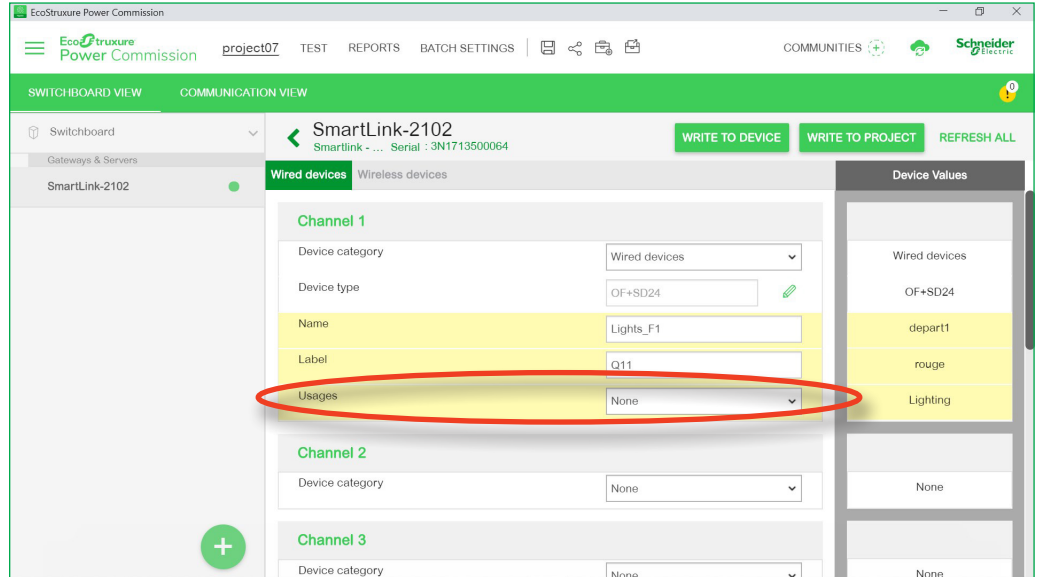
1



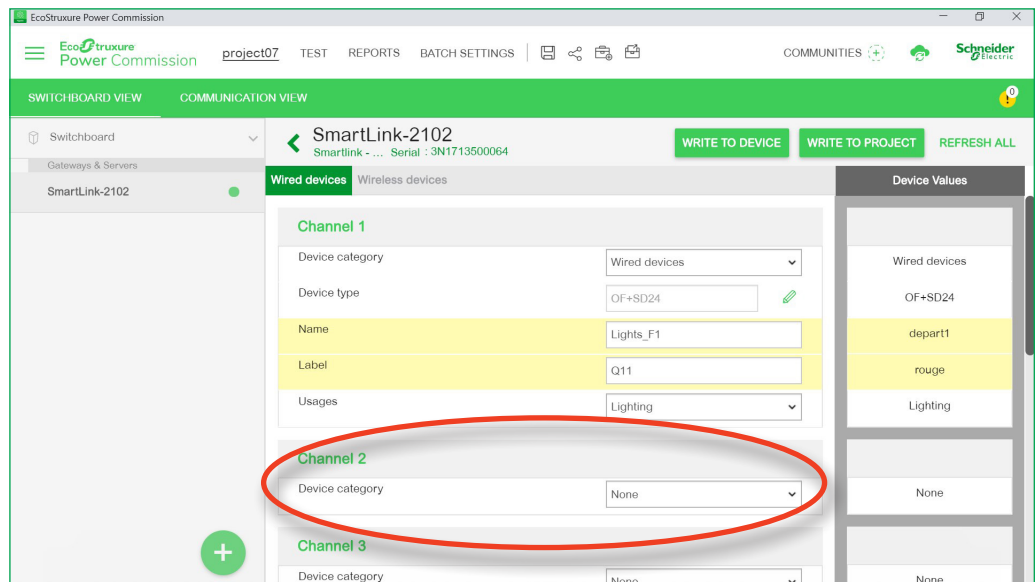
7. Put a name to the device.



8. Put a label on the device.



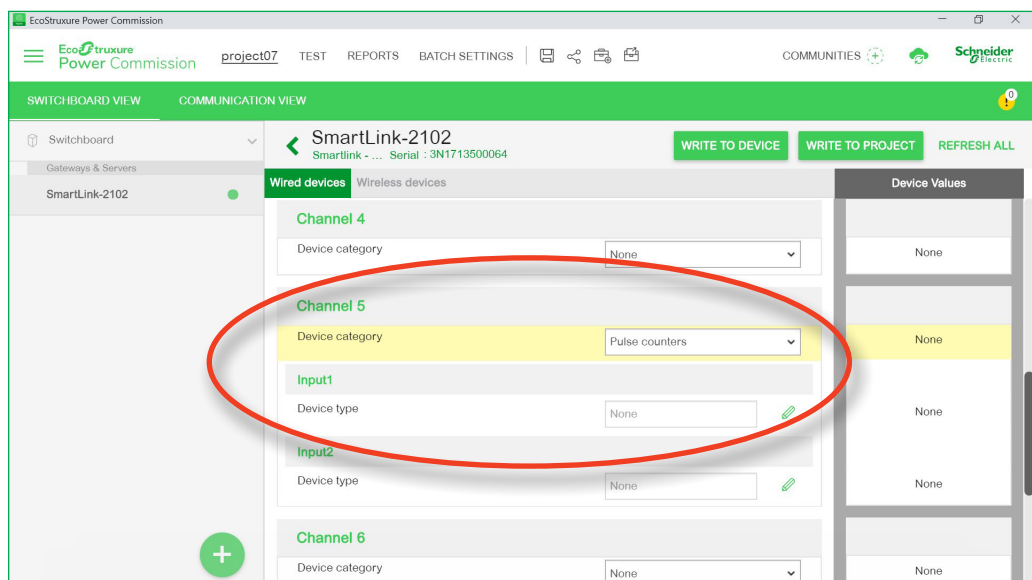
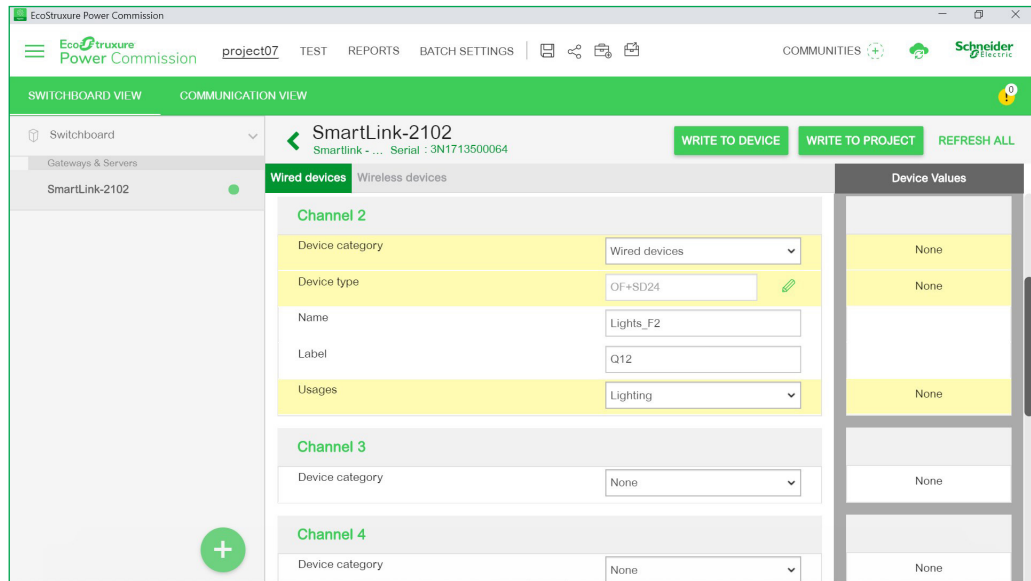
9. Put a usage for the device.



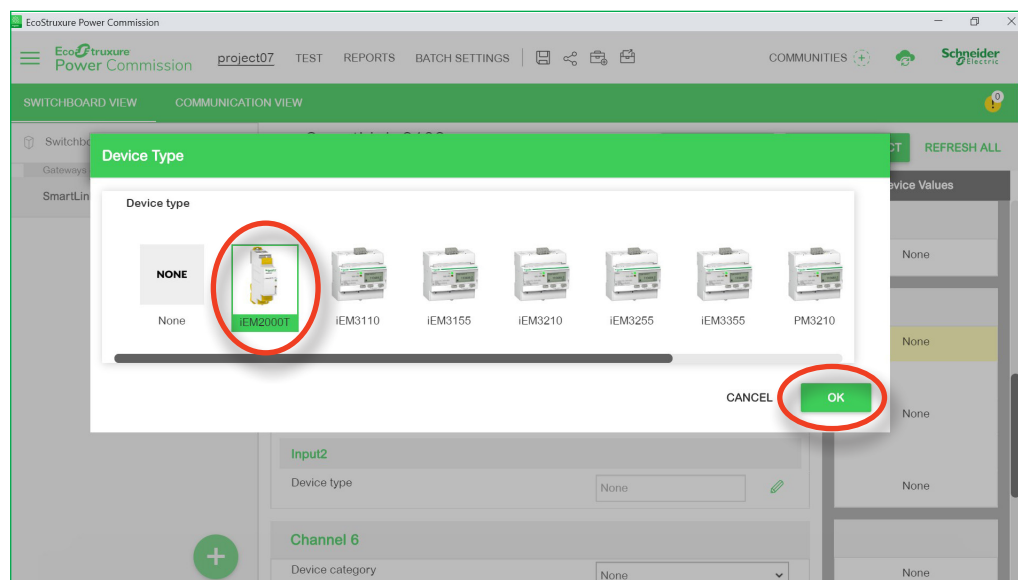
10. Do the same for Channel 2.

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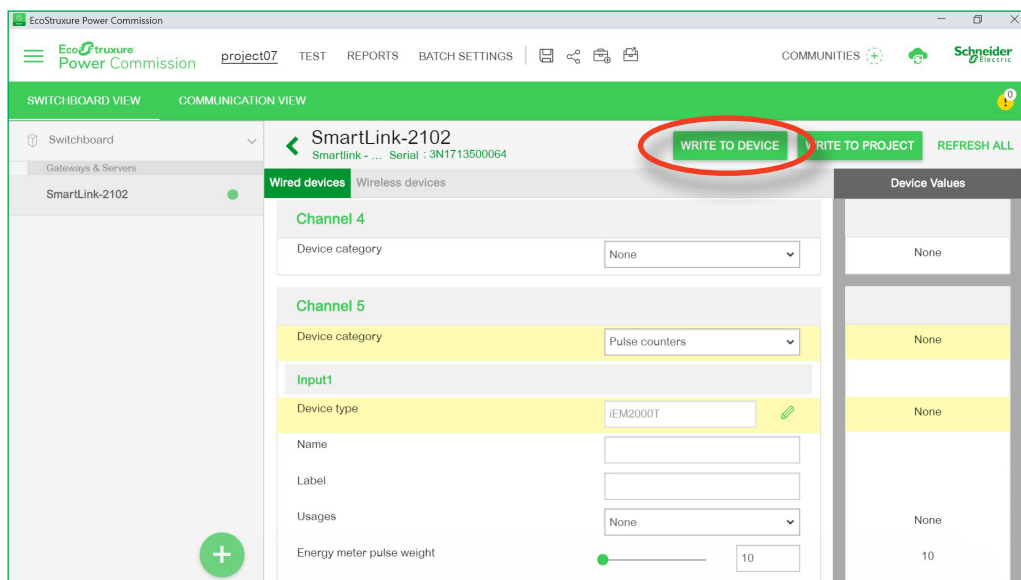
1



11. Next, configure the Channel 5 device category to "Pulse counters."
12. In Input1, select the device type.



13. Choose "iEM2000T" and click on "OK".



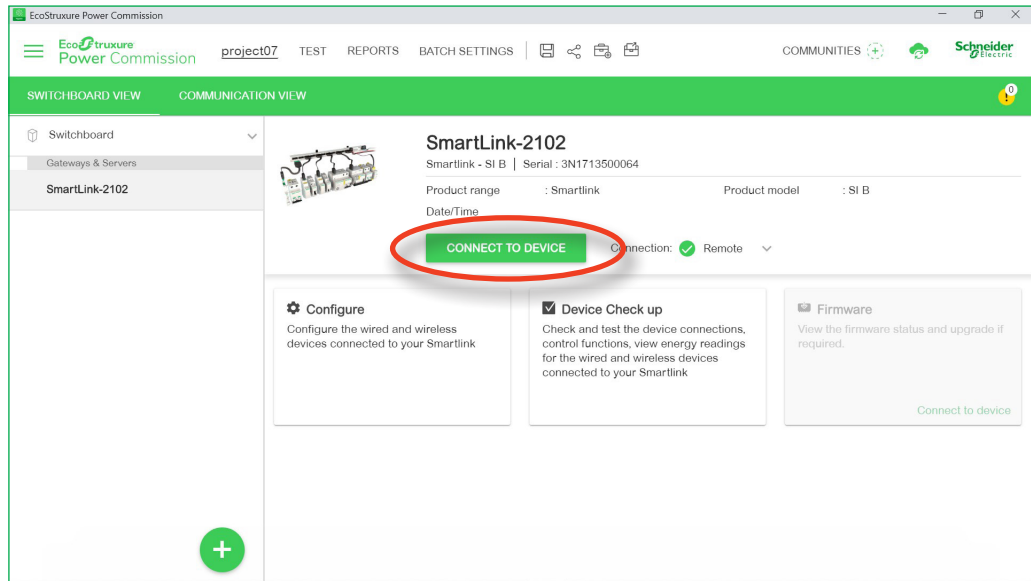
14. When you have finished, click on "WRITE TO DEVICE".

1.5.2. Wireless configuration

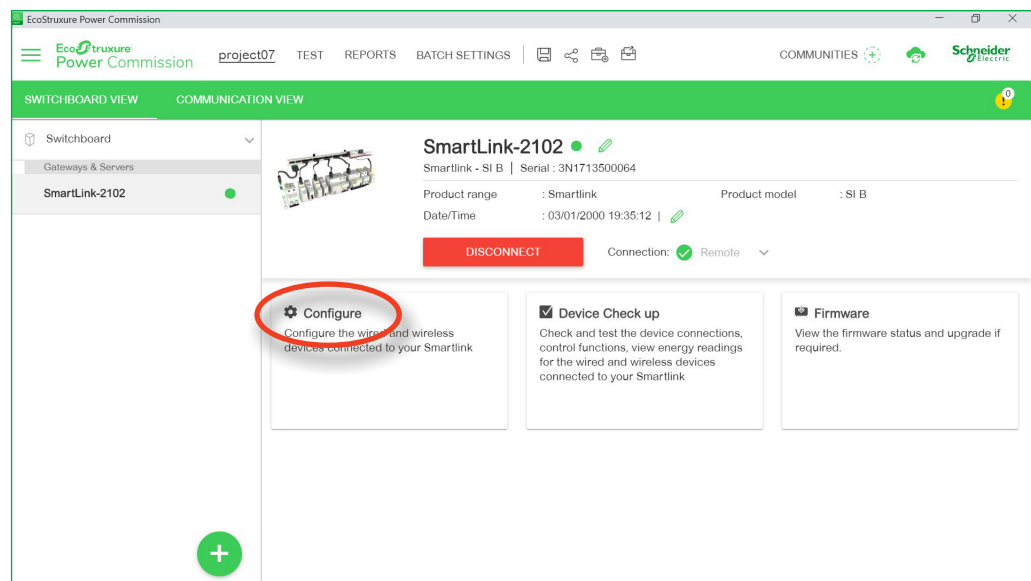
PowerTag wireless sensors are configured with EcoStruxure Power Commission software.

How to pair PowerTag sensor with Acti9 Smartlink with EcoStruxure Power Commission

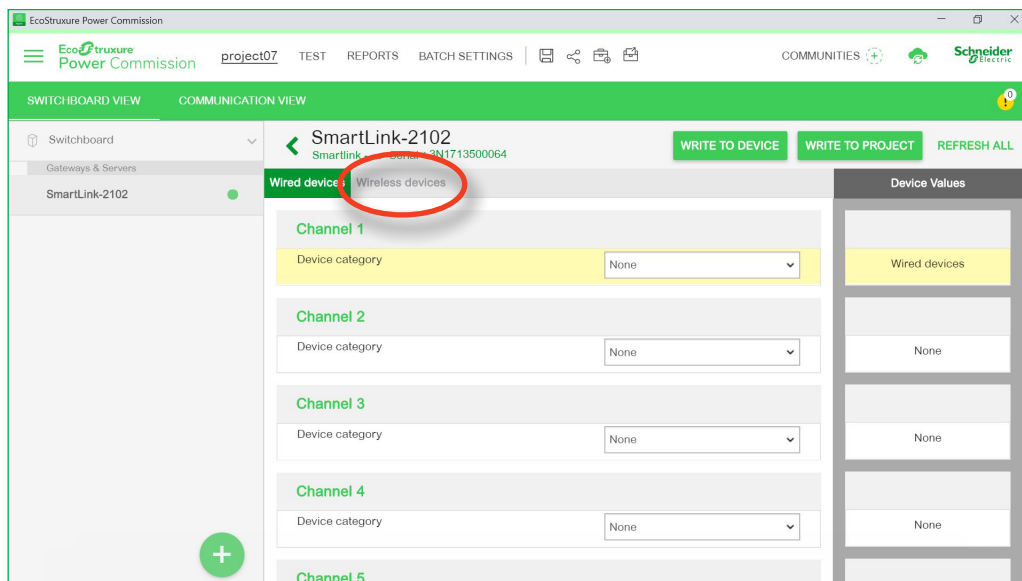
Note: EcoStruxure Power Commission software provides a locating function. Click the "Locate" button in front of the PowerTag to start the LED blinking and identify the correct PowerTag.



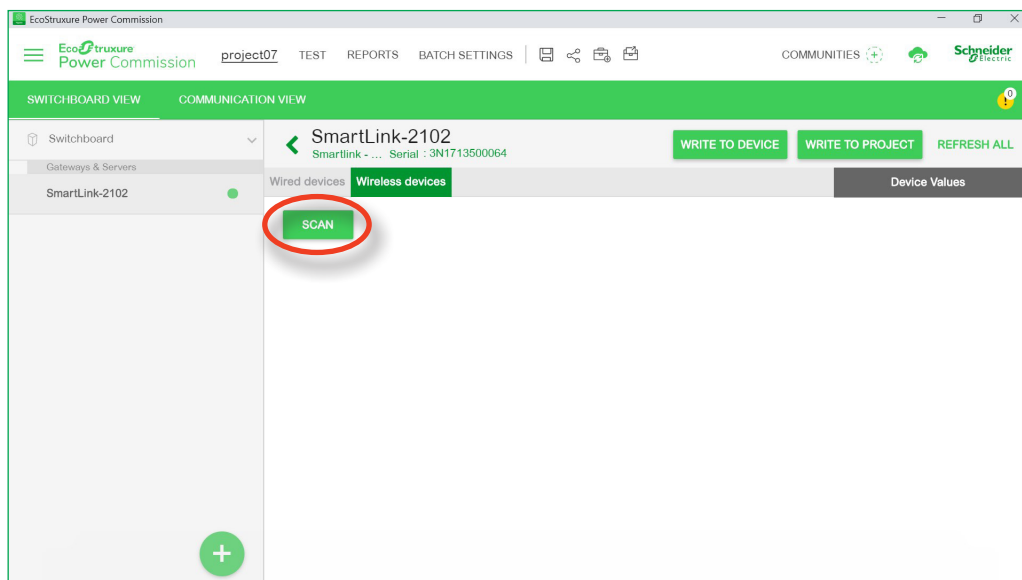
1. Click on "CONNECT TO DEVICE."



2. Click on "Configure."



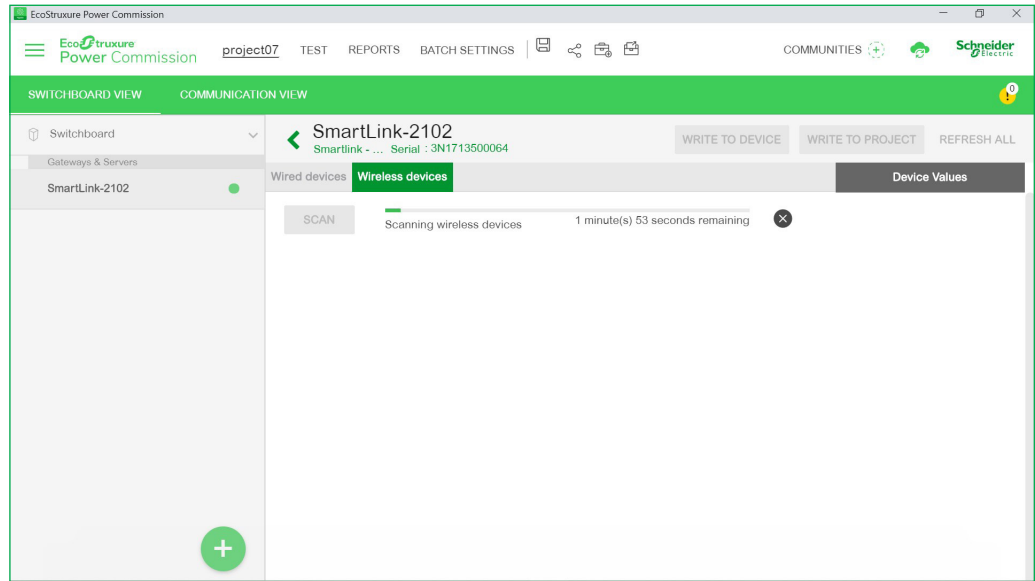
3. Click on "WRITE TO PROJECT." Then, click on "Wireless devices."



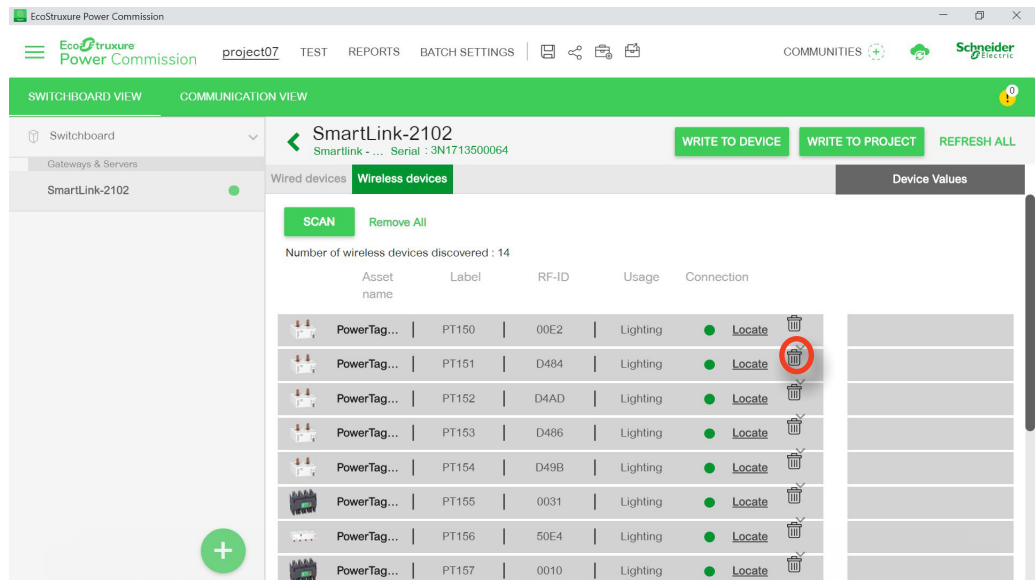
4. Click on "SCAN."

EcoStruxure™ Power Commission

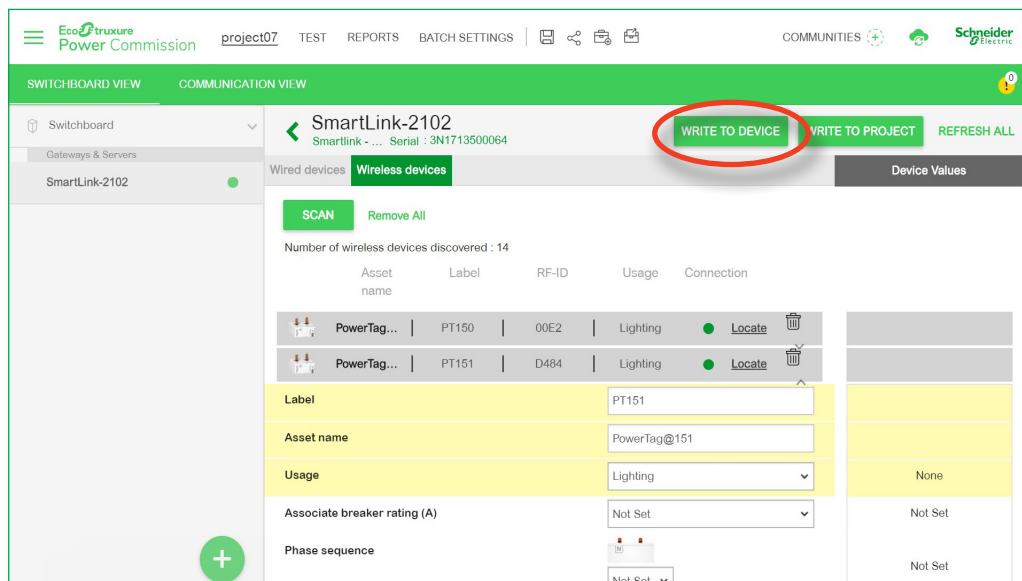
1



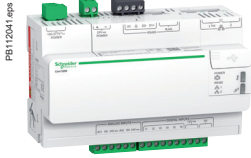
5. Wait around two minutes for scan to complete.



6. Click on the arrow of your PowerTag to see information about it.



7. You can modify the label, asset name, and usage for those located.
8. After modifying the information, click on "WRITE TO DEVICE."



1.6. First start

The set up of Com'X is completely carried out using the embedded webpages. For a general configuration overview, please refer to the **Com'X user manual** where you will have further information on:

- Windows device discovery (DPWS),
- Com'X provides a DHCP server by default on port E2; it will automatically attribute an IP address to the computer so that it can connect easily to the Com'X default IP address: 10.25.1.1. The DHCP server delivers addresses from 10.25.1.65 and provides a free addressing zone between 10.25.1.2 and 10.25.1.64 (use if setting a static IP address in your system).
- Wifi USB dongle, Com'X as an access point with nothing to configure:
 - A convenient way to configure the Com'X when access is difficult or to avoid requesting an IP from the customer network ("Private" Wifi network of Com'X)
 - Galvanic isolation with Wifi.

> see [How to access Com'X configuration webpage](#)



Com'X provides access to its webpages in HTTPS. To enable this you may be asked to provide a certificate which is delivered by your information system provider. (Certificates are linked to your Domain Name Server).

At this stage it is strongly recommended to get the serial number of Com'X to connect further the electrical installation to EcoStruxure™ Facility Expert. Refer to section 5.2.2.

1.7. Check Firmware version

The firmware of Com'X, which is compliant with EcoStruxure™ Power, is available on Schneider Electric's website, on the "Documents and Downloads" section of the product page. See the following video on checking the firmware version.

> see [How to check the firmware version of Com'X](#)



1.8. Adding devices in Com'X

1.8.1. MasterPact MTZ configuration

> see [How to configure MasterPact MTZ in Com'X](#)



1.8.2. Compact NSX configuration

> see [How to configure Compact NSX in Com'X](#)



1.8.3. Acti9 Smartlink configuration

> see [How to configure devices connected through Modbus gateway Smartlink in Com'X](#)



> see [How to configure Acti9 PowerTag sensor in Com'X](#)



1.9. Network setting



RECOMMENDED PRACTICE

Do not connect your electrical installation without Firewall. Devices connected to Internet and Internet Firewall must be updated.

1.9.1. Basic setting

> see [How to configure Com'X to connect to Ethernet Networks](#)



1.9.2. Advanced setting: use of Proxy

The IT department of the building very often requires the outgoing traffic to go through a proxy.

In that case it is mandatory to configure the Com'X to use this Proxy (because the direct access from the Com'X to the internet will be blocked by the Firewall of the site).

If the network administrator has set up a proxy or a firewall, verify that he has authorized the following HTTPS endpoints to allow the Com'X to communicate with the Facility Expert server:

- https://*.azure-devices.net:443
- <https://bootstrap.gl.struxurewarecloud.com:443>
- <https://remoteshell.rsp.schneider-electric.com:443>

1.10. Cloud connection

This section shows the connection of the Com'X with DSP (Digital Service Platform of Schneider Electric) that will manage a reliable connection with EcoStruxure™ Facility Expert.

> see [How to configure Com'X to send data to EcoStruxure™ Facility Expert](#)



1.11. Events activation

EcoStruxure™ Facility Expert mobile app provides automatic notification to mobile device in case of main electrical fault. They are considered as predefined events built for each model type of LV circuit breaker (MasterPact MTZ - NT -NW, PowerPact).

The user needs to activate the feature in Com'X and select the relevant ones to be monitored in EcoStruxure™ Facility Expert mobile app later on.

> see [How to activate alert in Com'X](#)



1.12. Publication

The final step activates the data publication from Com'X to EcoStruxure™ Facility Expert.

> see [How to start data publication in Com'X](#)



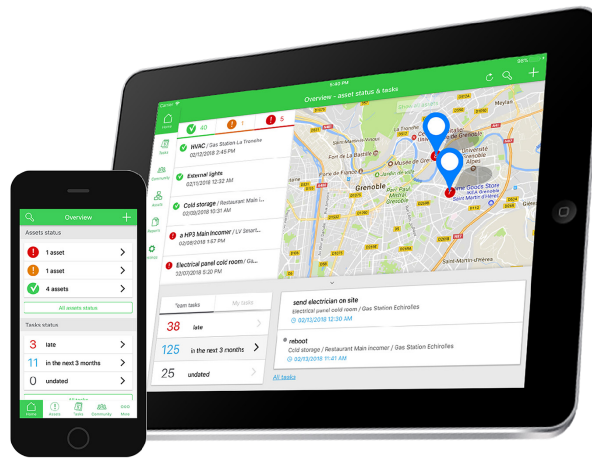
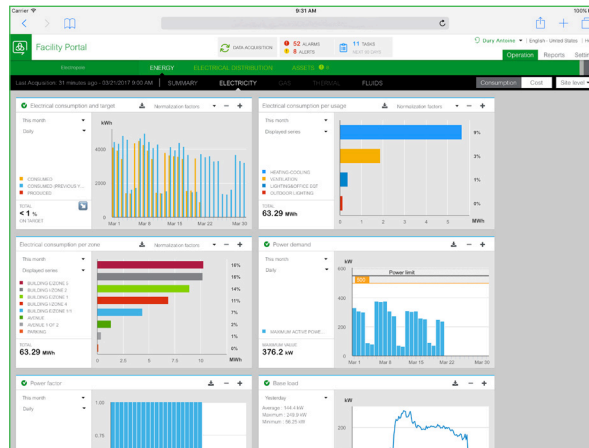
3.1. Introduction



RECOMMENDED PRACTICE

Use Com'X 210 if only the cloud based application is required without local energy management. Settings are identical to Com'X 510 for EcoStruxure™ Facility Expert.

EcoStruxure™ Facility Expert is a cloud based software available on PCs and mobile devices that provides valuable information on energy costs and on asset conditions along with tools to manage the maintenance activities.



The setup of EcoStruxure™ Facility Expert is carried out completely using the web portal.

3.2. Prerequisites

This chapter contains information about the elements and data that have to be collected before starting to commission EcoStruxure™ Facility Expert.

3.2.1. User account and EcoStruxure™ Facility Expert subscription

You need to have:

- A valid EcoStruxure™ Facility Expert account with login and password. To obtain an account, contact your local Schneider Electric representative.
- At least one available EcoStruxure™ Facility Expert Smart Power subscription.

3.2.2. Data required to set up EcoStruxure™ Facility Expert

Data required to create a customer

- Name ^[1]:
- Email:
- Country ^[1]:
- Activity ^[1]:

[1] Mandatory

Data required to create a site

- Name ^[1]:
- Address ^[1]:
- Zip code ^[1]:
- City ^[1]:
- State ^[1]:
- Time zone ^[1]:
- Surface area:

[1] Mandatory

Data required for the company data agreement signature

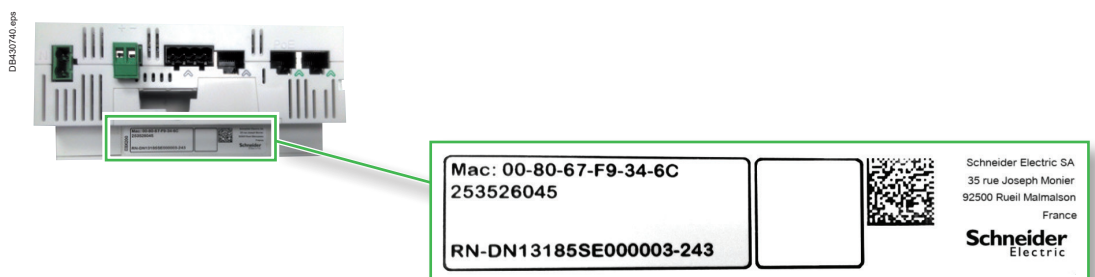
At the end of the setup, an email is sent to the building owner or the responsible party to sign the company data agreement.

Until the terms and conditions are signed, data will not be exported from the site to EcoStruxure™ Facility Expert.

Com'X serial number

You will have to pair the Com'X with the site using the serial number of the Com'X. It can be found in the Com'X embedded webpage, in the About area or on top of the product, as displayed in the figure below.

It starts with RN-DN:



3.3. Initial setup

In this step, you will:

- create a customer and a site,
- assign an EcoStruxure™ Facility Expert subscription to the site and pair the Com'X to the site,
- retrieve all devices configured in the Com'X.



RECOMMENDED PRACTICE

Ensure that the person responsible for the site data (Building owner or facility manager) has signed the terms and conditions received in his/her email box.

On the EcoStruxure™ Facility Expert web portal, select the **Settings Menu > Setup wizard tab** and follow each step of the wizard.

> see [How to set up EcoStruxure™ Facility Expert](#)



Check that all devices have been properly retrieved with the correct measurements.

Energy meters will be automatically declared in EcoStruxure™ Facility Expert.

In case the number of meters exceeds the number of meters subscribed with Smart Power license, you should declare in EcoStruxure™ Facility Expert the meters used for energy monitoring:

> see [How to declare energy meter in EcoStruxure™ Facility Expert](#)



3.4. Declaring circuit breaker asset

In this step, you will:

- check the devices you want to manage as an asset.

> see [How to declare circuit breaker asset in EcoStruxure™ Facility Expert](#)



Check that the events have been created for:

- Schneider Electric circuit breakers that you have declared as an asset.

3.5. Creating a panelboard asset and pairing an alarm to the panelboard

Check that custom events which have been configured in Com'X have been created in EcoStruxure™ Facility Expert Energy.

In this step, you create an asset of type electrical panelboard and pair the custom events that you have configured in the Com'X to the panelboard. For example, this will enable you to receive a notification on your smartphone when an Acti9 circuit breaker trips.

On the EcoStruxure™ Facility Expert web portal, select the **Settings Menu > My Customer and Sites**.

Select your site in the treeview and click on the button Create new asset.

> see [How to create a panelboard asset and pair OF/SD alarms in EcoStruxure™ Facility Expert](#)



Additional alarms can be attached to the same asset.



3.6. Checking the assets import in the mobile application

In this step, you check on EcoStruxure™ Facility Expert mobile app that:

- all assets have been correctly imported,
- the maintenance plan is generated for MasterPact circuit breakers,
- you receive a notification on your smartphone when an alarm is triggered.

> see [How to manage my asset with alert notification in EcoStruxure™ Facility Expert](#)



Download EcoStruxure™ Facility Expert mobile application:



3.7. Optional settings

3.7.1. Invite a user

On the EcoStruxure™ Facility Expert web portal, select the **Settings Menu > My Customer and Sites**.

In the section **User management** of a site, you are able to invite a new user as a Site Administrator or a Site Viewer. He will receive an email to create his account for EcoStruxure™ Facility Expert.

	Site Administrator	Site Viewer
Web portal		
Access to the site energy dashboards	■	■
Access to site settings	■	
Mobile app		
View assets information and tasks	■	■
Modify assets /create log intervention	■	
Receive events notification	■	possible
Create and assign tasks	■	

3.7.2. Energy dashboard settings

On the EcoStruxure™ Facility Expert web portal, select the **Settings Menu > My Customer and Sites**.

In the section **Energy** of a site, you are able to set:

- power demand limit,
- monthly targets for main consumptions,
- monthly consumptions of previous years.

3.7.3. Energy events settings

On the EcoStruxure™ Facility Expert web portal, select the **Settings Menu > Events**.

Clicking on each Energy events, you are able to:

- set threshold for Power demand and Power Factor alarms,
- enable/disable alarms,
- select the recipients of the alarms to be notified through email.

3.7.4. Asset events settings

In the EcoStruxure™ Facility Expert mobile app, in **More > User Name / Settings > Notification**, you are able to activate or deactivate the notifications of new log, new alarm or new tasks.

Troubleshooting on Com'X

For any questions concerning the Com'X, refer to the troubleshooting section of the Com'X 210/510 User Guide.

Create/Set Up a Site in EcoStruxure™ Facility Expert

If	Then
The desired service reference is not available to create a site.	Contact your local Schneider Electric representative to confirm that you have subscribed to the correct service offer.
The Com'X cannot be paired to the site.	<ul style="list-style-type: none">■ Check Com'X serial number.■ Check that the Com'X is not already paired to another site.■ Contact Schneider Electric technical support at 888-778-2733.

Setting Up and Configuring the Com'X for EcoStruxure™ Facility Expert

If	Then
The Com'X cannot connect to the EcoStruxure™ Facility Expert server.	If connected on the Ethernet port, check that there is no proxy present to set. If it is the case, contact your network administrator.
	If connected on the Ethernet port, it is possible that your DNS server is not compatible with Schneider Electric server. Temporarily try the Google DNS address 8.8.8.8 and then contact Schneider Electric technical support.
	Execute a Com'X restart.
The Com'X is not connected to the Facility Insights server.	Save your configuration if needed and execute a factory reset. Load the configuration file again and try reconnecting to the remote platform.
	Check that the Com'X has been properly registered in EcoStruxure™ Facility Expert.
Configuration of Com'x has to be duplicated	User should configure manually both Com'X. The duplication of configuration is not recommended.

Modifying a custom event on OF/SD

If	Then
You update a custom event in Com'X	Pair again the asset in EcoStruxure™ Facility Expert in the event tab. If necessary fill in the causes, potential result and recommendation fields.

Testing Publication / Data Import in EcoStruxure™ Facility Expert

If	Then
Following a successful publication, the Com'X name has not been upgraded and the devices do not appear in EcoStruxure™ Facility Expert tree view.	Refresh the page (Ctrl+F5). Sign out and sign back in your EcoStruxure™ Facility Expert account. Launch again a publication test. Wait 15 minutes and refresh the page. Contact Schneider Electric technical support.
No usage is displayed in the widget Consumption per usage or no zone is displayed in the widget Consumption per zone . There is no value in the electrical distribution widget.	Check that the fields Usage, Building, Floor, and Zone have been properly filled in the EcoStruxure™ Facility Expert settings tab. The meter Main Meter is not displayed in those widgets. Eight usages and eight zones can be displayed in default widget size and up to 20 usages and 20 zones in larger widget size. Check that the Switchboard Incomer check box has been selected for one of the devices in the EcoStruxure™ Facility Expert settings tab.
Some widgets are missing values.	Check the time range displayed.
There is no value in the Baseload widget.	This widget displays values from the day before.
The circuit breaker dashboard is incomplete.	Check that the circuit breaker has been properly instrumented with the complementary module (BSCM for PowerPact circuit breakers).
There is no circuit breaker in the list of Assets.	Check that the is active check box has been selected for the relevant circuit breakers in the EcoStruxure™ Facility Expert Settings tab.
A wrong device has been configured in the Com'X.	Use the function Replace the device in the Com'X, publish data. Data history is kept.
Notification is not received on EcoStruxure™ Facility Expert Mobile App	Wait 2 min and refresh the EcoStruxure™ Facility Expert mobile App.

Default settings and password

The default configurations are shown below:

To activate default configurations, > refer to the device user guides listed in the reference documents.

DHCP client (Default ADDR* =169.254.YY.ZZ**)

Login: admin

Password: admin



SmartLink Ethernet or SmartLink SI B



SmartLink SI D

E1 = E2

Client DHCP (Default ADDR* =169.254.YY.ZZ**)

Login: Administrator

Password: Gateway



IFE

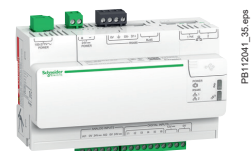
E1<>E2

E1: DHCP client (Default ADDR* =169.254.YY.ZZ**)

E2: DHCP server (ADDR 10.25.1.1)

Login: admin

Password: admin (after first access, user is requested to change it)



Com'X

Troubleshooting

Firmware installation and upgrade recommendations

It is important to consider your firmware in the context of the system.

In some situations, adding and updating devices potentially creates inconsistencies for communication and firmware upgrades. It is therefore important to review your firmware upgrade plan with respect to other devices in your system. If the firmware creates inconsistencies, the system may be subject to limitations or unexpected behavior.


Firmware precautions

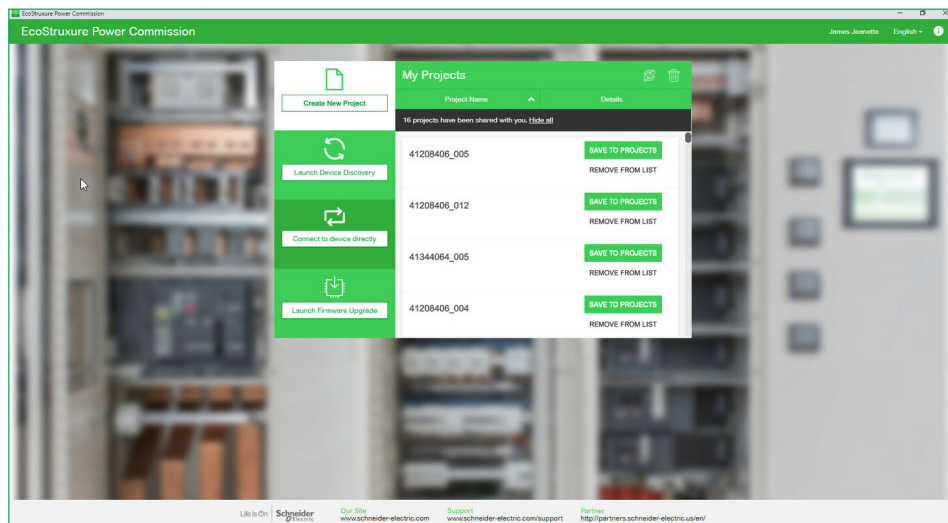
Please follow the precautions below during a firmware installation or update:

- Please check the Minimum Supported Baseline to ensure the firmware version is compatible with other devices.
- Ensure that a verification plan is prepared and executed to verify that the product behavior and communication is as planned.
- It is recommended to perform a firmware upgrade during non-peak hours as the product cannot operate normally until the upgrade is complete. This may result in some abnormal communication and perceived unresponsiveness.
- In some situations, the firmware upgrade may require the upgraded device to power cycle.

How to check the firmware version

It is important to manage the Smart Panels firmware to allow the full set of features. Each device should be updated to ensure optimal communication and compliance of the modules. Most Enerlin'X products can be connected to EcoStruxure Power Commission, a Windows-based application, to check the firmware compatibility. Customers are encouraged to connect to EcoStruxure Power Commission and run the compatibility check to ensure the system is coherent.

EcoStruxure Power Commission software provides the current baseline for Smart Panels components, by clicking on the help button  :



Then click on Device firmware baseline to get the current baseline compatibility or view the old one. EcoStruxure Power Commission only allows to upgrade the firmware.

In addition, product versions can be found via the device webpages or on the splash screen during product startup. For more information, please refer to the user guide for the product at se.com/us.

The EcoStruxure Power Commission compatibility check is used for PowerPact (MCCB), MasterPact (ACB), and Acti9 SmartLink devices. As a result, Enerlin'X devices that are not part of these product lines (e.g. Com'X, iEM, PM) should be manually verified with the Enerlin'X Communication Components Minimum Supported Baseline.

In some cases, the firmware in the Enerlin'X system needs a physical component change to ensure correct behavior. Please ensure that the product date code printed on the product sticker is higher than the number mentioned in the Enerlin'X Communication Components Minimum Supported Baseline table accessible from the EcoStruxure Power Commission software.

Firmware update tools

Most Enerlin'X products can be updated via EcoStruxure Power Commission. Supplementary firmware downloads (e.g. Com'X can be loaded onto products via a USB key. EcoStruxure Power Commission software provides a one-click upgrade for:

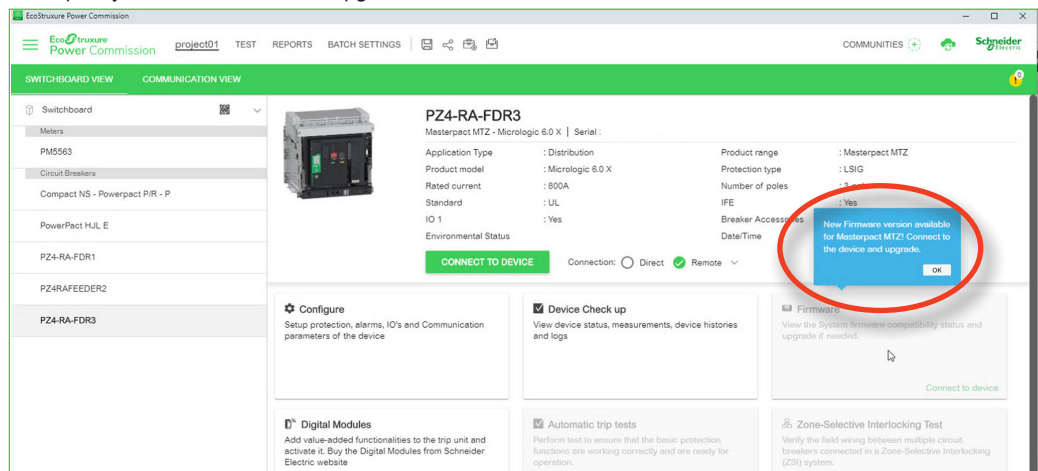
- The ULP system
- The Acti9 Smartlink system.

From EcoStruxure Power Commission project, launch Firm ware Upgrade:

> see [How to check devices firmware baseline with EcoStruxure Power Commission](#)

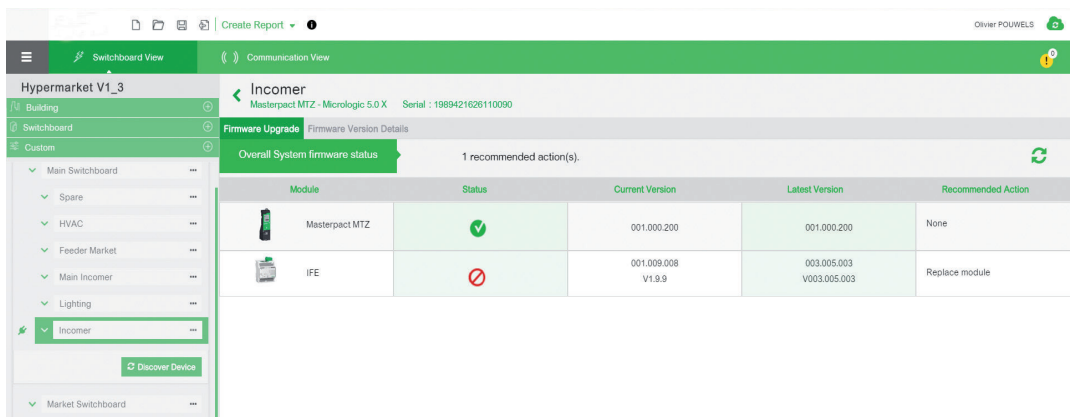


When connecting to a device, EcoStruxure Power Commission will inform you in case of firmware baseline discrepancy. It is recommended to upgrade the device with the latest firmware available.



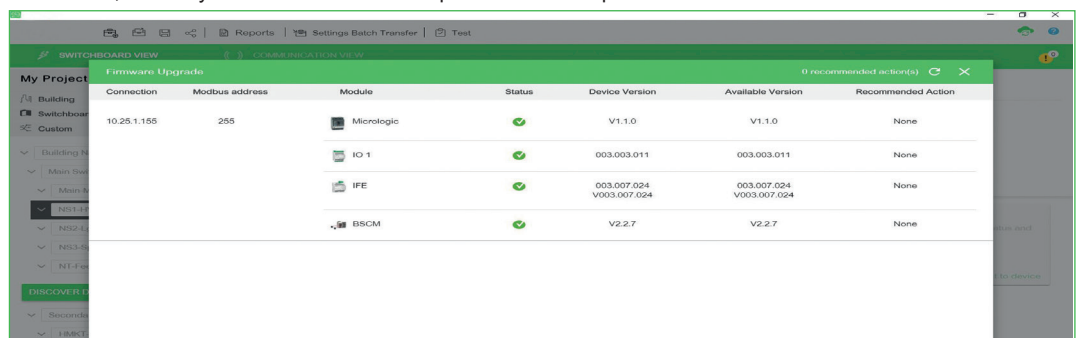
Device firmware discrepancy

In some cases, EcoStruxure Power Commission may highlight hardware discrepancy. It implies to change the device.



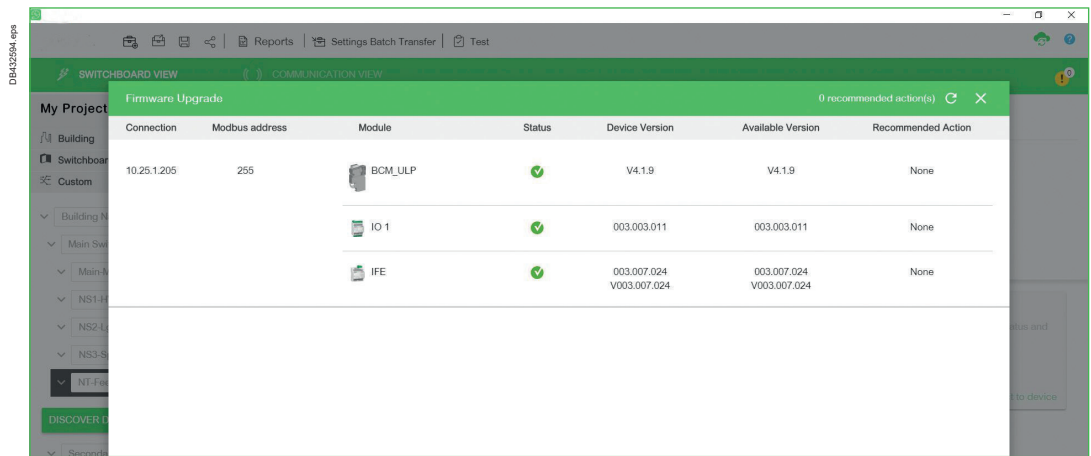
Hardware module discrepancy

In this case, contact your Schneider Electric representative to replace the obsolete module.

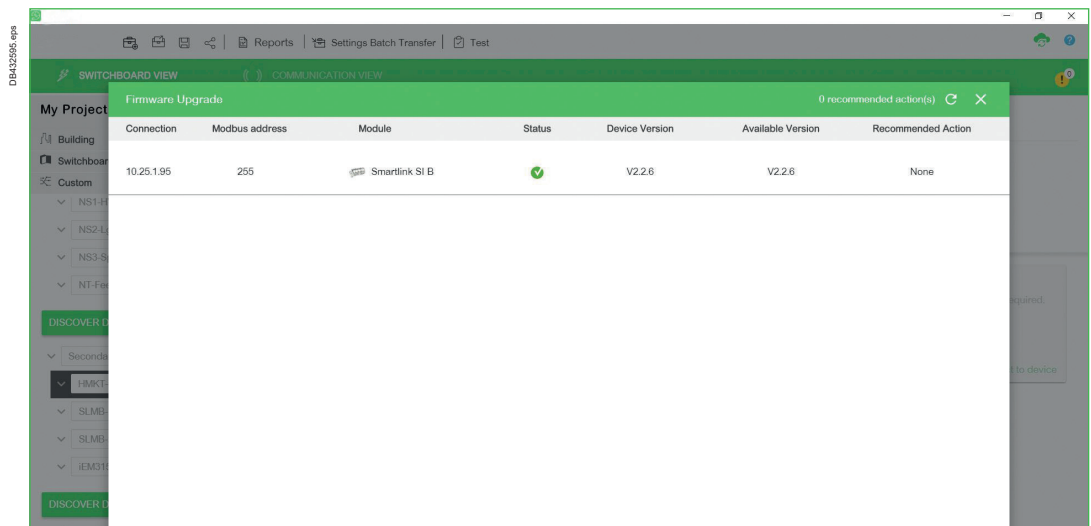


Firmware upgrade of IFE / IO / PowerPact circuit breakers

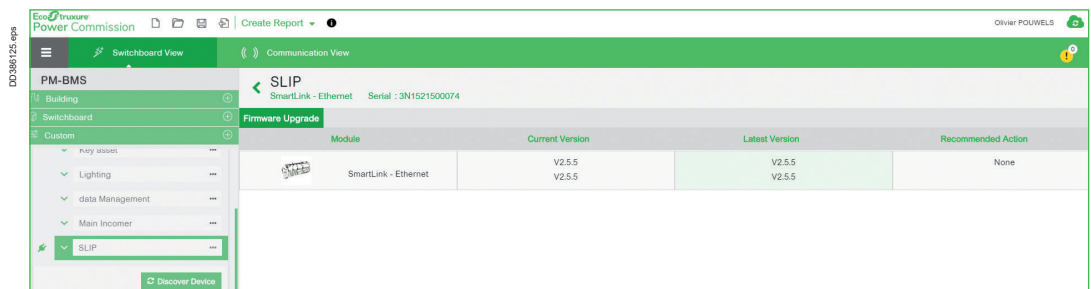
Troubleshooting



Firmware upgrade of IFE / IO / MasterPact NT

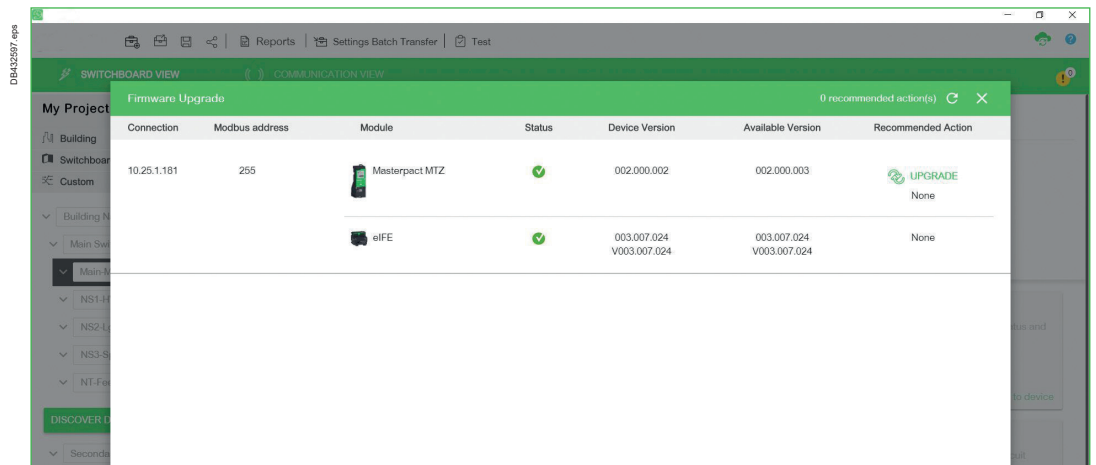


Firmware upgrade of Acti9 SmartLink SI B



Firmware upgrade of Acti9 SmartLink Ethernet

Note that in this last screenshot, the upgrade is not offered to the user as the "Current Version" is equal to the "Latest Version."



Firmware upgrade of MasterPact MTZ

Firmware upgrade Acti9 Smartlink

> see [How to upgrade the firmware of my Acti9 Smartlink](#)



ULP system

Each Enerlin'X product using the ULP system provides a ULP LED diagnostic status. The tables below provide the ULP LED blink code pattern and associated Mode/Action:

ULP LED	Mode	Action
	Nominal	None
	Conflict	Remove extra ULP module
	Degraded	Replace ULP module at the next maintenance operation
	Test	None
	Non-critical firmware discrepancy	Upgrade firmware at the next maintenance operation
	Non-critical hardware discrepancy	Replace ULP module at the next maintenance operation
	Configuration discrepancy	Install missing features
	Critical firmware discrepancy	Upgrade firmware
	Critical hardware discrepancy	Replace ULP module
	Stop	Replace ULP module
	Power OFF	Check power supply

ULP system LED diagnostic status

Troubleshooting

Ethernet network

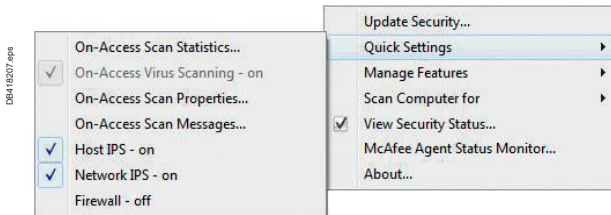
On some computers, DPWS is blocked by the firewall. If your firewall blocks the ping, it should be temporarily disabled. Alternatively, request support from your local IT service to enable the DPWS service:

- In the Windows notification area, right-click on the firewall icon (example with McAfee):

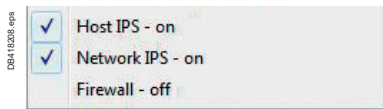


Windows task bar

- Open the 'Quick Settings' menu and uncheck the 'Firewall' item:



- Open the 'Quick settings' menu again and check that the 'Firewall' item is disabled:



Deactivation of the firewall

Procedure to connect to Enerlin'X devices with a computer running Windows XP:

DPWS is not supported by Windows XP or previous versions of Windows OS.

If Windows XP is being used, a connection can be made to the Enerlin'X devices with Ethernet.

The steps to manually change the IP address of the computer in order to reach the device webpages are outlined below:

Step	Action
1	Disconnect your local computer from the local area network (LAN) and switch off Wi-Fi.
2	Connect an Ethernet cable from the computer to the Enerlin'X IFE or Acti9 Smartlink Ethernet.
3	Start Internet Explorer 8+, Mozilla Firefox 15+, Chrome 24+ or later versions. Note: the computer should automatically use the default IP address 169.254.## (# = 0 through 255 and the default subnet mask 255.255.0.0).
4	In the address text box, type 169.254.YY.ZZ where YY and ZZ are the last 2 bytes of the IFE MAC address (found on the IFE side label) or Smartlink Ethernet IP address (found on the Smartlink Ethernet top label), then press Enter. The home page opens in your browser. For example: for an IFE with MAC address 00-B0-D0-86-BB-F7, or 0-176-208-134-187-247 in decimal, type 169.254.187.247 in the address text box.
5	Press Enter. The login page automatically opens in your browser.
6	Type user name and password. The home page automatically opens in your browser.

Com'X acts as a DHCP server on the Ethernet 2 port by default. Connect the computer via LAN to the E2 in the Com'X and type 10.25.1.1 in the address text box to access the Com'X.

In both cases, the computer should use DHCP and not a static IP address.

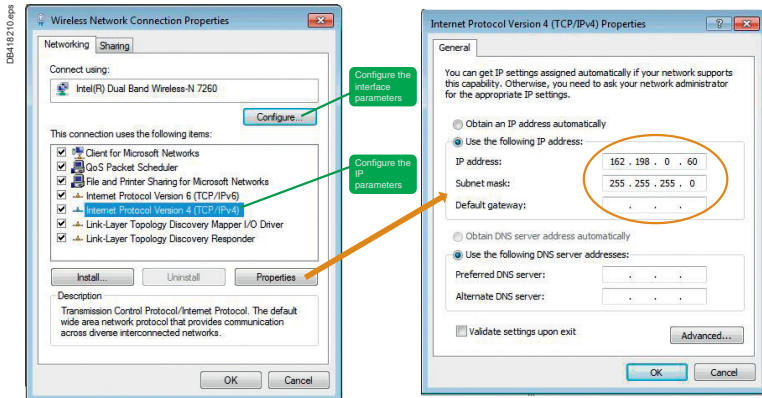
To verify the setting, open a DOS command shell (Start\All Programs\Accessories\Command Prompt) and type the "Ipconfig" command line.

Click "Enter" keyboard. The following information should be displayed (language will vary based on your OS settings):

```
DB418210.eps Wireless LAN adapter Wireless Network Connection:
Connection-specific DNS Suffix . . . :
Link-local IPv6 Address . . . . . : fe80::4c62:277a:273d:7ea6%12
IPv4 Address. . . . . : 10.196.157.46
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 10.196.157.1
```

IPconfig DOS command

Verify that the IP address is the default one (e.g. static addressing is not enabled). If the parameters are not correct, force an IP address directly in your network configuration using the steps below:



Glossary

This section explains certain words or acronyms which might be unclear to a reader who does not know the system or the environment.

Term	Description
ACB	Air Circuit Breaker - MasterPact
Acti9 Smartlink	Modular communication system for final distribution
BMS	Building Management System
DHCP	Dynamic Host Configuration Protocol
DPWS	Devices Profile for Web Services
DSP	Digital Service Platform
EcoStruxure Power Commission	Configuration software for LV circuit breaker (MasterPact - PowerPact) and for Acti9 system
EMC	Electromagnetic Compatibility
EMS	Energy Management System
Enerlin'X	Name of the range of digital product in Schneider Electric
IT service	Information Technology service, manage the computers and network
LV	Low Voltage
MCB	Miniature Circuit Breaker - Acti9
MCCB	Molded Case Circuit Breaker - PowerPact
Modbus	Serial line protocol, also known as Modbus RTU
SMTP	Simple Mail Transfer Protocol
TCP/IP	Ethernet protocol
Ti24 connector	Prefabricated connector in the Acti9 system
WAGES	Water Air Gas Electricity Steam
EcoStruxure™ Facility Expert	Cloud based software for energy and asset management

Custom model creation for OF/SD in Com'X

The notification feature in Acti9 Communication System is not supported natively. The user needs to create a custom model as a contactor and then apply it to the selected unit. One custom model can be instantiated several times. Custom models are multiple and can be applied to other electrical device model of Com'X, refer to the Com'X manual.

> see [How to create custom model of OF/SD in Com'X](#)



> see [How to connect an OF/SD to Acti9 Smartlink in Com'X](#)



Custom event on OF/SD in Com'X

The next step consists of creating a notification from Acti9 Communication System circuit breaker is to create a custom event on the contactor custom model created in the previous section.

> see [How to create custom events on OF/ SD in Com'X](#)



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