

XW Pro
Commissioning Guide

solar.se.com

Life Is On Schneider Electric

Table of Contents

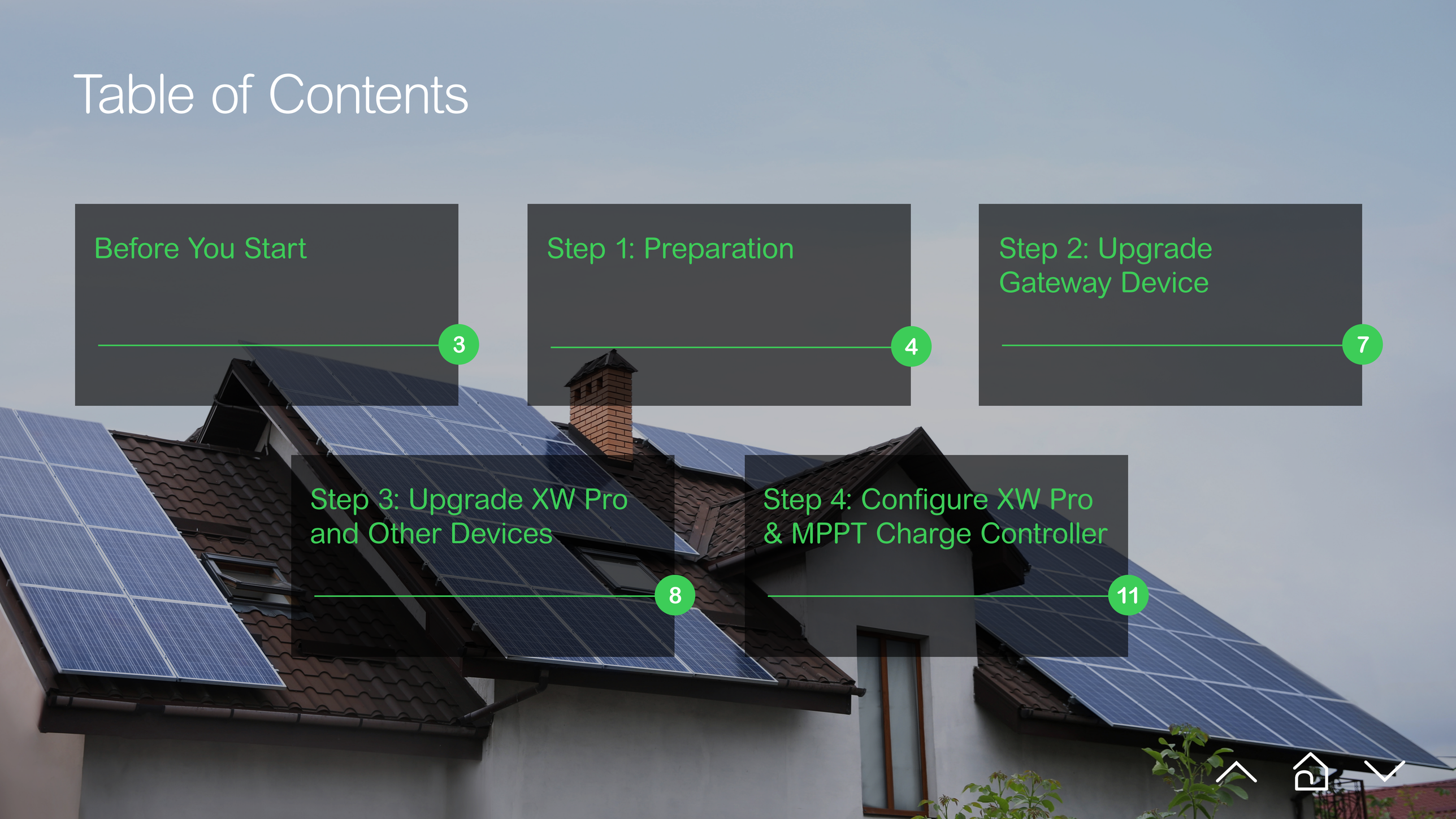
Before You Start 3

Step 1: Preparation 4

Step 2: Upgrade Gateway Device 7

Step 3: Upgrade XW Pro and Other Devices 8

Step 4: Configure XW Pro & MPPT Charge Controller 11



Before You Start

Congratulations on completing the installation of your solar system!

Now, it's time to move forward with the commissioning process. This guide offers you step-by-step instructions for commissioning a solar system equipped with a XW Pro hybrid inverter, MPPT charge controller, and Gateway/InsightHome/InsightFacility.

Please note that this commissioning guide is supplementary and refers to the relevant product manuals. We strongly advise reading the appropriate product manuals before proceeding. The primary documentation received with the product contains essential information on safety, specifications, installation, and operation, unless otherwise specified. Neglecting to follow these instructions may result in severe injury or even loss of life.



Step 1

Download the Latest Firmware

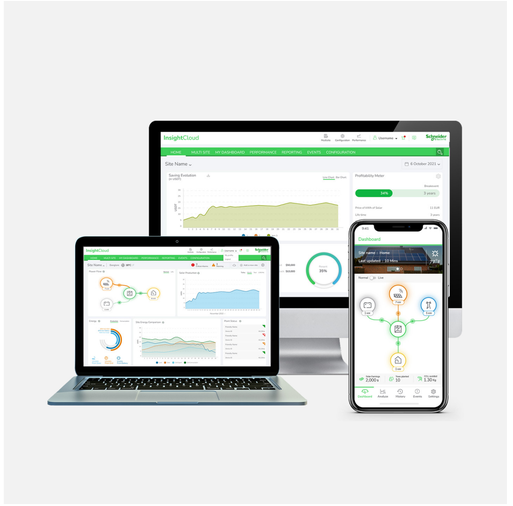
Begin by downloading the most recent firmware for all your devices through the product pages below. It is highly advised to complete this step prior to configuration. Refer to the instructions on the following page to locate the firmware files contained in ZIP format. Once downloaded, unzip the files and extract the .epkg or .xfo file into the root directory of a USB drive.



XW Pro Hybrid Inverter



Charge Controllers



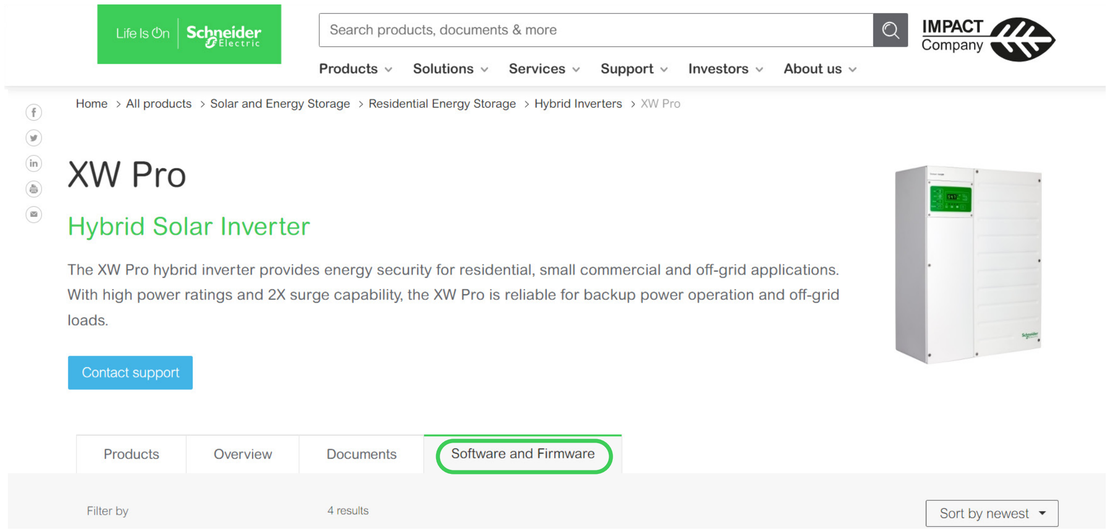
Insight Energy Management



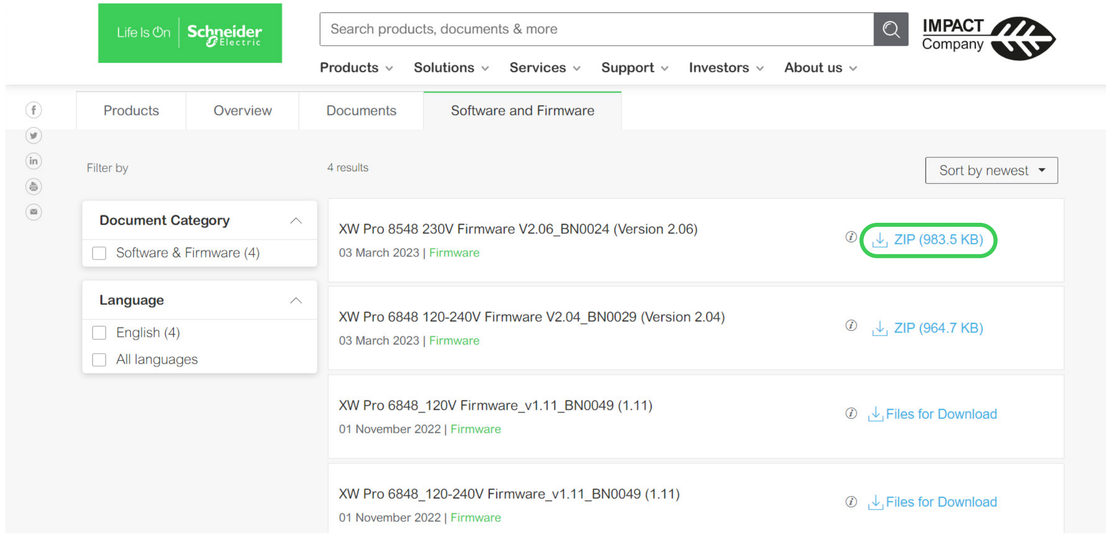
Accessories

Download the Latest Firmware

1. Visit your product page and click on **Software and Firmware.**



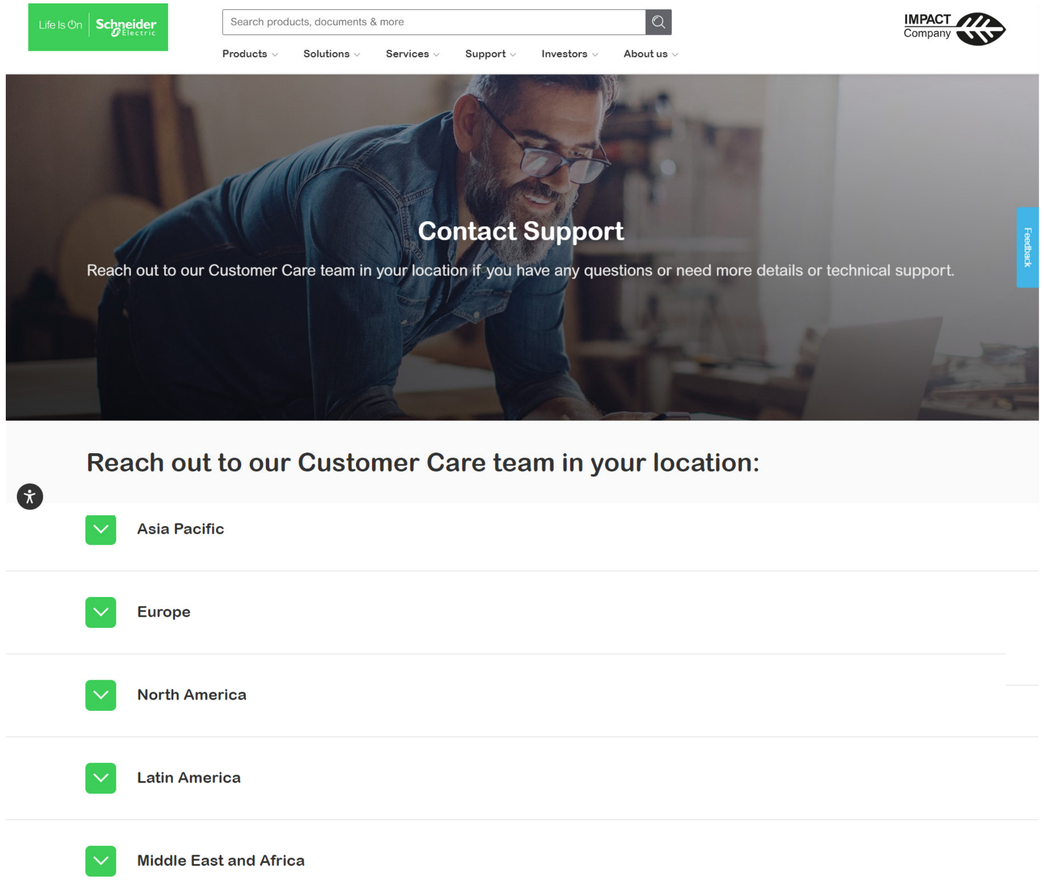
2. Scroll down and click to download the latest version.



Request XW Pro Region Settings Password

As part of the commissioning process, you'll need to set up a region code, which requires the password. We recommend requesting the password before visiting the site. Please note that the region settings password is exclusively shared to certified professionals.

To request your password, contact technical support in your geographical location via our website.



Step 2

Update the firmware of Gateway/InsightHome/InsightFacility

You can upgrade the gateway firmware via USB or through your gateway device's web application*, InsightLocal.

1. To initiate the update to the firmware:

    a. Insert the USB drive into your Gateway, InsightHome, or InsightFacility device port.

    b. The gateway device will beep once and the LED will blink while the firmware is copied to the device and the upgrade is performed. This can take 5 – 10 minutes.

    c. If the update takes more than 10 minutes, make sure that the .epkg file is copied correctly into the root directory.

    d. **Important:** Once the USB drive is inserted, do not turn off your gateway device.

2. Once the firmware upgrade is done, the gateway device emits two beeps and the LED indicator stops blinking.

3. Remove the USB drive.

4. To complete the firmware upgrade process, manually reboot your gateway device by pressing the power button for five seconds until you hear a beep.



How to Update the Firmware of Gateway/InsightHome/InsightFacility

View Video

*We recommend a hardwired connection from the internet port of the Gateway device to the LAN port of your router, but you can also access InsightLocal via network Wi-Fi.If you prefer the latter method, please refer to the Owner's Guide for your Gateway device.

Step 3

Ugrade the XW Pro Firmware

You can upgrade the XW Pro's firmware through your gateway device's web application*, InsightLocal.

1. Before upgrading the XW Pro, make sure that you read the "Read Me First" document (PDF file included in the zip file) and follow the instructions.

2. On your laptop/tablet, go to your Wi-Fi settings and locate your gateway.

   a. Android: Settings > Connections > Wi-Fi > Select Gateway

   b. iOS: Settings > Wi-Fi > Select Gateway

   Wi-Fi password is on the back of the gateway device.

3. Open a web browser and type the IP address, **192.168.100.1**, in the address bar.

4. Log into InsightLocal. Refer to the first-time login information in the Gateway/ InsightHome/InsightFacility Owner's Guide.

5. In the main menu bar, click on **Devices.**



How to Update the Firmware of XW Pro

View Video

*We recommend a hardwired connection from the internet port of the Gateway device to the LAN port of your router, but you can also access InsightLocal via network Wi-Fi.If you prefer the latter method, please refer to the Owner's Guide for your Gateway device.

Ugrade the XW Pro Firmware (Continued)

6. Put the XW Pro into Standby mode first. This will stop power production. If power is needed for backup loads during this process, put the system in AC Bypass either by using interlock breakers in the PDP/mini-PDP, BCS, or external bypass switch.

   a. Click the device you want to put into Standby mode.

   b. Select **Configuration > Controls**.

   c. Search for the control setting Operating Mode

   d. Choose Standby.

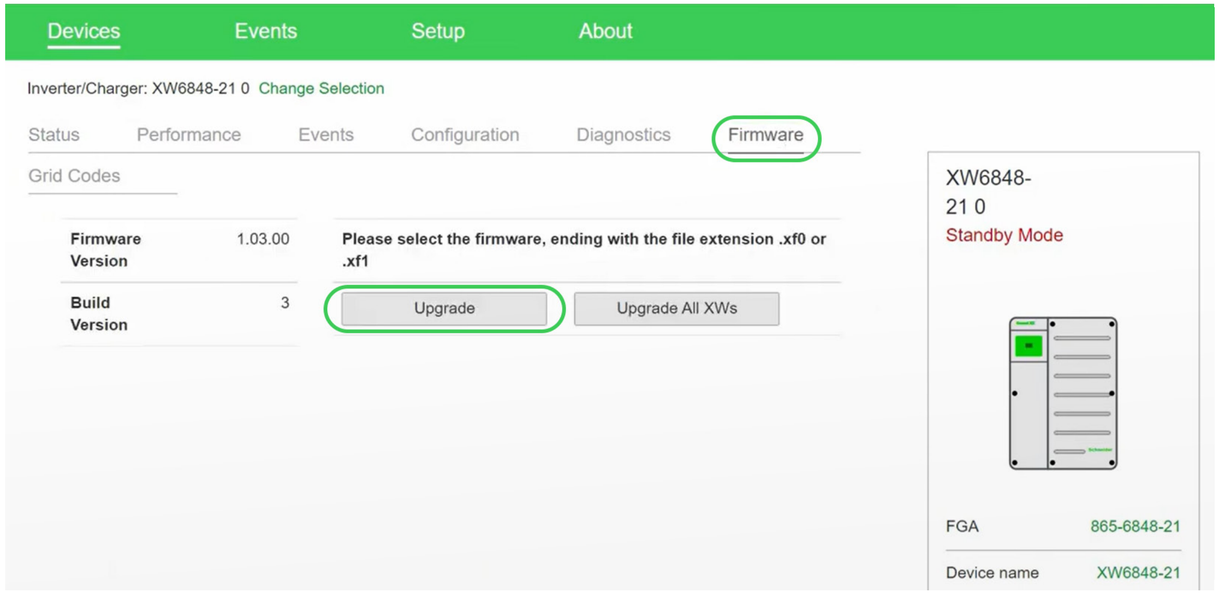
   e. Click Apply.

7. Go to the Firmware tab.

8. Select Upgrade.

9. Follow the upgrade instructions step-by-step.

10. Use the Operating Mode menu to put the device back into normal operating mode.



Set the Region Code

After the latest firmware is loaded to the XW Pro, you can set up region code.

1. Restore each XW Pro in the system to ALL factory defaults by choosing the XW Pro device, then click **Controls**. Select **Reset All Settings to Factory** from the Reset dropdown menu and click **Apply.**

2. Click on **Setup** in the menu bar and then select **Region Settings.**

3. Enter the password that you obtained in step 1 and select **OK**. Choose the appropriate region for your utility. (Pro tip – For off-grid, select IEEE 1547-2003.)

If applicable, upgrade other devices following the same process as the XW Pro firmware upgrade. Each device will have a dedicated “Firmware” tab.



How to Set Region Code for XW Pro

View Video

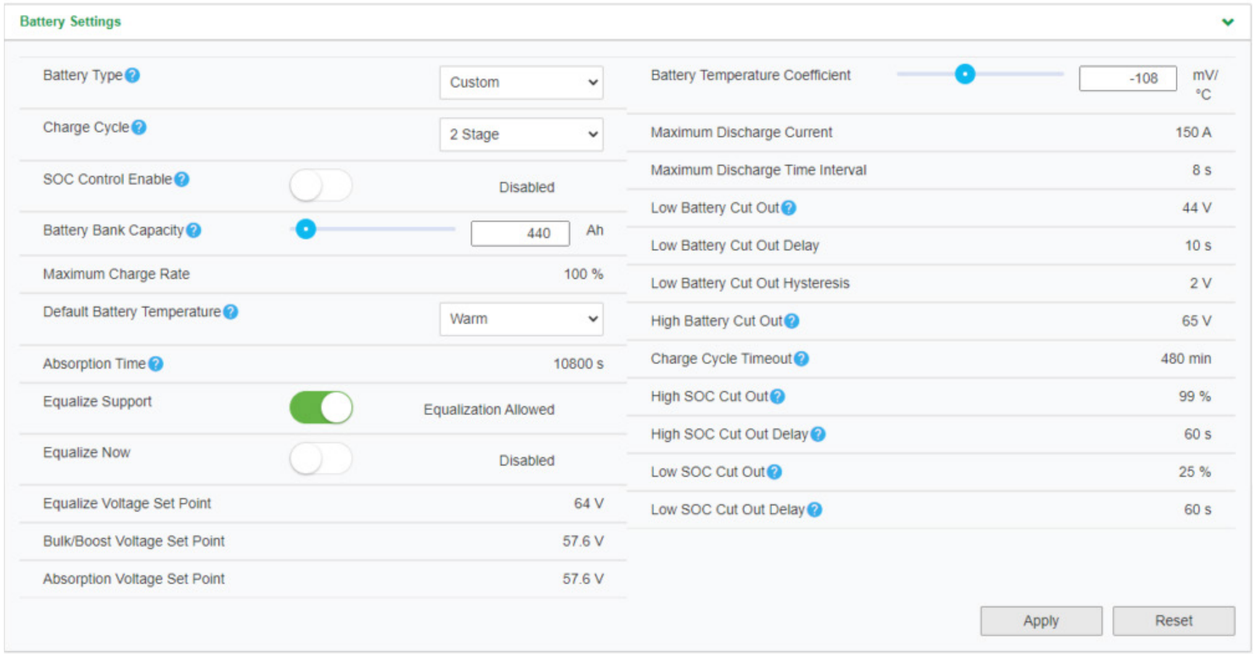
Step 4

Configure the XW Pro

Now both your gateway device and XW Pro are up to date. Let's start programming the XW Pro for your system using InsightLocal. The instructions below are for open-loop batteries.

Battery Charging Configuration

1. In InsightLocal, Click on **Devices** in the menu.
2. On the left-hand side menu bar, click on **Inverter/Chargers.**
3. Click on the inverter icon.
4. Click on **Configuration**.
5. Click on the **Advanced** button.
6. Click on **Battery Settings.**
7. Select **Battery Type/Capacity**. Alternatively, you can select battery make/model/quantity in the **Setup > BMS Setup** menu for closed-loop compatible batteries.



a. For customer battery type, refer to the battery manufacturer's manual to find the correct information for maximum charge voltage/current.

Set up the XW Pro

Set up your XW Pro according to your system design. This guide addresses four common system types: grid exporting, self-consumption, off-grid, and backup. Copy configurations acccording to system type.

Grid Exporting or Self-Consumption

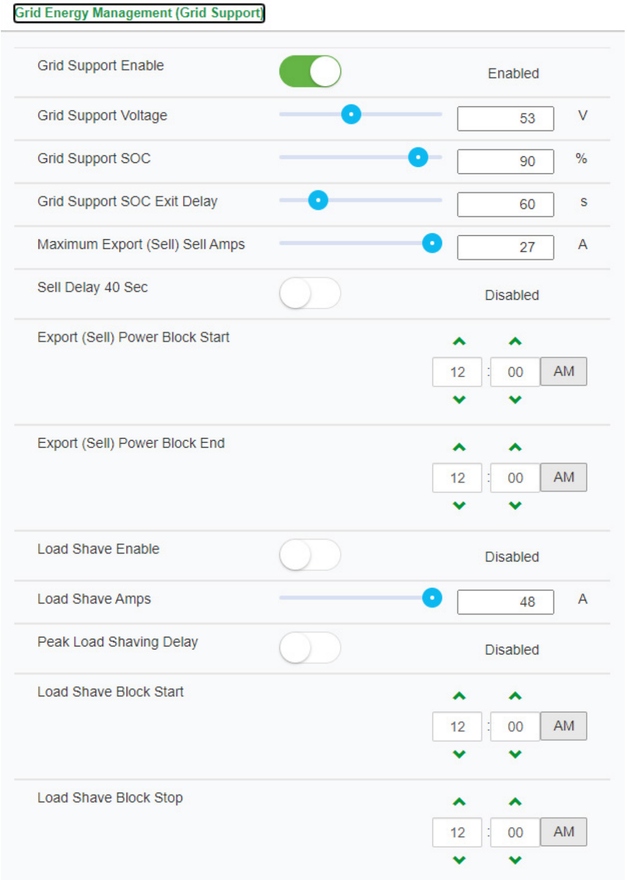
Key Settings for Grid Exporting:

- Grid Support Enable = Enabled
- Maximum Export(Sell) Amps > Set according to maximum expected PV power, except when setting up for enhanced grid support (Grid Support Voltage = 64).

This feature is only applicable for DC coupling with our MPPT models while connected to XW Pro inverters within the same Xanbus network.

Key Settings for Self-Consumption:

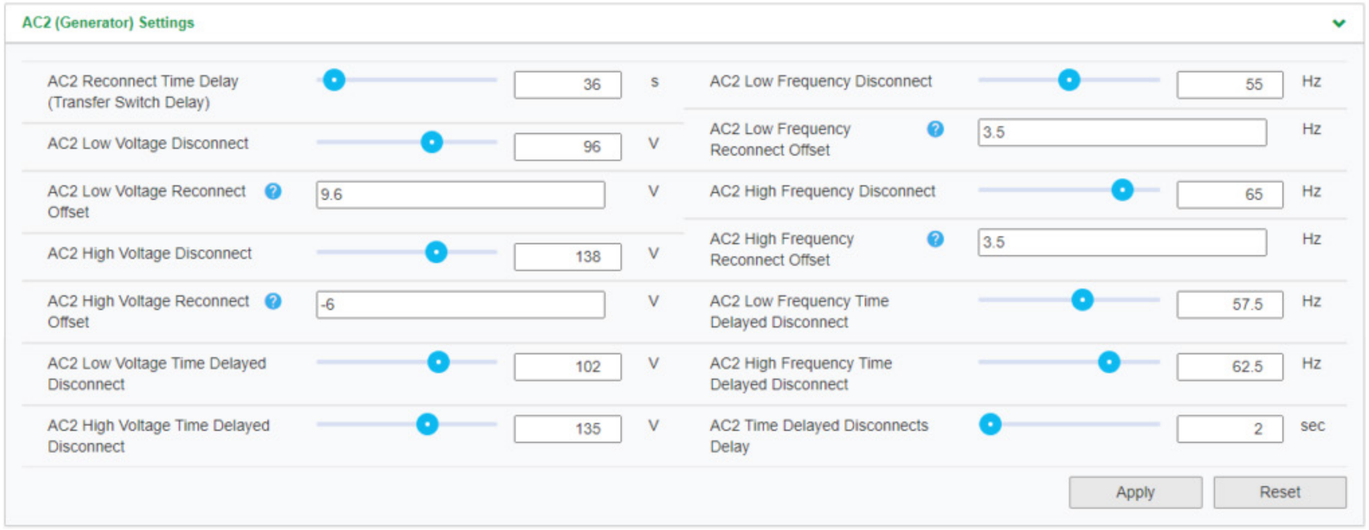
- Grid Support = Enabled
- Sell = Disabled
- Load shave > refer to the XW Pro Owner's Guide.



Set up the XW Pro (Continued)

Off-Grid

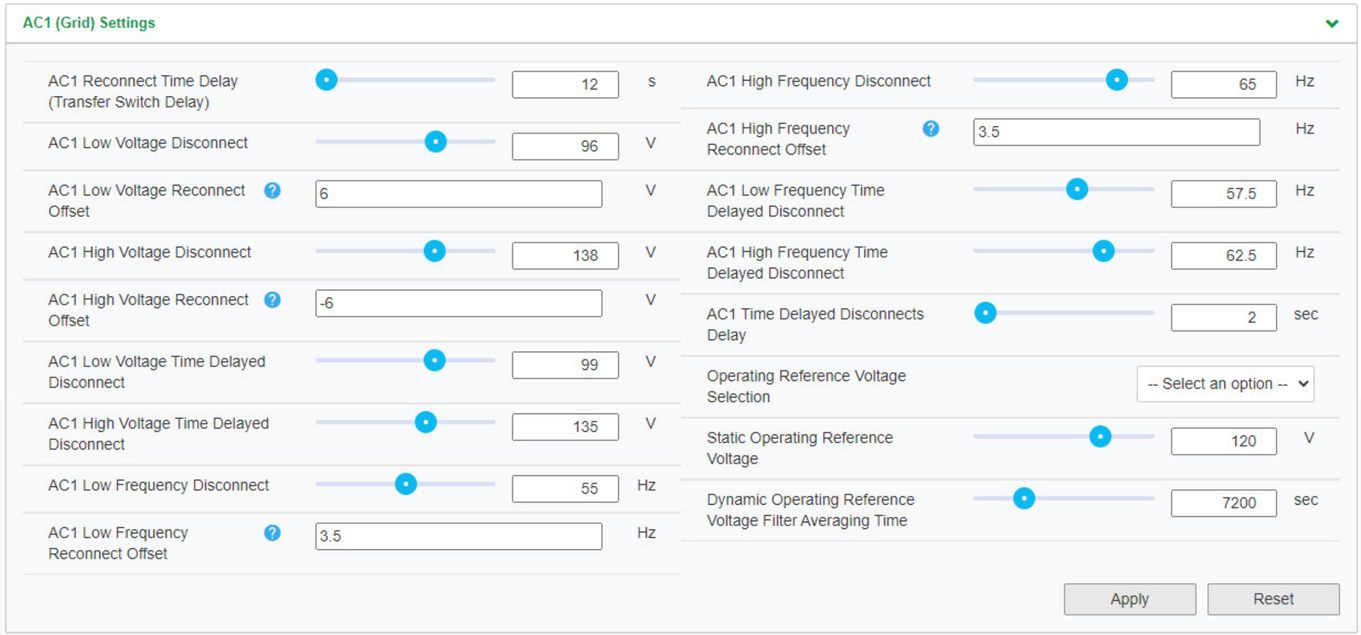
If your system has a generator, please scroll down to AC 2 (Generator Settings). AC 2 breaker size needs to be set for your generator breaker size.



Set up the XW Pro (Continued)

Backup

If your system has a generator, please refer to the Off-Grid settings. If not, please scroll down to AC1 Grid Settings. For most backup systems for default settings will be appropriate for most utility companies.

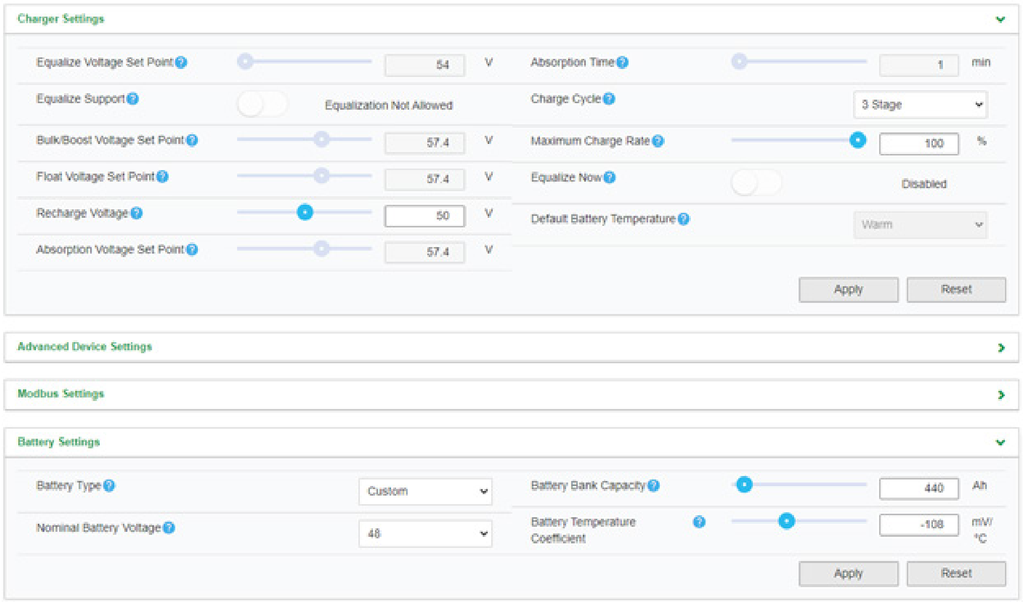


Configure the MPPT Charge Controller

The last step is the configuration of your MPPT charge controller. Like the XW Pro, the MPPT charge controller can be configured in InsightLocal.

Battery Charging Configuration

1. In InsightLocal, Click on **Devices** in the menu.
2. On the left-hand side menu bar, click on **Charge Controllers.**
3. Click on the charge controller icon.
4. Click on **Configuration**.
5. Click on the **Advanced** button.
6. Click on **Charger Settings.**
7. Select Battery Type/Capacity.



a. For customer battery type, refer to the battery manufacturer's manual to find the correct information for maximum charge voltage/current.

Note: With v.1.18 firmware for InsightLocal, closed-loop compatible batteries can be set up using **Setup** > **BMS Setup** dropdown menu.

Life Is On | Schneider Electric

To learn more information about the
Schneider Electric solar and storage solutions, visit

solar.se.com

Schneider Electric IT Corporation
70 Mechanic Street
Foxborough, MA 02035

© 2023 Schneider Electric. All Rights Reserved. Life Is On | Schneider Electric and EcoStruxure are trademarks and the property of Schneider Electric SE, its subsidiaries and affiliated companies.
998-23146371_XWProCommissioningGuide_GMA_ebrochure_XIA