MARSHALL

2025

MARSHALL

Device Config (SMA)

1.0 Device Configuration

Part A

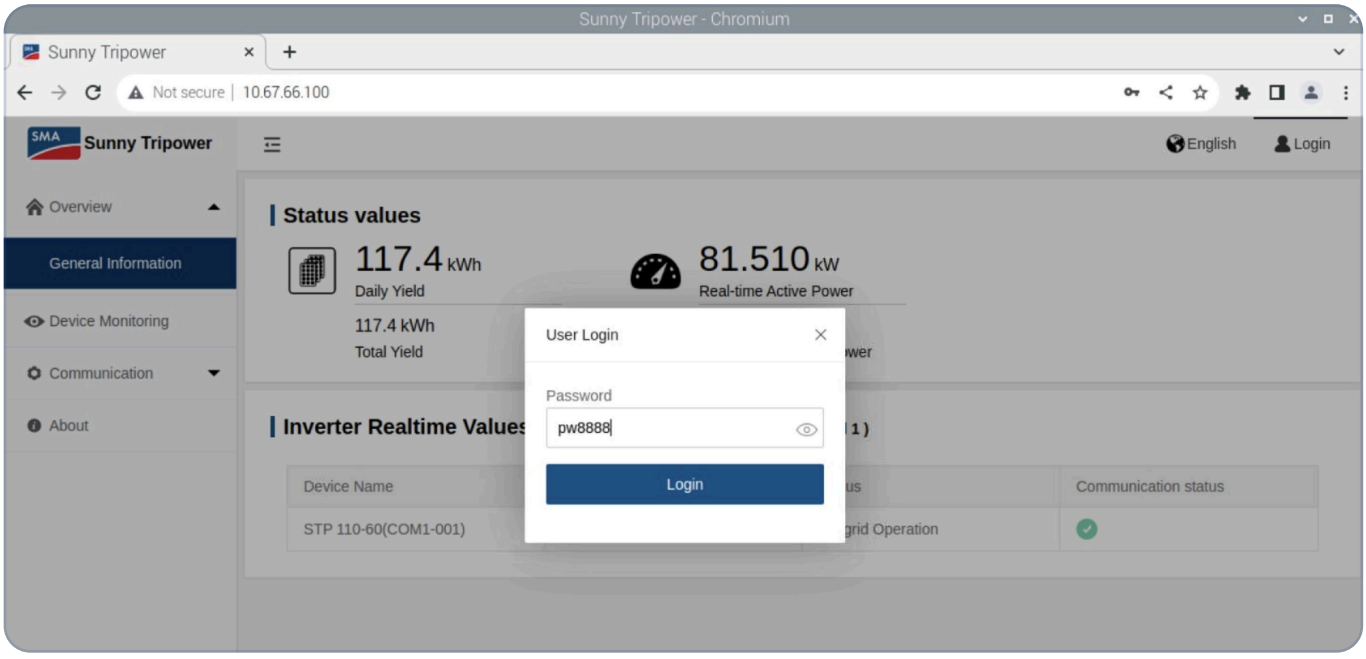
SMA CORE2 Inverters

1. SMA CORE2 inverters do not have a built-in Wi-Fi access point. To enable network connectivity, connect the inverter to a router, Wi-Fi repeater, or network switch using a LAN cable.

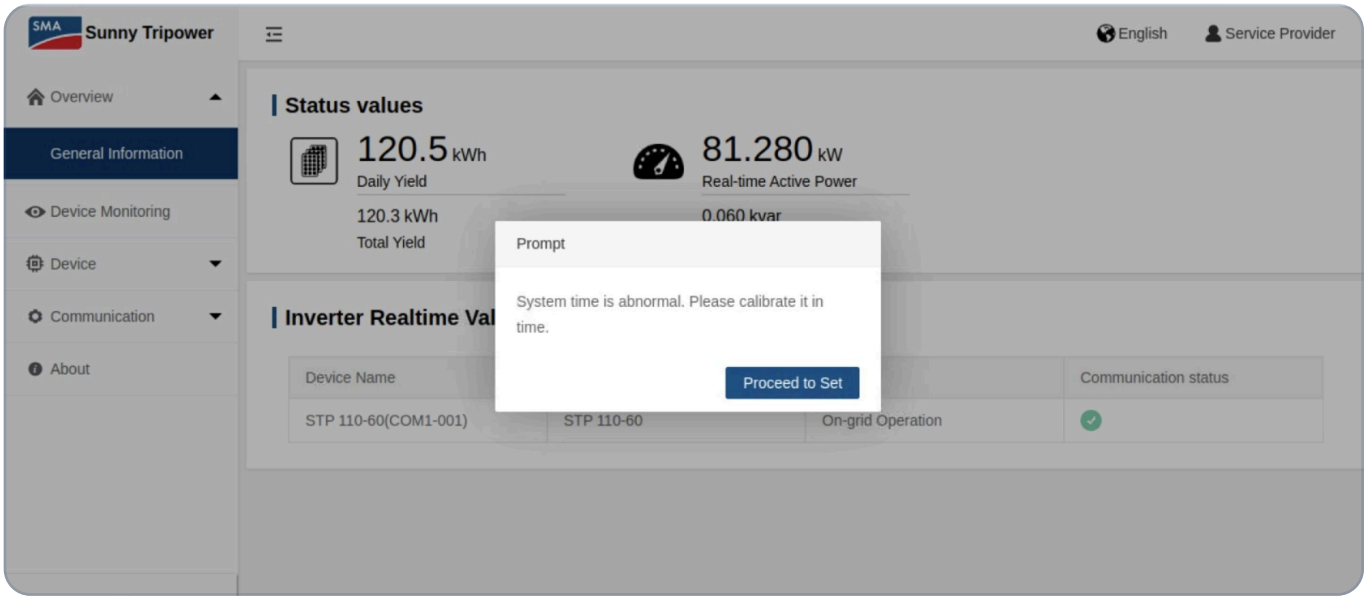
2. Connect your phone or laptop to the same network, then use an IP scanner to detect and identify the inverter's IP address.

3. Open a web browser on your phone or laptop, enter the IP address obtained in Step 2, and access the SMA inverter's web interface.

4. Click the "Login" button in the top right corner of the inverter's web interface. Use the default password 'pw8888' to log in.



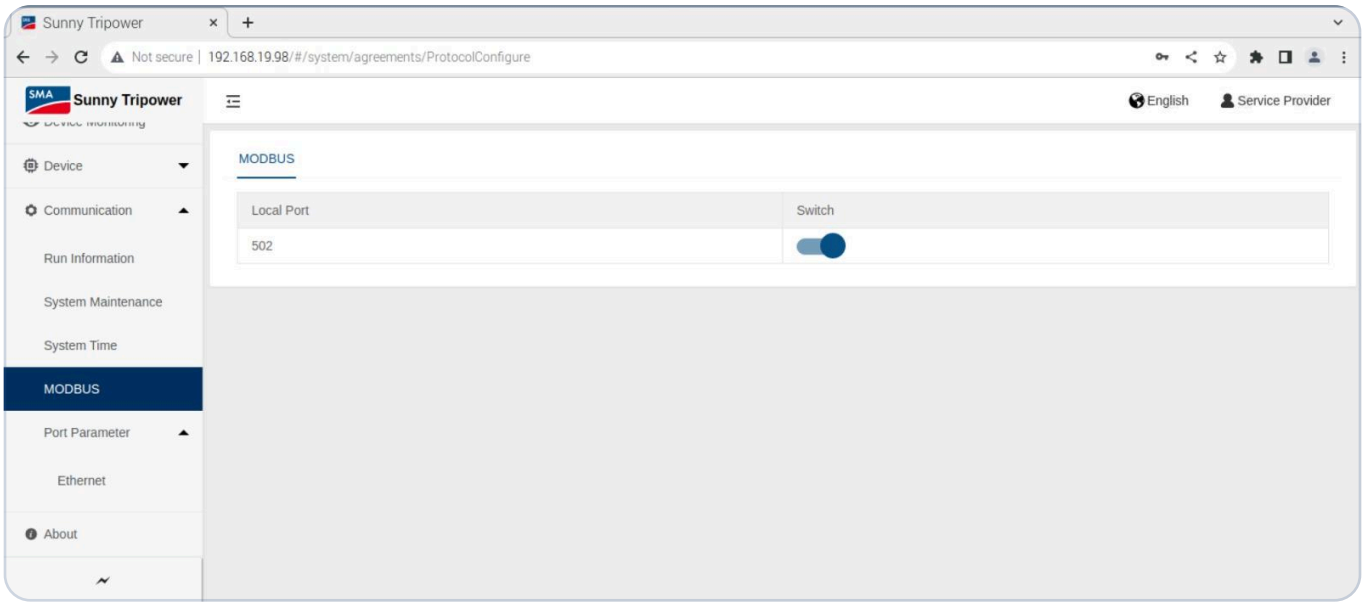
5. Ignore the "System time abnormal" prompt, as the inverter does not support daylight saving time. This does not affect functionality.



Before interfacing the inverter with the Marshall gateway device, change the inverter configuration to the following. Failure to change the inverter configuration may result in loss of communication between the Marshall device and the inverter.

a. Inverter MODBUS Control

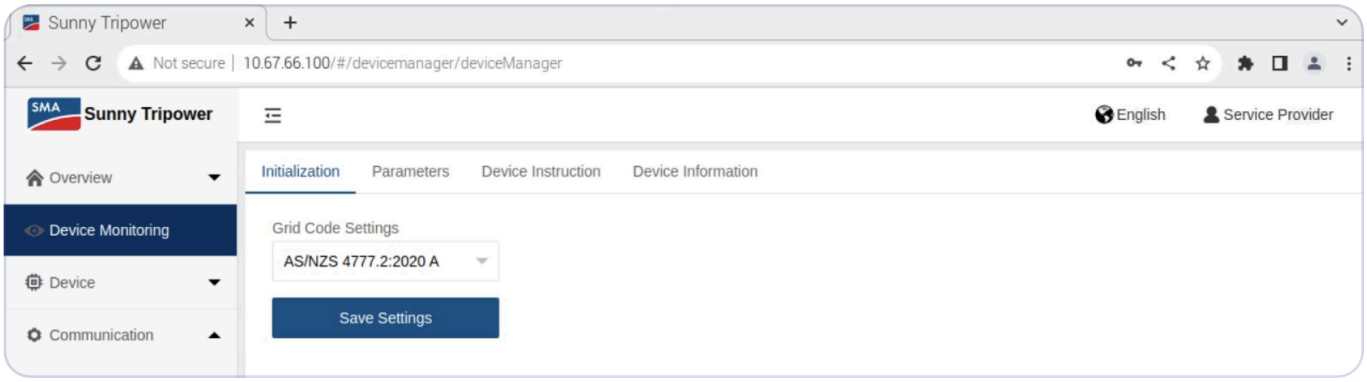
1. Switch Enable/Disable of Local Ports.



b. Grid Code Settings

1. Open the Device Manager tab from the navigation bar.

2. Under the Initialization tab, select the appropriate Grid Code setting. This is the default view when you access the Device Monitoring tab. Click “Save Settings”

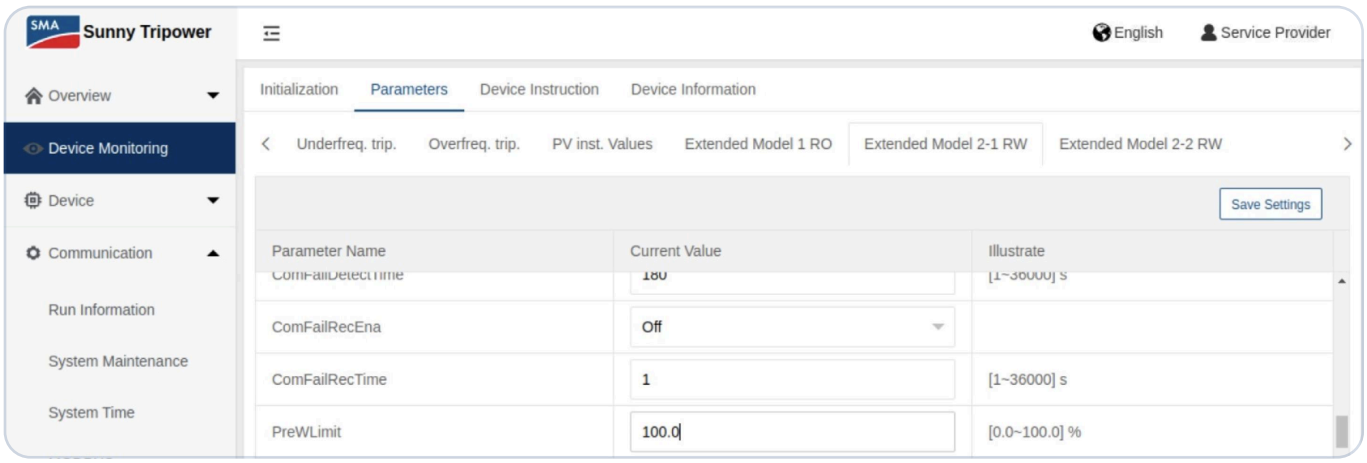


c. PreWLimit

1. In the Device Monitoring tab, navigate to the Parameters section. Use the arrow keys to browse through the available settings.

2. Use the arrow keys to navigate to "Extended Model 2-1 RW."

3. Scroll vertically to locate "PreWLimit", then set the parameter based on the grid requirements. This defines the fallback percentage for active power. Click “Save Settings”



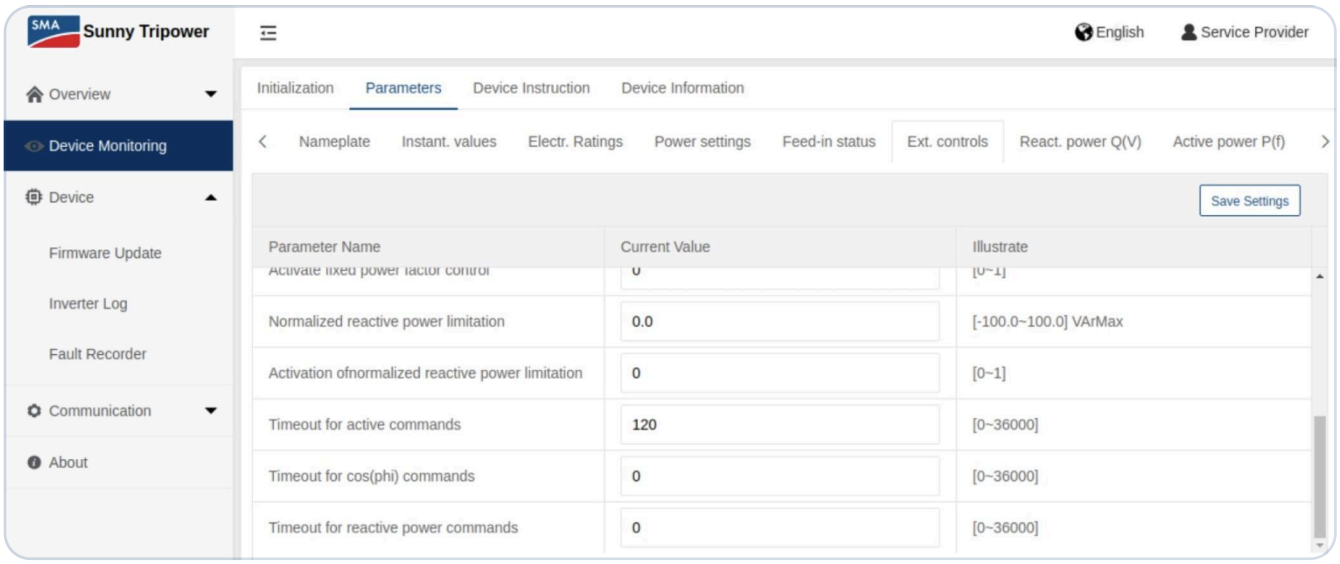
d. Timeout for active commands

1. In the Device Monitoring tab, navigate to the Parameters section. Use the arrow keys to browse through the available settings.

2. Use the arrow keys to navigate to "Ext. Control"

3. Scroll vertically to find "Timeout for Active Commands", then adjust the parameter according to the grid requirements. This setting determines the time, in seconds, before the fallback behavior for active power is triggered.

4. Click “Save Settings”



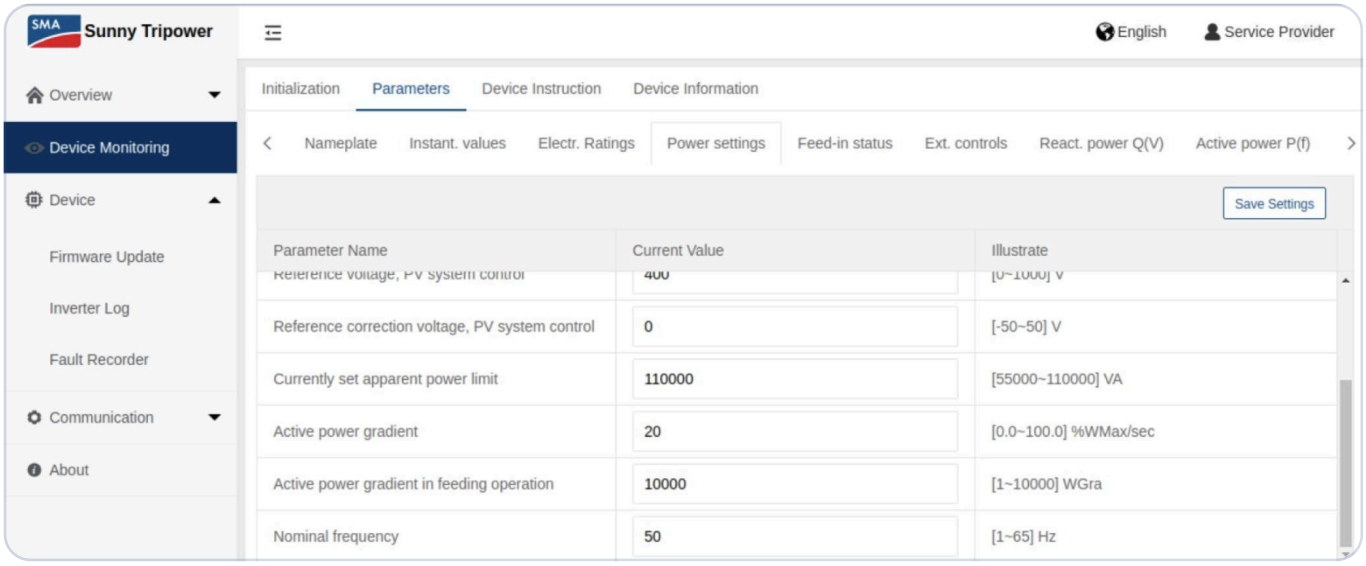
e. Active Power Gradient

1. In the Device Monitoring tab, navigate to the Parameters section. Use the arrow keys to browse through the available settings.

2. Use the arrow keys to navigate to "Power Settings"

3. Scroll vertically to find "Active Power Gradient", then adjust the parameter according to the grid requirements.

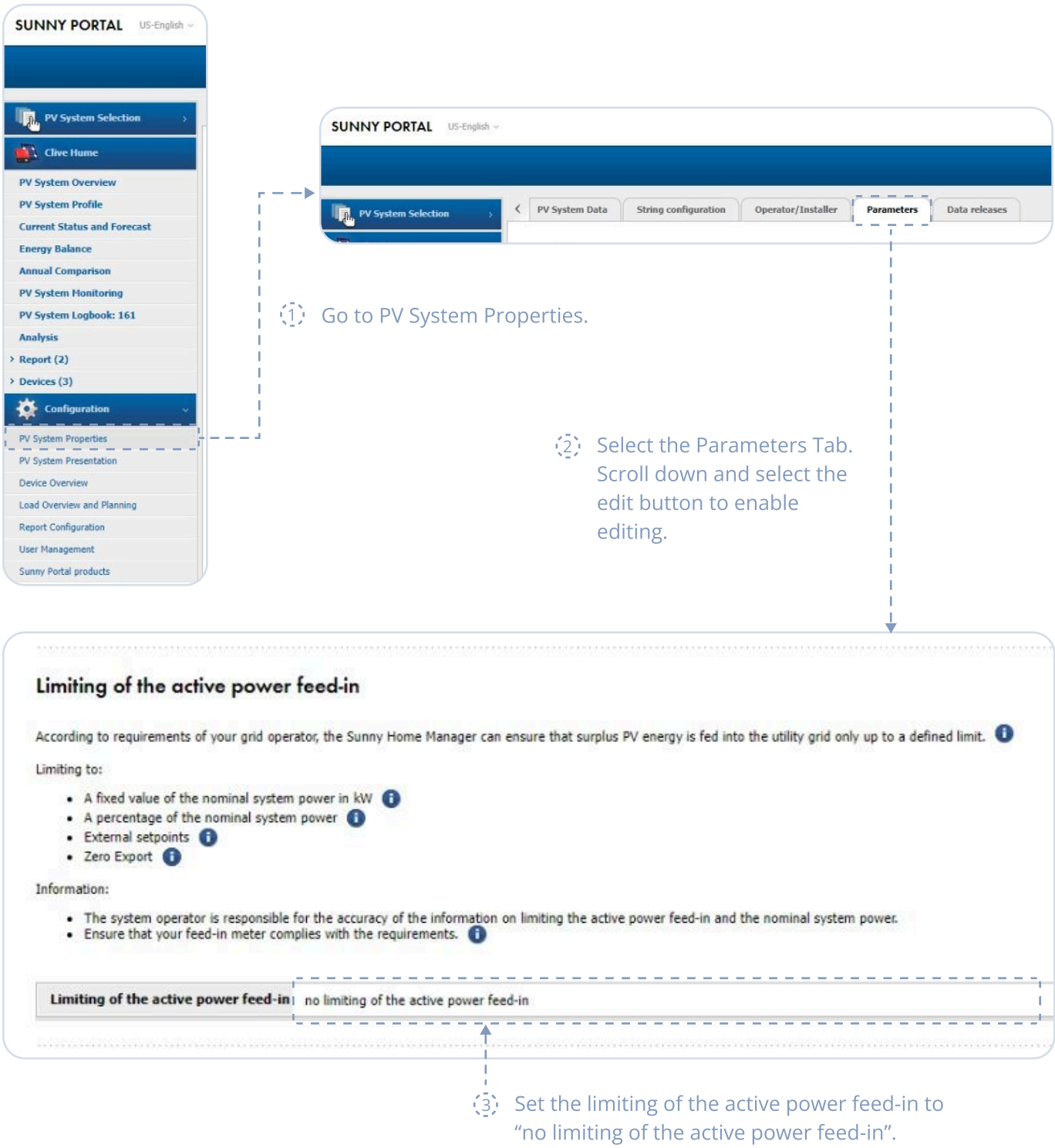
4. Click “Save Settings”


Sunny Tripower
English
Service Provider
Overview
Device Monitoring
Device
Firmware Update
Inverter Log
Fault Recorder
Communication
About
Initialization
Parameters
Device Instruction
Device Information
Nameplate
Instant. values
Electr. Ratings
Power settings
Feed-in status
Ext. controls
React. power Q(V)
Active power P(f)
Save Settings
Parameter Name
Current Value
Illustrate
Reference correction voltage, PV system control
0
[-50~50] V
Currently set apparent power limit
110000
[55000~110000] VA
Active power gradient
20
[0.0~100.0] %WMax/sec
Active power gradient in feeding operation
10000
[1~10000] WGra
Nominal frequency
50
[1~65] Hz

Sunny Portal Login

2. Follow the process as below to set up limiting of the active power feed-in.

(Sunny Portal Login is only needed if they have a SMA Data Manager on the site.)

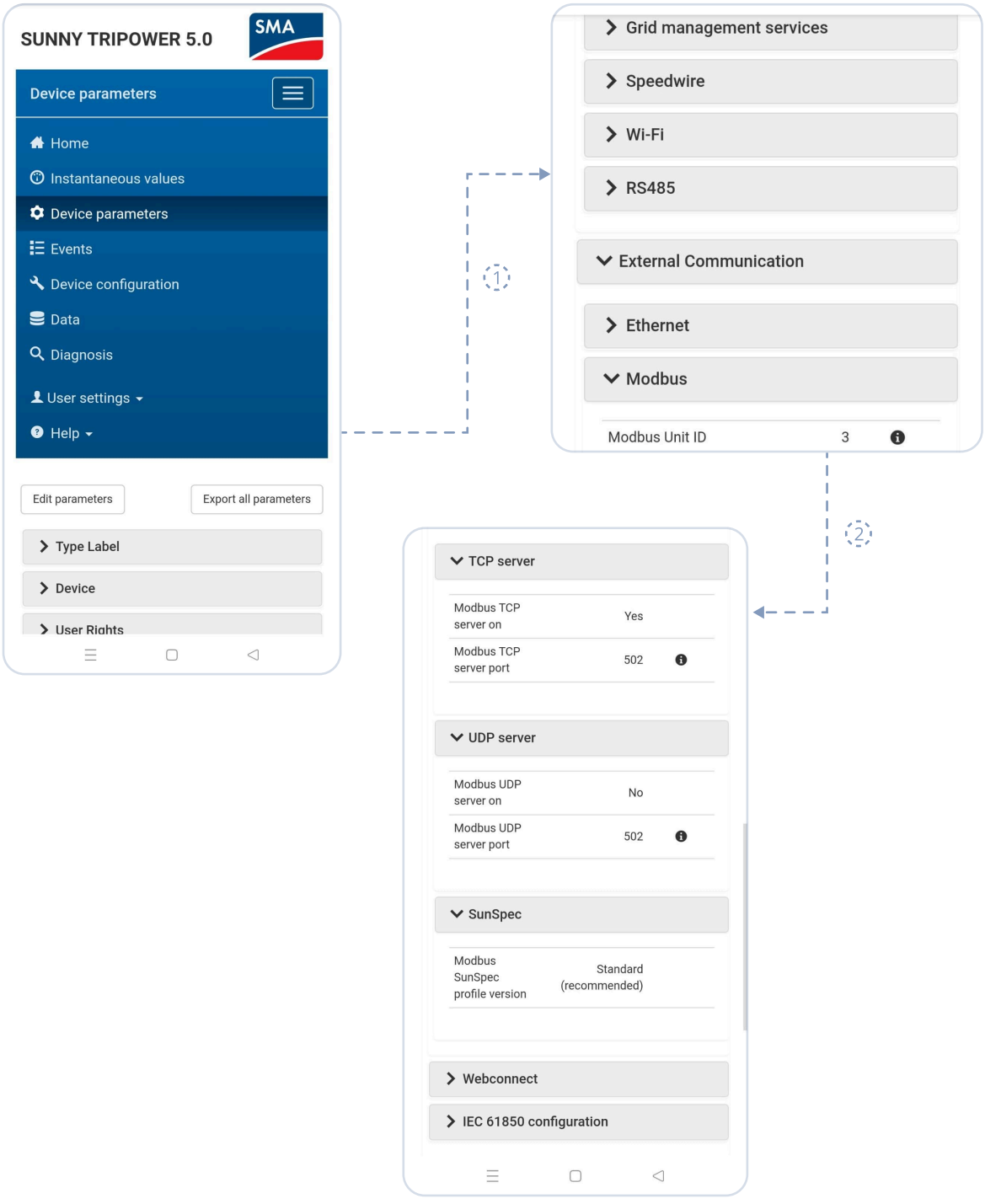


2.0 Device Configuration

Part B

SB STP STP50-41

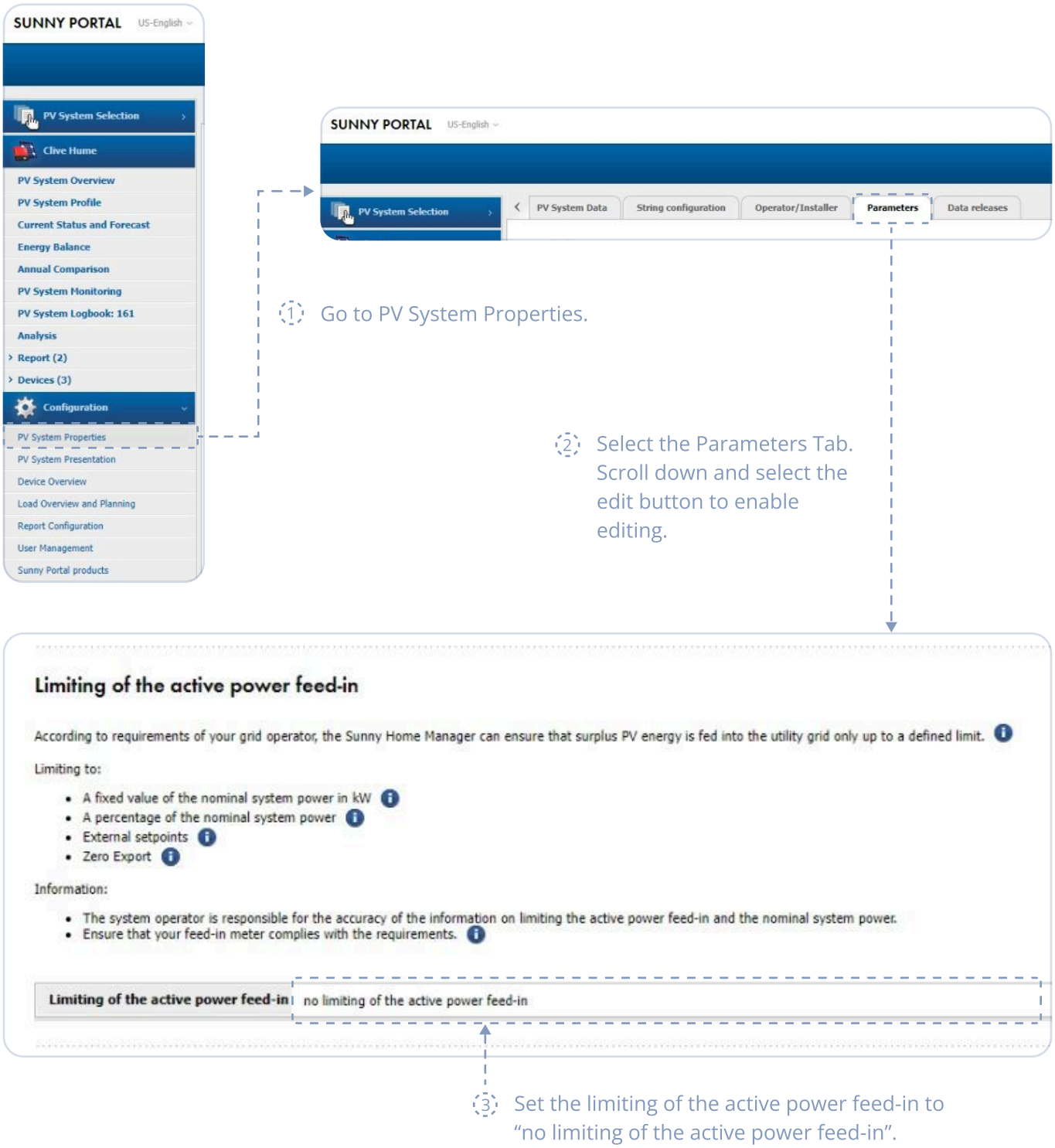
1. Follow the process as below to set up SB STP STP50-41.



Sunny Portal Login

2. Follow the process as below to set up limiting of the active power feed-in.

(Sunny Portal Login is only needed if they have a SMA Home Manager on the site.)

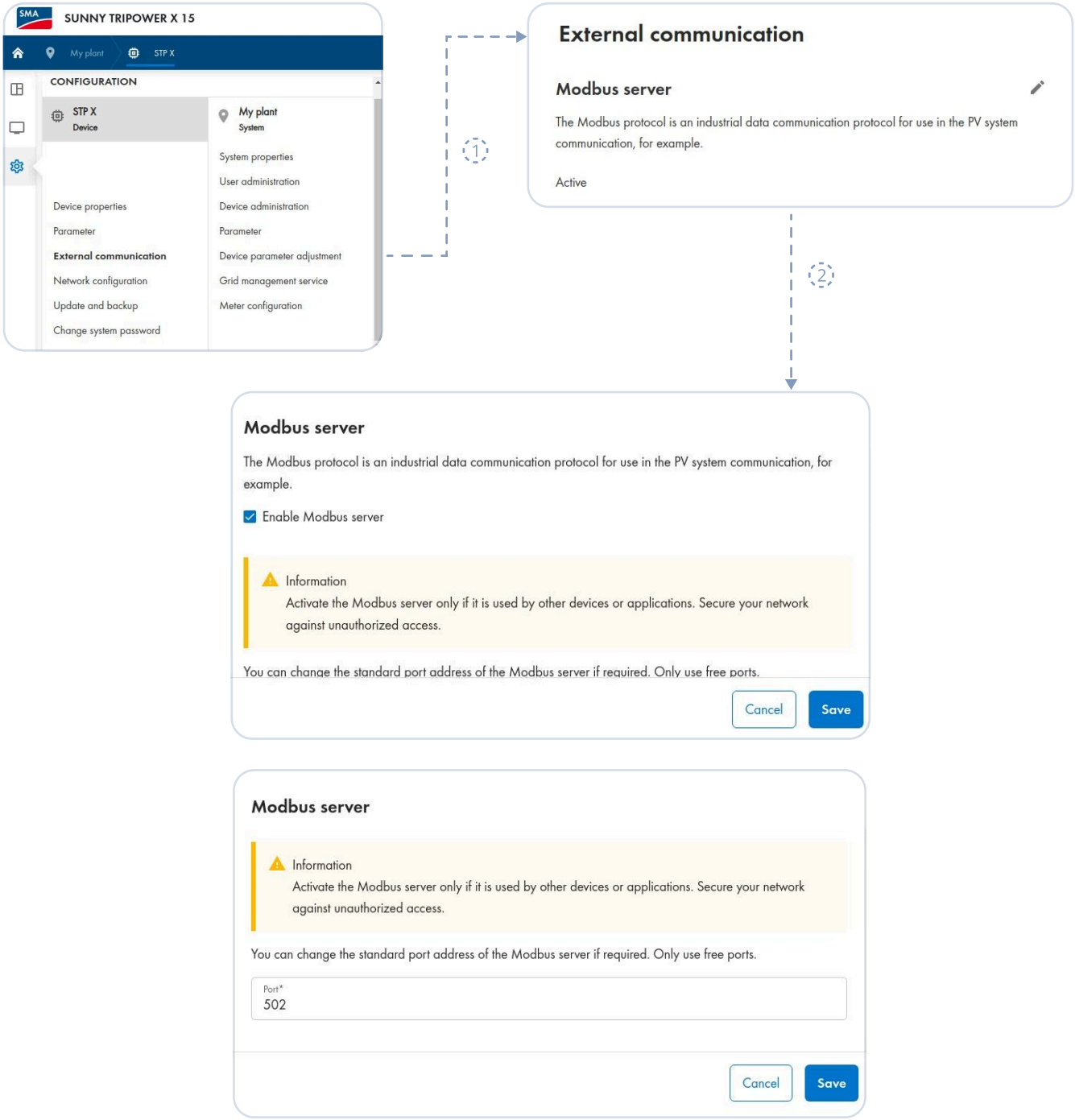


3.0 Device Configuration

Part C

Sunny Tri Power x 12 15 20 25

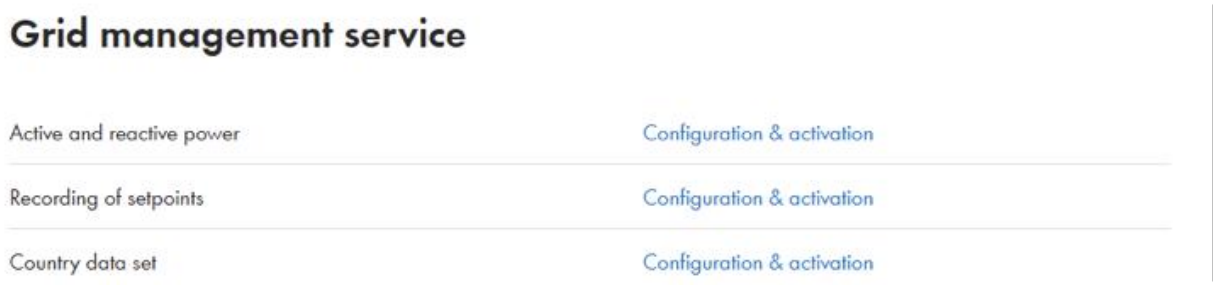
1. Follow the process as below to set up Sunny Tri Power x 12 15 20 25.



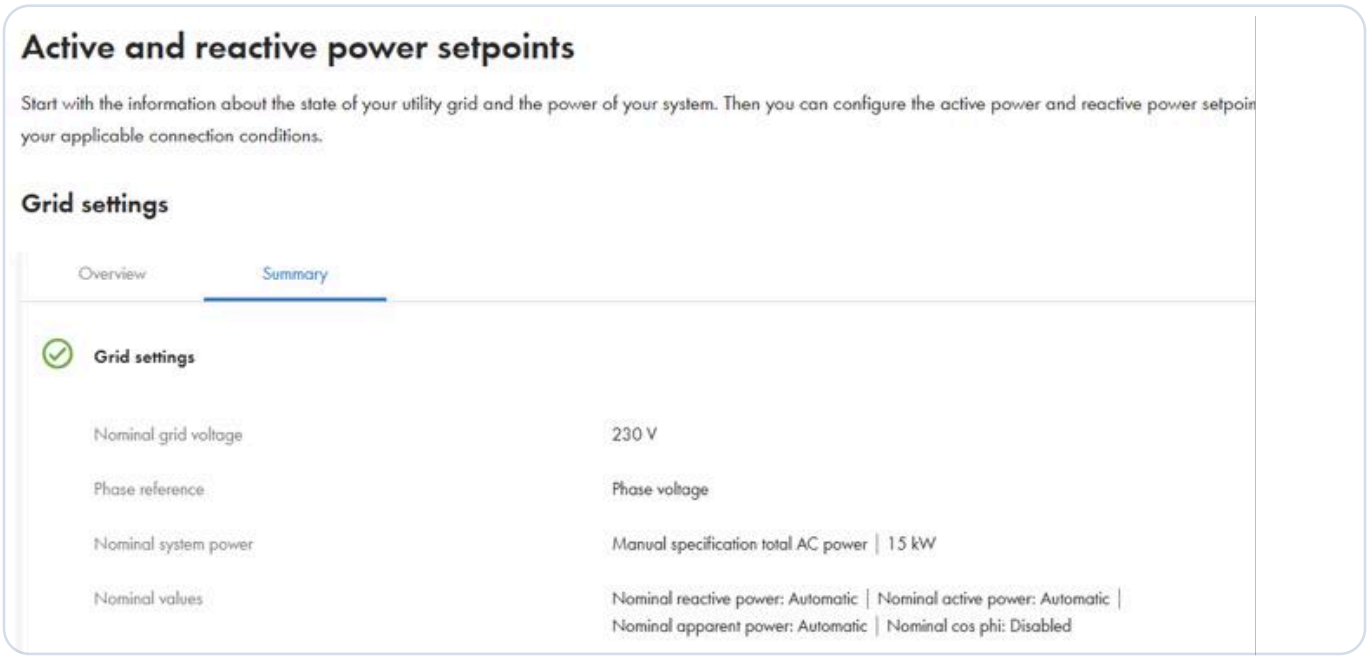
Grid Management Service

2. Follow the process as below to set up Grid Management Service.

1. Navigate to Grid Management Service
2. Select Active and Reactive Power
3. Click on Configuration & Activation



4. Properly configure the grid settings to ensure optimal performance and alignment with system requirements.



Grid settings

Start with the information about the state of your utility grid and the power of your system. Then you can configure the active power and reactive power setpoints acc
your applicable connection conditions.

Nominal grid voltage

The nominal grid voltage is the target voltage at the point of interconnection. This voltage varies depending on the region and type of utility grid (high, medium or lov

What nominal voltage is the utility grid designed for?

Nominal grid voltage*
230 V

Which phase reference should the nominal grid voltage have?

- ○ Outer conductor voltage
- ◉ Phase voltage

Nominal system power

The nominal power of your system is the maximum total power your system can generate. Both the sum of all AC powers and the sum of all PV modules (DC) can be
purpose.

- ◉ Total AC power

Sum of all AC power in the system*
15 kW

- ○ Total DC power

Information
Please note that in some utility grids and, depending on the specification by the grid operator, the total DC power must be specified (e.g., with an active power specification of 70%).

Nominal values

Indicate the nominal values of your system for active, reactive and apparent power or have them automatically calculated from the nominal system power. Additional
can limit the reactive power modes.

Nominal reactive power	Automatic
Nominal active power	Automatic
Nominal apparent power	Automatic
Nominal cos phi	Disabled

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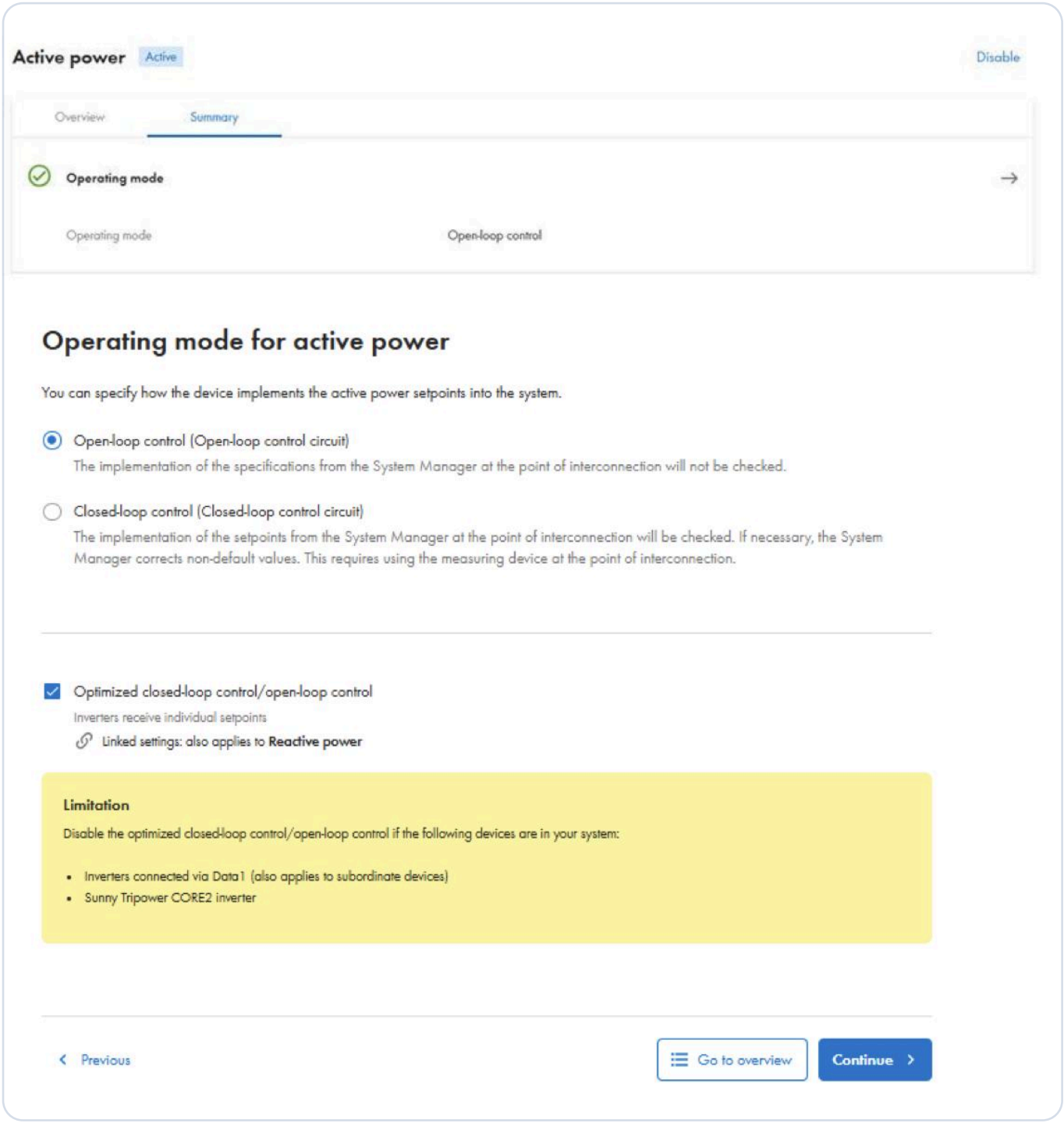
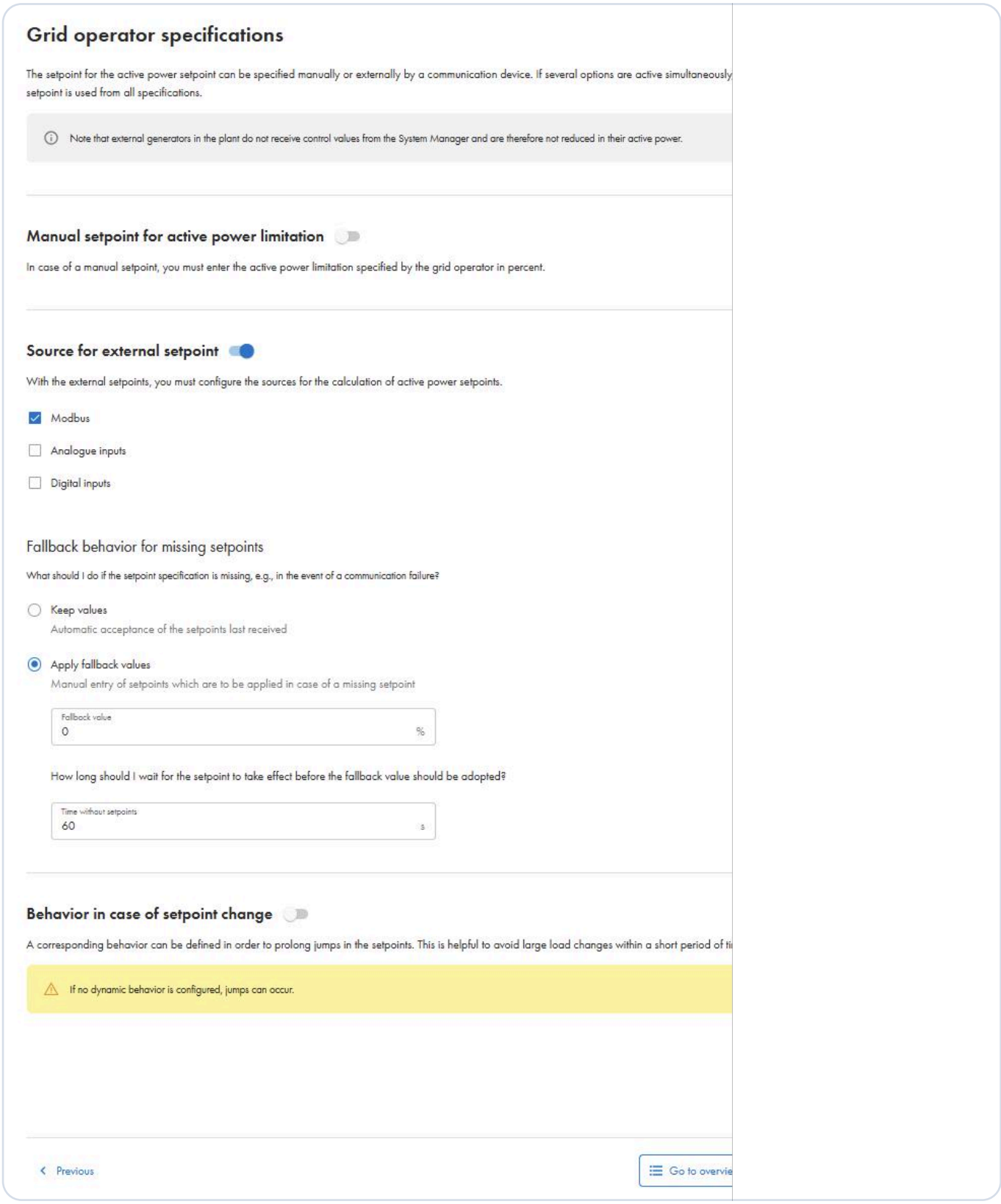
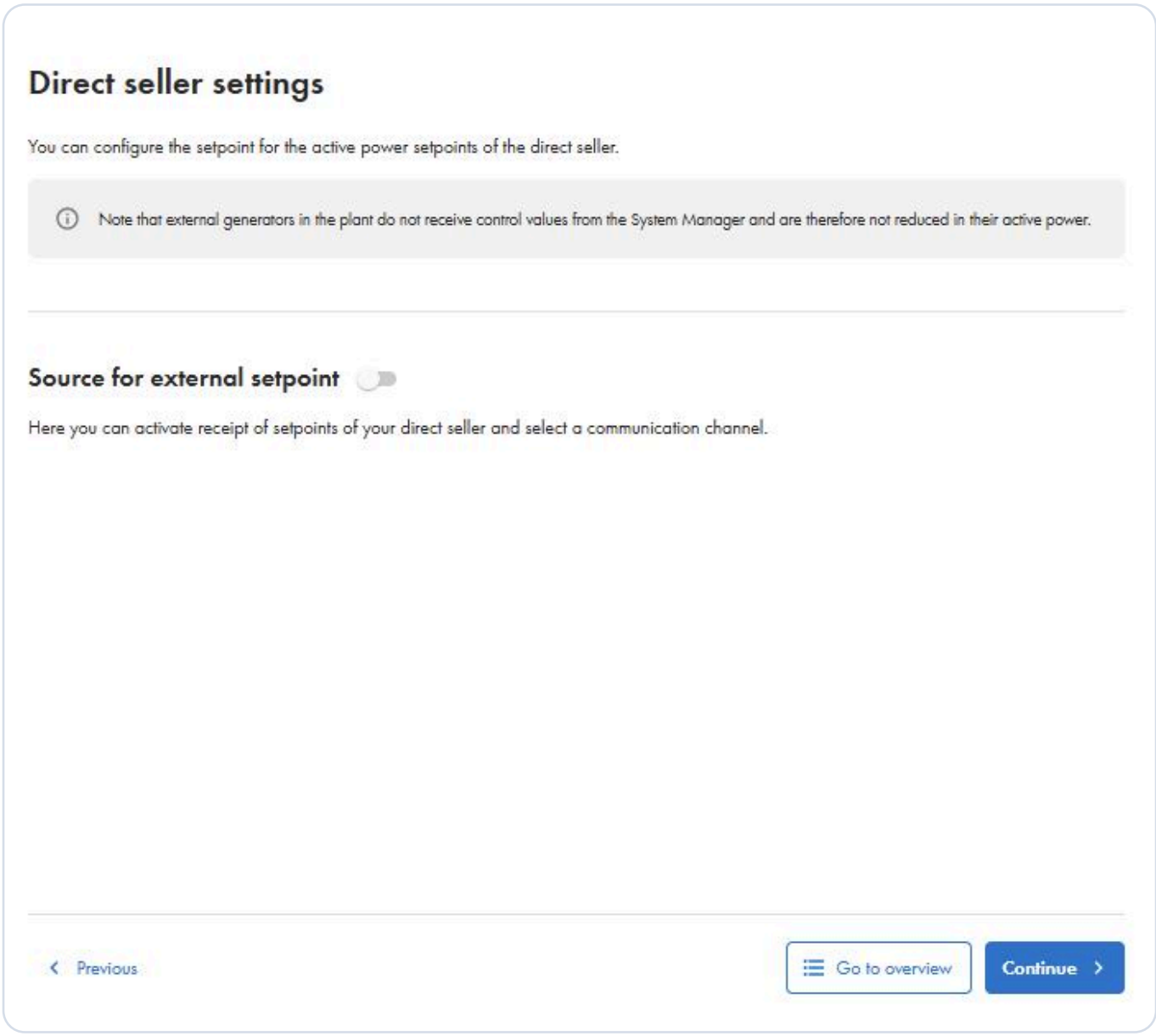
5. Navigate to Operating Mode, select Open Loop Control, and click Continue.



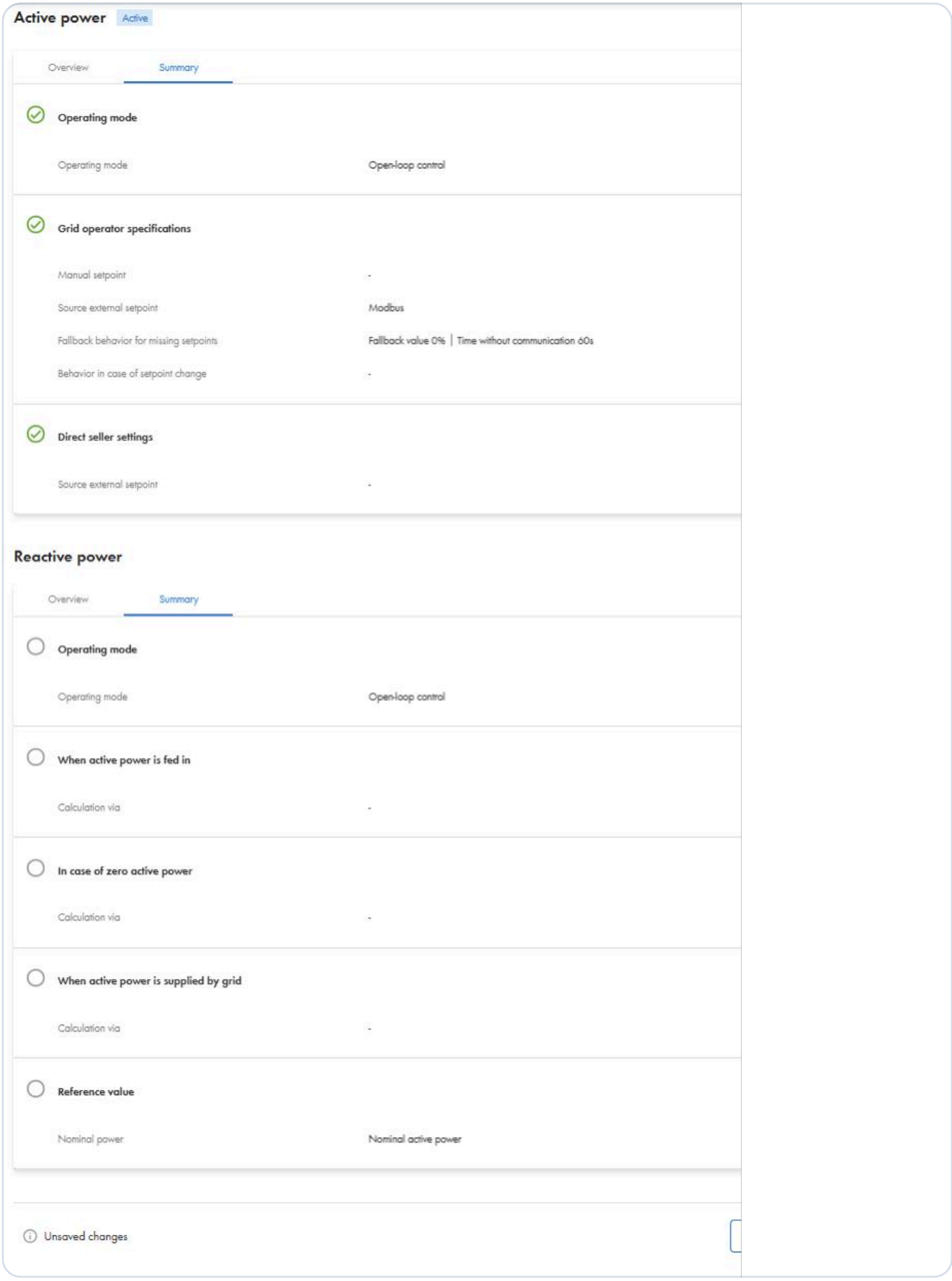
6. In the Grid Operator Specifications, enable the Source for External Setpoint and check the Modbus option.



7. When prompted to access Direct Seller Settings, ensure that the Source for External Setpoint is disabled.



8. Click Save


Active power
Active
Overview
Summary
Operating mode
Operating mode
Open-loop control
Grid operator specifications
Manual setpoint
-
Source external setpoint
Modbus
Fallback behavior for missing setpoints
Fallback value 0% | Time without communication 60s
Behavior in case of setpoint change
-
Direct seller settings
Source external setpoint
-
Reactive power
Overview
Summary
Operating mode
Operating mode
Open-loop control
When active power is fed in
Calculation via
-
In case of zero active power
Calculation via
-
When active power is supplied by grid
Calculation via
-
Reference value
Nominal power
Nominal active power
Unsaved changes

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