

# mySigen App Installer Manual

**Version: 03**


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# Revision History

Version	Date	Description
03	2024.10.09	<p>Updated 2.2.2 Operation information of Sigen EV AC Charger.</p> <p>Added 2.2.5 Viewing backup event record.</p> <p>Updated 2.3.1.1 Energy storage working mode.</p> <p>Added 2.3.1.4 Grid scheduling.</p> <p>Updated 2.3.1.5 Internet connection.</p> <p>Added 2.3.1.6 DI customization.</p> <p>Updated 2.3.1.7 Others.</p> <p>Added 2.3.4 Station connection diagnosis.</p> <p>Added 2.3.6 Software upgrade.</p> <p>Added 2.3.7 After-sales service.</p> <p>Added 2.3.8 Adding device.</p> <p>Updated 2.4.1.1 Internet connection.</p> <p>Updated 2.4.2 Inverter.</p> <p>Added 2.4.3 Sigen EV DC Charging Module.</p> <p>Updated 2.4.4 Gateway.</p> <p>Updated 2.4.5 Sigen EV AC Charger.</p> <p>Added 3.1.3 Changing binding information.</p> <p>Added 3.1.4 Viewing and exchanging points.</p> <p>Updated 3.1.8 Configuring parameters on the</p>

Version	Date	Description
		<p>"App Setting" screen.</p> <p>Updated 3.1.10 Support.</p> <p>Added 5.6 How do I connect a power sensor if the RS485_2 port of the inverter is faulty?</p> <p>Added 5.7 In grid connection scenarios, how can I quickly identify where SigenStor is installed?</p> <p>Added 5.8 How do I reconnect the network when the device network connection is lost?</p> <p>Added 5.9 How do I check whether the device is connected in parallel with other ones?</p>
02	2024.03.22	<p>Updated 1.3 Creating new systems.</p> <p>Updated Chapter 2 Routine O&amp;M of power station and device.</p> <p>Added 2.2.2 Operation information of Sigen EV AC Charger.</p> <p>Updated 2.3.1 Parameters on the "System Settings" screen.</p> <p>Added 2.3.2 Setting rate plan.</p> <p>Added 2.3.5 License activation.</p> <p>Updated 2.4 Device parameter setup.</p> <p>Added 3.1.5 Team and company management.</p> <p>Added 3.1.9 Owner consultation and request management.</p>

Version	Date	Description
		Added 5.5 What should you do if you want to disconnect WLAN when the communication mode changes from WLAN to FE?
01	2023.08.31	Initial release.

# Overview

## Introduction

This document describes how to use the mySigen App.




## Readers

This document is intended for:

- Professionally trained and qualified installers
- Technical support engineer

## Sign Definition

The following signs may be used in the document to indicate security precautions or key information. Before installation and operation, familiarize yourself with signs and their definitions.

Signs	Definition
 <b>Danger</b>	Danger. Failure to comply will result in death or serious personal injury.
 <b>Warning</b>	Warning. Failure to comply will result in serious personal injury or property damage.
 <b>Caution</b>	Caution. Failure to comply will result in property damage.
<b>Tips</b>	Important or key information, and supplementary operation tips.



# Chapter 1 Creating new systems and commissioning

## Tips

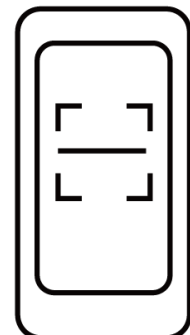
- This document takes version 2.0.0 as an example to introduce relevant operations. The screenshots given in this document are for illustration purposes only. Interfaces in different periods may differ. The actual interface display shall prevail.
- Before creating new systems, please make sure that the device is powered on.

## 1.1 Downloading the App

### Tips

**Mobile operating systems: Android 6.0, iOS 12.0, and later versions.**

Use the following two methods to download the App.

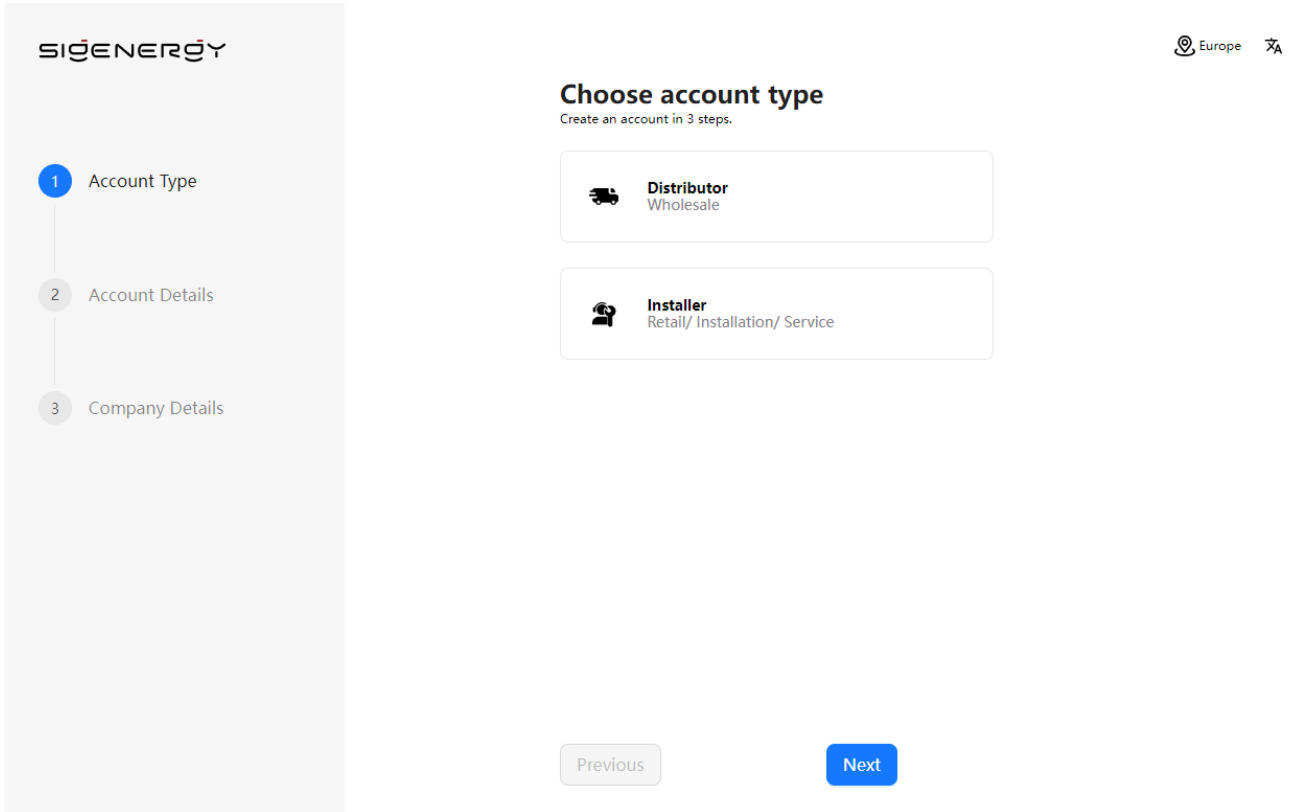


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## 1.2 Registration of installer account

### Method 1: Web-based operation

Please visit <https://www.sigenergy.com> and go to "Partner" → "Register Now" and sign up for your account.



The screenshot shows the registration interface for a SIGENERGY account. On the left, a vertical progress bar indicates three steps: 1. Account Type (highlighted in blue), 2. Account Details, and 3. Company Details. The main content area is titled "Choose account type" with the subtitle "Create an account in 3 steps." Below this, there are two selectable options:

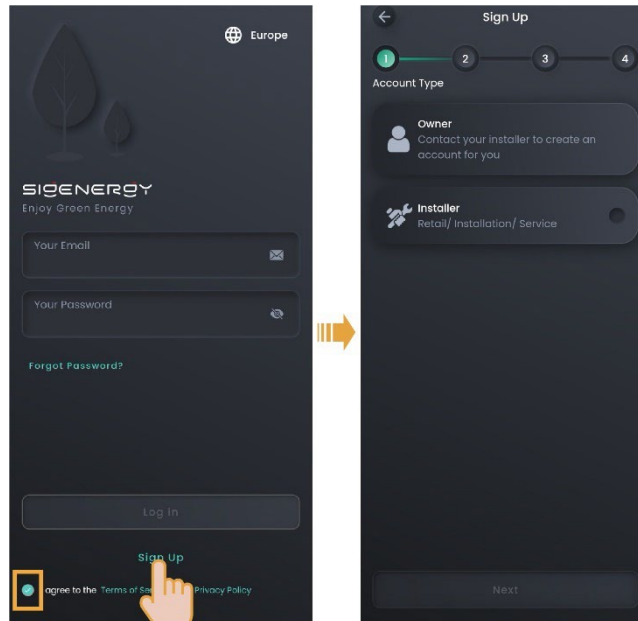
- Distributor** (Wholesale): Represented by a truck icon.
- Installer** (Retail/ Installation/ Service): Represented by a person icon.

At the bottom of the form, there are two buttons: "Previous" (disabled) and "Next" (active).

Top right corner: Europe flag icon and a language selection icon.


## Method 2: App-based operation

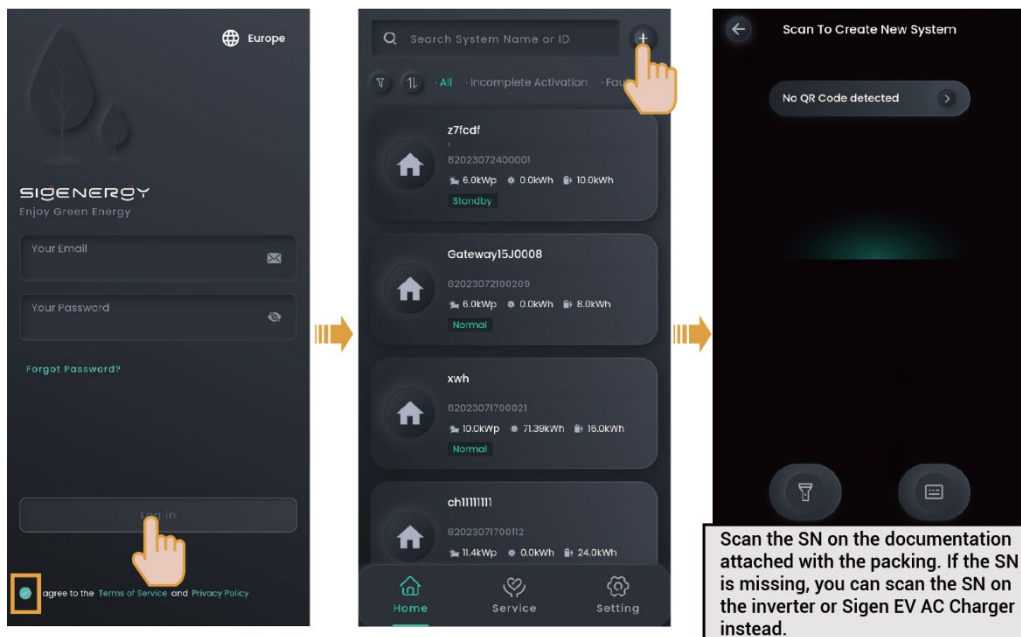
On the "Sign Up" screen of the App, sign up for your account.



MSA1CM00001

## 1.3 Creating new systems

1. Click  in the upper right corner of the "Home" to go to the station creation screen, where you can finish creating a power station. The App will send the owner account to the owner's email address.
















### Tips





**Create a new system step by step as instructed on the screen. The screen display may differ depending on the device model. For detailed steps, check the supporting documentation.**

2. Please ask the owner to check the email titled "sigencloud" within 24 hours and activate the account.

# Chapter 2 Routine O&M of power station and device


## 2.1 Commonly-used icons and description

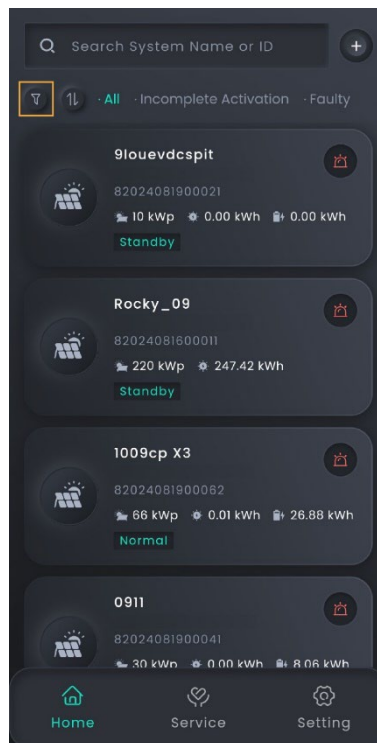
Icon	Description	Icon	Description
	Indicates the search icon. Here you can enter a keyword in the input box to search for a power station or others.		Indicates the plus and minus button. You can click this button to adjust the time.
	Indicates the filter button. You can click this button to filter the results by conditions.		Indicates the zoom-in button. You can click this button to zoom in the screen.
	Indicates the back button. You can click this button to return to the previous screen.		Indicates the expand icon. You can click this icon to check more information or set more parameters.
	Indicates the more button. You can click this icon to check more information or set more parameters.		Indicates the expand and collapse icon.
	Indicates the OFF and ON button. You can click this button to switch between on and off.		Indicates the check box. You can click this box to select an item. The filling color differs to distinguish different meanings. For example,  indicates To Grid.
	Detection status indicator. This icon indicates detection		Detection status indicator. This icon indicates detection failure.

Icon	Description	Icon	Description
	success.		
	Device status indicator. This icon indicates "Normal" or "Standby".		Device status indicator. This icon indicates "Power-off".
	Device status indicator. This icon indicates "Offline".		Device status indicator. This icon indicates "Faulty".

## 2.2 Information querying

### 2.2.1 Station operation information

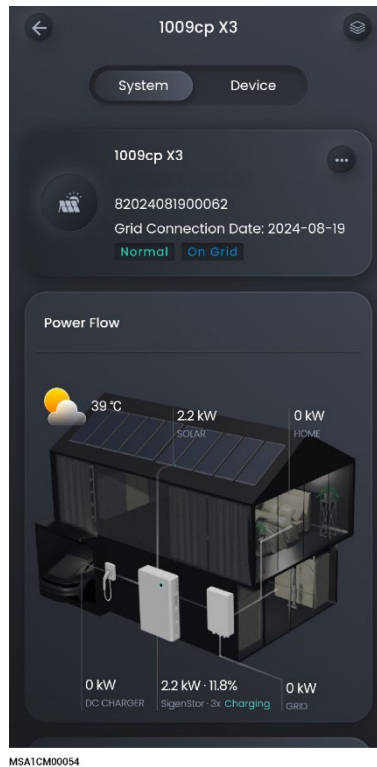
You can click "Home" to check the status of all stations. You can click  in the upper left corner to filter the stations you want to view.




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### 2.2.1.1 System information

On the "Home" screen, you can click the station name you want to query to check its detailed information, such as generating capacity and revenue.



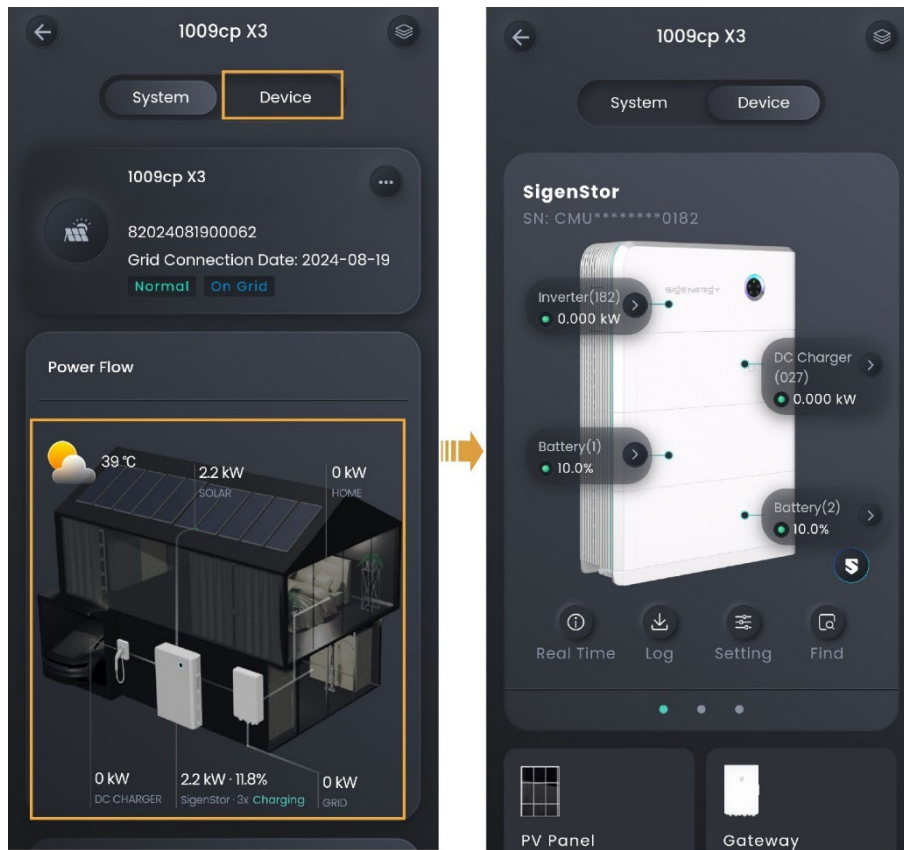
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In parallel connection scenarios, you can click "" to check the operation information of multiple devices.



### 2.2.1.2 Information of a single device

On the "Home" screen, click the station name you want to query. Click the device in the energy flow chart in the "System" tab or the "Device" tab to view the device information, software version, and more.



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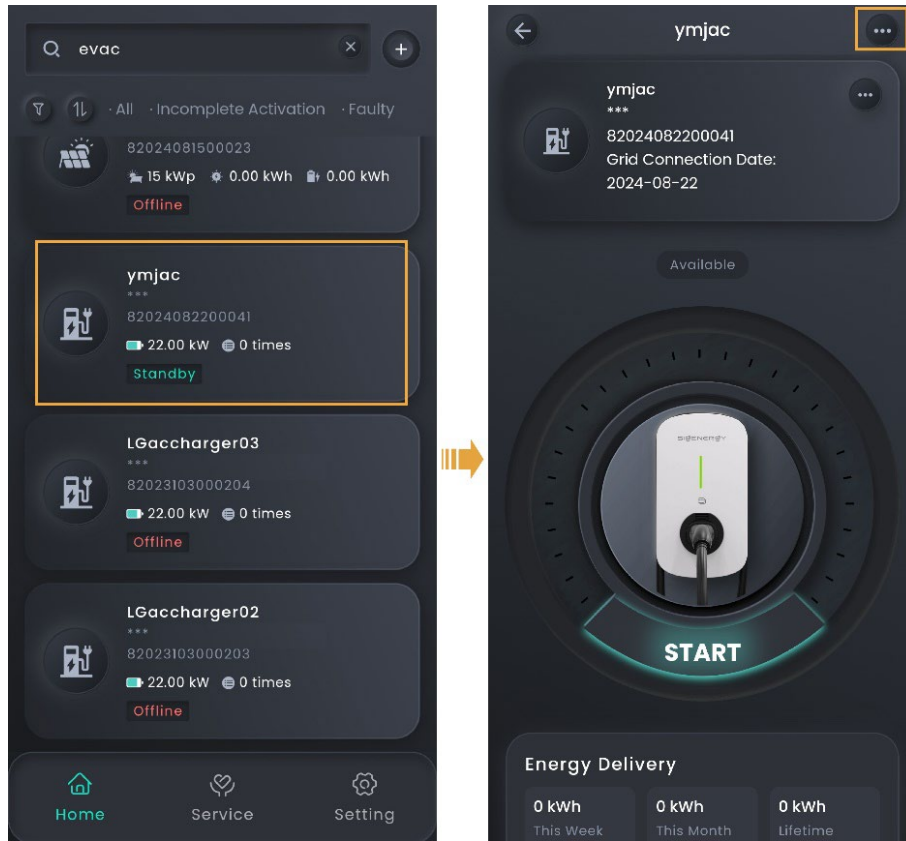
#### Tips

In parallel mode, slide left or right, or up and down, to locate the SigenStor you want to view based on the SN.

## 2.2.2 Operation information of Sigen EV AC Charger

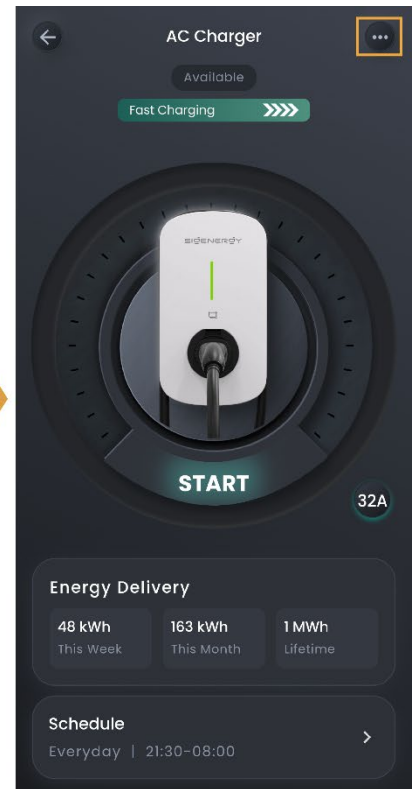
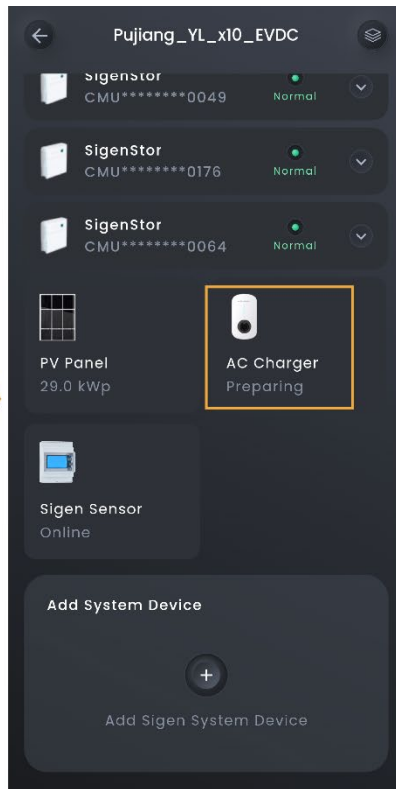
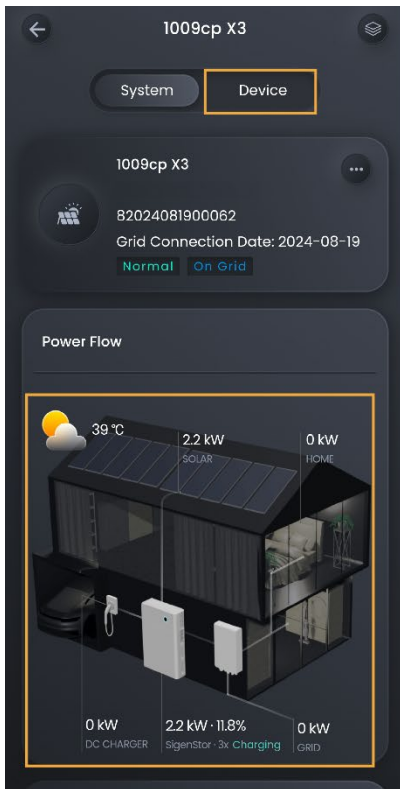
Go to the corresponding interface using the following method, and click "Real Time Info" to view detailed information.

### Pure charging application



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## PV charging or PV storage & charging application

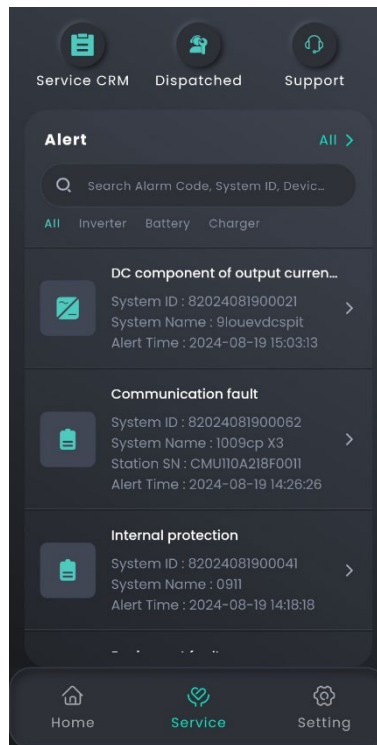


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
## 2.2.3 Alarm information

### 2.2.3.1 Alarms of all station


You can click "Service" to view alarm information of all stations.



### 2.2.3.2 Alarm of a single station/Sigen EV AC Charger

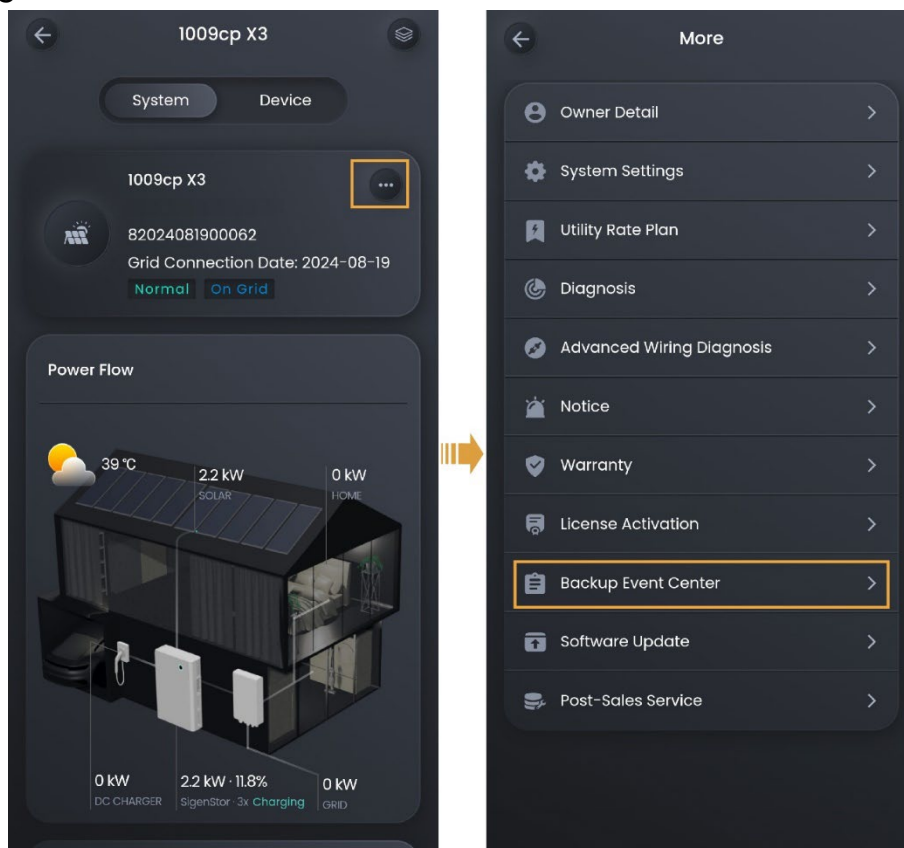
1. On the "Home" screen, click the station name you want to query.
2. Click  next to the station name and click "Notice" to view the alarm of this station.

## 2.2.4 Viewing warranty information


1. On the "Home" screen, click the station name you want to view.
2. Click  next to the station name and click "Warranty".

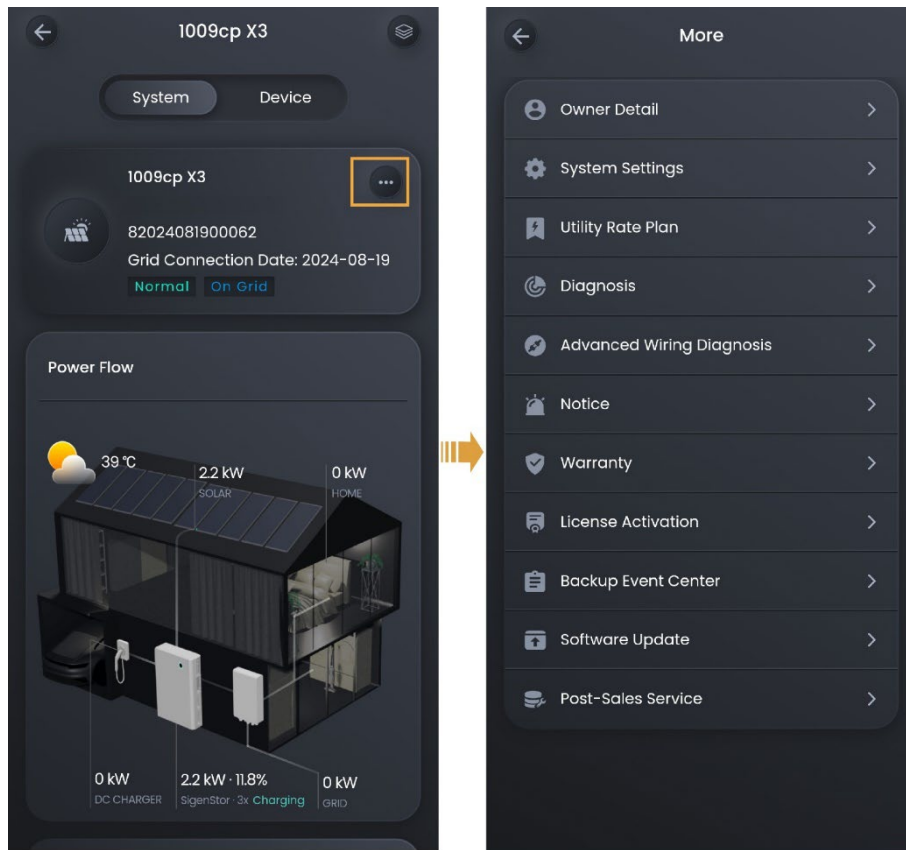
## 2.2.5 Viewing backup event record

After Gateway is installed in the system, the system records on-grid/off-grid events. You can view the time and reason for the on-/off-grid switchover through the following methods.



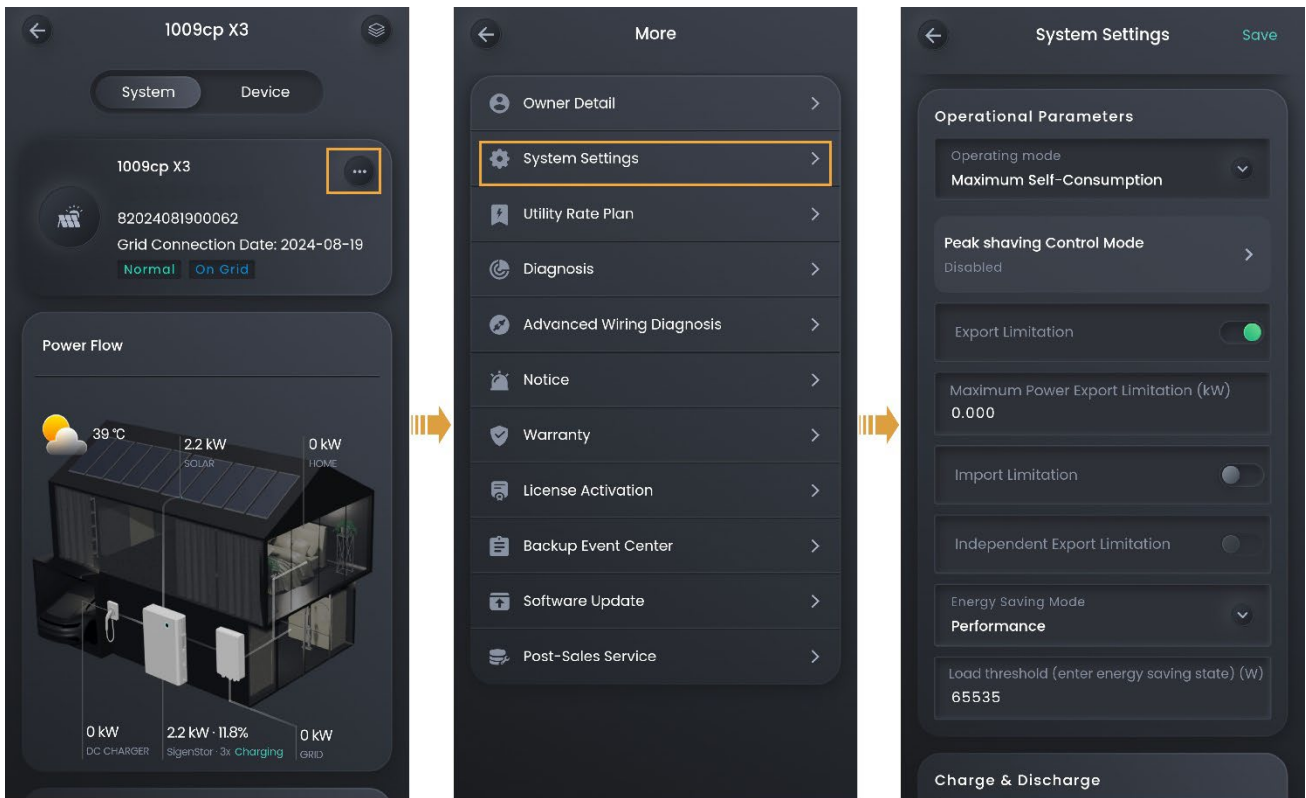
## 2.3 Station parameter setup

1. On the "Home" screen, click the station name you want to set.
2. Click  next to the station name to go to the settings interface.



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## 2.3.1 Parameters on the "System Settings" screen



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### Tips

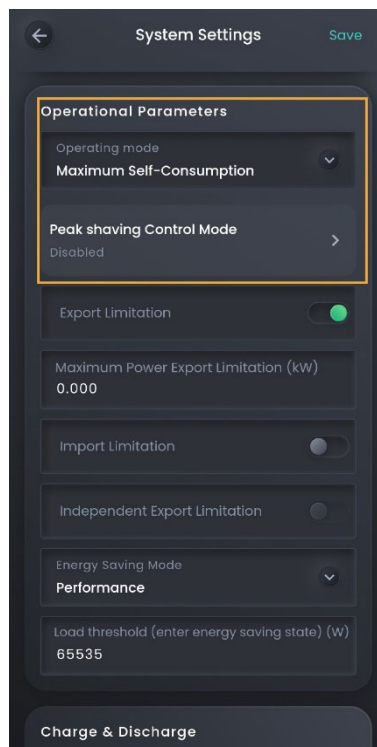
**Parameters available for setup differ depending on the grid code. The screen display shall prevail.**



### 2.3.1.1 Energy storage working mode

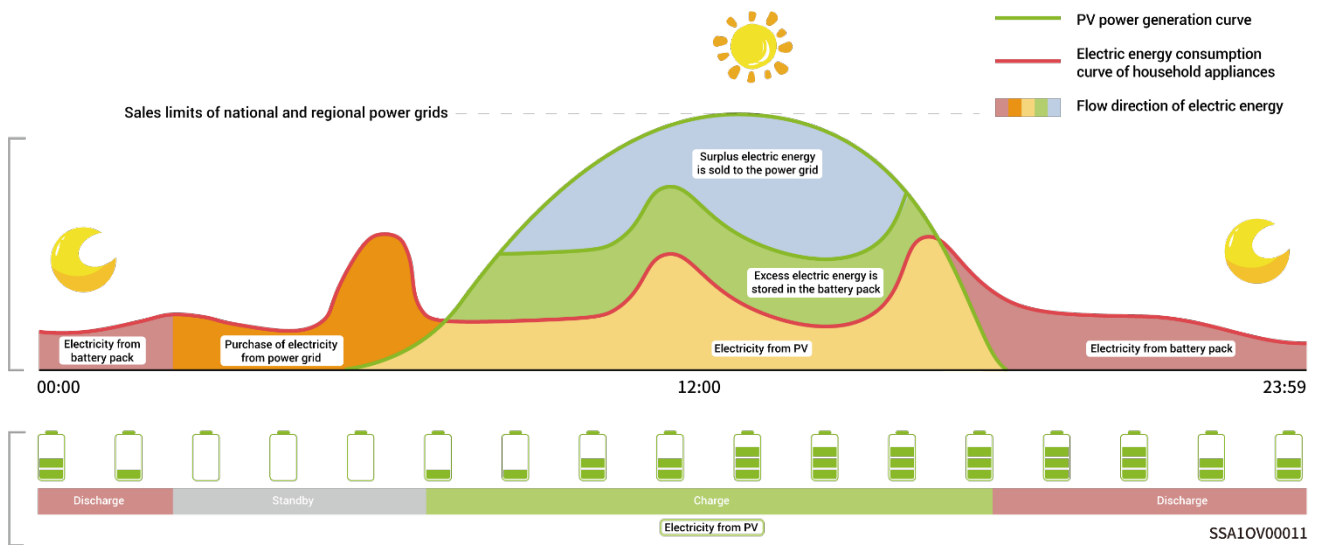
#### Tips

- **There are four working modes for the energy storage system, including Sigen AI Mode, Fully Feed-in to Grid Mode, Maximum Self-Consumption Mode, TOU Mode, Remote EMS Mode, and Load Shedding.**
- **Sigen AI Mode and Load Shedding are available in some countries and regions. The screen display of the App shall prevail.**



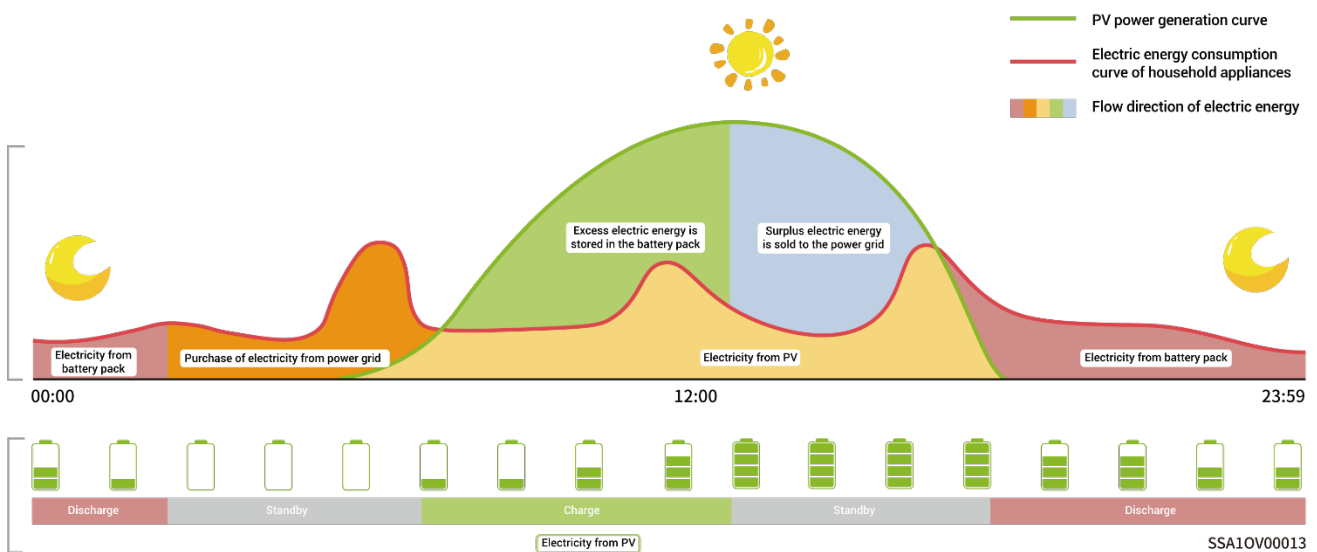
### 2.3.1.1.1 Sigen AI Mode

In Sigen AI Mode, the system records data such as electricity usage, local peak-valley electricity price, and weather conditions and thus customizes smart electricity solutions to save electricity costs for customers to the maximum extent.

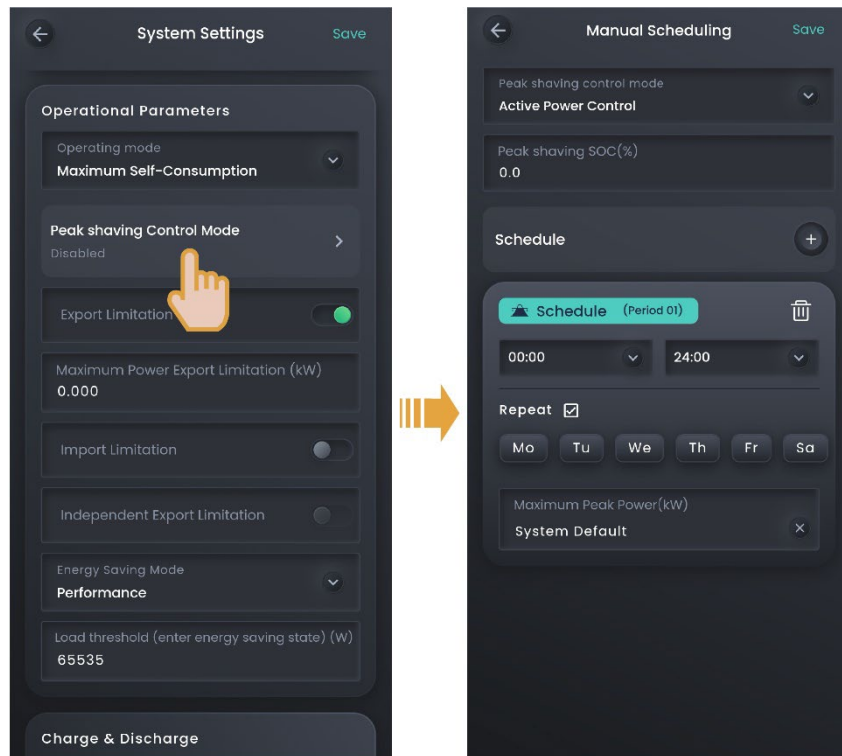


### 2.3.1.1.2 Maximum Self-Consumption Mode

When there is sufficient solar power, the electric energy generated by the PV system will first be used to power the loads, with any excess energy being stored in the batteries. If there is still surplus energy, it will be sold to the grid. When there is insufficient solar power, the batteries will release electric energy to loads. By increasing the self-consumption ratio of the PV system and improving the self-sufficiency ratio of household energy, you can effectively save on your electric bills.



The electricity bill in some regions is calculated as follows: Total electricity bill = Cost at peak power + cost for electricity usage + other costs. Wherein, peak power refers to the maximum power imported from the grid. You can set the maximum peak power imported from the grid to reduce the electricity bill.

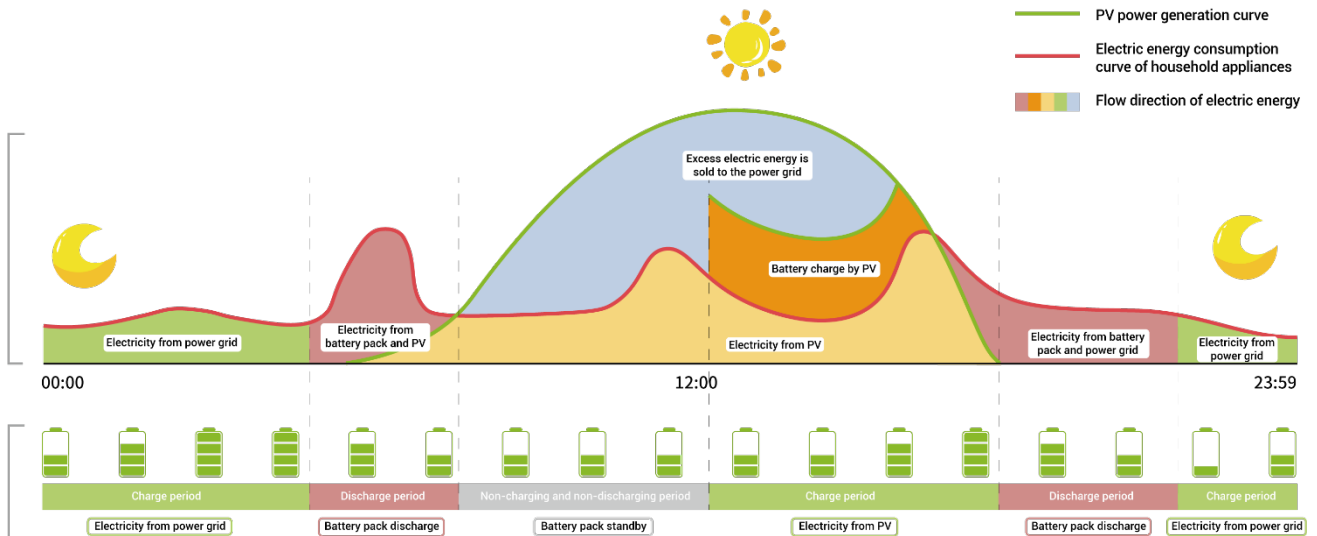


SEA1CM00045

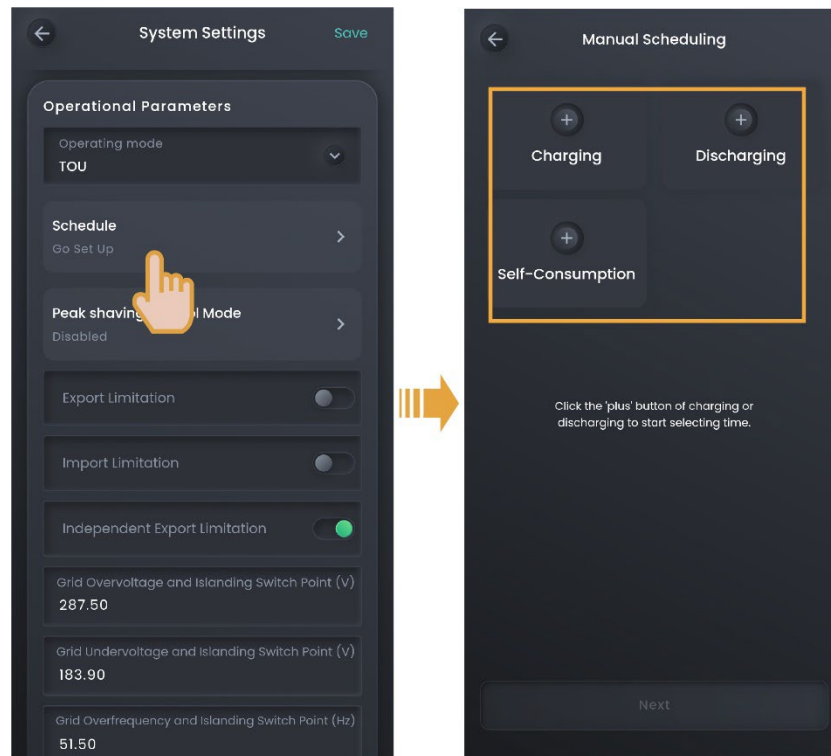
No.	Parameter name	Description
1	Peak shaving SOC	This parameter setting affects the capacity of peak shaving, and the system charges the battery to the set SOC value during the off-peak period. The larger the parameter setting, the stronger the peak shaving capability.
2	Maximum Peak Power	Sets the maximum peak power imported from the grid for household load and charging the battery pack.

### 2.3.1.1.3 TOU Mode

In TOU mode, you must manually set the charging and discharging periods, and the remaining periods will be non-charging and non-discharging periods. In the daytime, the surplus PV power can be sold to the grid or used to charge batteries. At night, batteries are charged from the grid when the electricity price is low to save the electricity bill.



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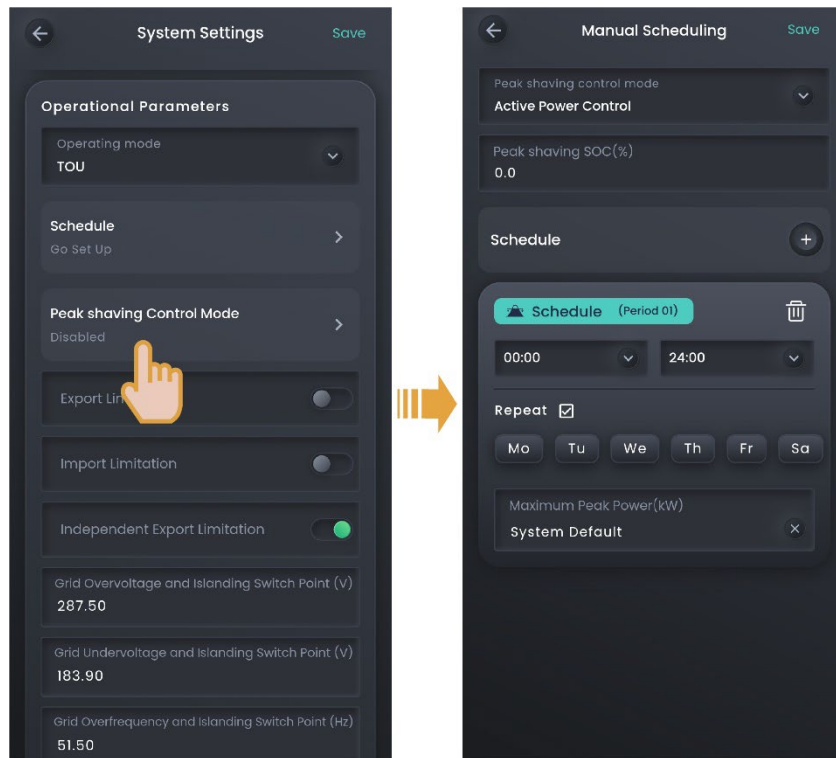
No.	Parameter name	Description
1	Charging	Maximum charging power for BAT
2		Grid Charging Cut-off SOC
3		Maximum power for importing from grid
4		Maximum Charging Power from Grid to BAT

No.	Parameter name	Description
5	Discharging/Self -Consumption	Maximum discharging power for BAT
6		Maximum power for exporting to grid
7		Maximum Discharging Power from BAT to Grid

### Tips

**The system will operate based on the PV power situation in periods that you do not specify as charging and discharging periods. The PV power will first be used to power home loads, with excess energy charging the batteries, and the batteries will not discharge.**

The electricity bill in some regions is calculated as follows: Total electricity bill = Cost at peak power + cost for electricity usage + other costs. Wherein, peak power refers to the maximum power imported from the grid. You can set the maximum peak power imported from the grid to reduce the electricity bill.



No.	Parameter name	Description
1	Peak shaving SOC	This parameter setting affects the capacity of peak shaving, and the system charges the battery to the set SOC value during the off-peak period. The larger the parameter setting, the stronger the peak shaving capability.
2	Maximum Peak Power	Sets the maximum peak power imported from the grid for household load and charging the battery pack.



#### 2.3.1.1.4 Fully Feed-in to Grid

You can sell excess energy back to the grid and earn credits on your energy bill. In the daytime, when the PV power is greater than the maximum output capacity of the inverter, the inverter maintains the maximum output while storing excess energy in the batteries. When the PV power is lower than the maximum output capacity of the inverter or there is no PV power in the nighttime, the batteries are discharged to ensure that the inverter maximizes the output.

#### 2.3.1.1.5 Remote EMS Mode

- In non-parallel mode, devices can be connected to a third-party energy management system (EMS) over the RS-485 interface. Before setting this mode, please make sure that the cable is properly connected to the RS485-1 port, and that you have set the correct baud rate as described in 2.4.1.5 Others.
- Devices can be connected to a third-party EMS over the ModBus-TCP protocol. Before setting this mode, please make sure that you have configured the settings as described in 2.4.1.4 ModBus parameters.
- Before setting this mode, users can set the scheduling parameters of our product through a third-party EMS.

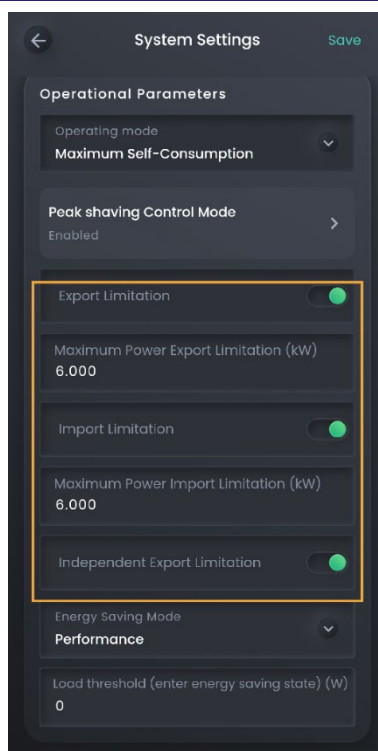
#### 2.3.1.1.6 Load Shedding




In areas with frequent power outages, you can add your region and schedule in this mode, and the system will fully charge the battery in advance as scheduled, ensuring that you have battery power available to supply the load during outages.

## 2.3.1.2 Export/Import limitation parameters

### Tips

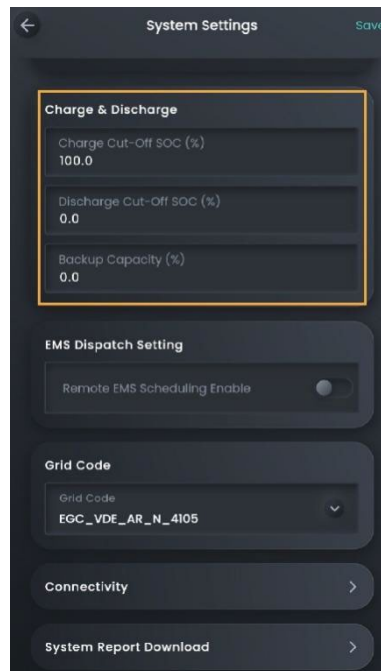
- An installer can set export/import limitation parameters according to user needs when creating new systems.
- To modify parameters after creating new systems, please manually set export/import limitation parameters according to local laws and regulations and grid agreements.
- The parameter display may differ depending on the device model. The actual screen display shall prevail.



No.	Parameter Name	Description
1	Export Limitation	When it is set to  , you can set the maximum power exported from the device to the power grid.
2	Maximum Power Export Limitation	Sets the maximum power exported from the device to the power grid.
3	Import Limitation	When it is set to  , you can set the maximum power purchased from the power grid.
4	Maximum Power Import Limitation	Sets the maximum power purchased from the power grid.
5	Independent Export Limitation	When it is set to  , each phase line of the inverter can execute the export/import limitation

No.	Parameter Name	Description
		independently.

### 2.3.1.3 Charge & discharge and backup capacity



No.	Parameter name	Description
1	Charge Cut-off SOC	Sets the capacity at which the battery pack stops charging.
2	Discharge Cut-off SOC	<p>Sets the capacity at which the battery pack stops discharging.</p> <ul style="list-style-type: none"> <li>● Value 0 is not recommended for this parameter to avoid irreversible attenuation due to failure to charge the battery pack in time.</li> <li>● The priority is given to "Backup Capacity" in backup power networking mode, while the parameter is applied in non-backup power networking mode.</li> </ul>

No.	Parameter name	Description
3	Backup Capacity	<ul style="list-style-type: none"> <li>● You can set this parameter when a gateway exists in the network.</li> <li>● In the on-grid scenario, the battery pack stops discharging when the backup capacity value is reached. In the off-grid scenario, the battery pack supplies power to power device and stops discharging when the Discharge Cut-off SOC setting is reached.</li> <li>● Users can manually set this parameter according to the power interruption frequency of their regions and leave time. Value 0 is not recommended for this parameter to avoid irreversible attenuation due to failure to charge the battery pack in time.</li> </ul>

## 2.3.1.4 Grid scheduling

### 2.3.1.4.1 Power regulation

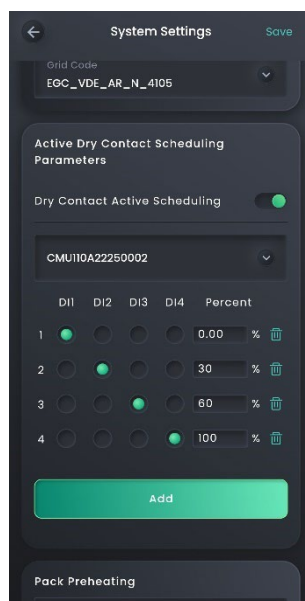
#### Tips

- In Germany and some European areas, the Ripple Control Receiver is used to convert power grid scheduling signals to dry contact signals, which are then transmitted to power stations. The dry contact communication mode is required to receive the power grid scheduling signal to achieve active and reactive power scheduling for the power station.
- Before this operation, ensure that the inverter you want to configure is connected with the Ripple Control Receiver and ports DI1–DI4 (ports 5–8 for an aviation connector) are not in use. For details, please refer to the Installation Guide.

### 2.3.1.4.2 Setting active power control

#### Tips

When a power station has power limiting requirements, the grid scheduling personnel must temporarily limit the active power fed into the power station or directly disconnect all the active power fed into the power station, that is, active power derating.



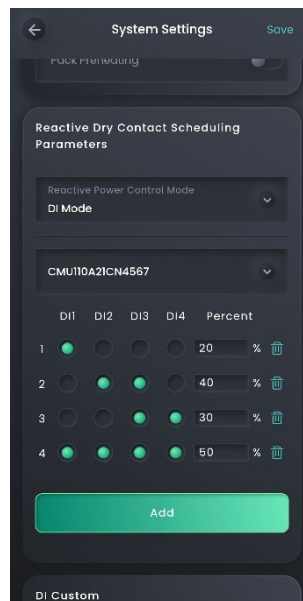
No.	Parameter name	Description
1	Dry Contact Active Scheduling	When it is set to <input checked="" type="checkbox"/> , you do not need to set the SN for a single device. For multiple devices, drop down and select the SN of the device connected to the Ripple Control Receiver. You can view the SN on the side of the device.
2	DI1, DI2, DI3, DI4	<p><input checked="" type="checkbox"/> indicates that the switch set on the DI cable is turned on and it is low level.</p> <p><input type="checkbox"/> indicates that the switch set on the DI cable is turned off and it is high level.</p> <p>The parameters shown in the figure are for reference only. Configure these parameters as needed.</p> <ul style="list-style-type: none"> <li>The status combination of DI1 to DI4 must not be</li> </ul>

<b>No.</b>	<b>Parameter name</b>	<b>Description</b>
		<p>duplicated. Otherwise, a command parsing error occurs.</p> <ul style="list-style-type: none"> <li>● If the actual DI signal does not match the setting in the App, the device will operate at the maximum active power command (100%).</li> </ul>
3	Percent (%)	<ul style="list-style-type: none"> <li>● Percentage values refer to the final power percentage executed by the device, and the value should be set to the corresponding value according to local grid requirements.</li> <li>● Positive percentage values indicate inversion (inverter outputs active power), whereas negative values indicate rectification (inverter absorbs active power).</li> <li>● Supports adding up to 16 percentage value configurations.</li> </ul>

### 2.3.1.4.3 Setting reactive power control



#### Tips

The grid operator requires a large-scale power station to have a certain ability to regulate the voltage at the grid connection point. The grid scheduling personnel schedules the power station to absorb or inject reactive power to the grid connection point according to the real-time reactive power transmission condition in the power grid, that is, reactive power compensation.



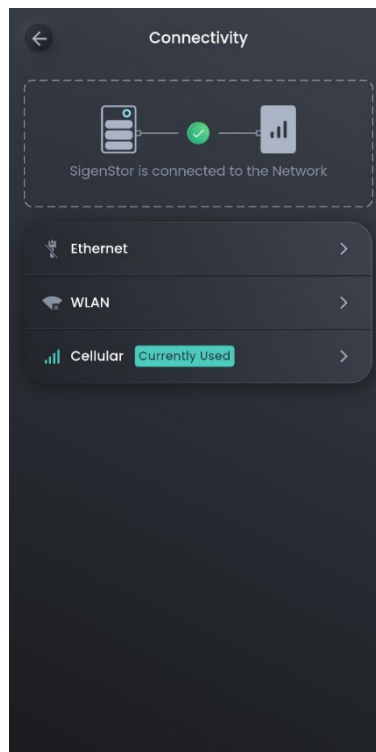
No.	Parameter name	Description
1	Reactive Power Control Mode	<ul style="list-style-type: none"> <li>● No Output: If the grid operator does not require the power station to regulate the voltage at the grid connection point and does not need to implement reactive power compensation, devices can maintain the output with pure active power. In this case, set to "No Output."</li> <li>● DI mode: Set to "DI mode" when setting dry contact reactive scheduling parameters.</li> <li>● Grid connection point power factor control: When a distributed power station needs to implement distributed reactive power compensation to reduce or avoid power-factor-adjusted electricity cost and increase</li> </ul>



No.	Parameter name	Description
		<p>power station revenue, you must set "Grid connection point power factor control."</p> <p>When the DI mode is selected, you do not need to set the SN for a single device. For multiple devices, drop down and select the SN of the device connected to the Ripple Control Receiver. You can view the SN on the side of the device.</p>
2	DI1, DI2, DI3, DI4	<p> indicates that the switch set on the DI cable is turned on and it is low level.</p> <p> indicates that the switch set on the DI cable is turned off and it is high level.</p> <ul style="list-style-type: none"> <li>● The parameters shown in the figure are for reference only. Configure these parameters as needed.</li> <li>● The status combination of DI1 to DI4 must not be duplicated. Otherwise, a command parsing error occurs.</li> <li>● If the actual DI signal does not match the setting in the App, the device will operate at the minimum reactive power command (0%).</li> </ul>
3	Percent (%)	<ul style="list-style-type: none"> <li>● Percentage values refer to the final power percentage executed by the device, and the value should be set to the corresponding value according to local grid requirements.</li> <li>● Positive percentage values indicate the output of capacitive reactive power (raising voltage), whereas negative values indicate the output of inductive reactive power (lowering voltage).</li> <li>● Supports adding up to 16 percentage value configurations.</li> </ul>

### 2.3.1.5 Internet connection

Click "Connectivity" to check the Internet connection mode.



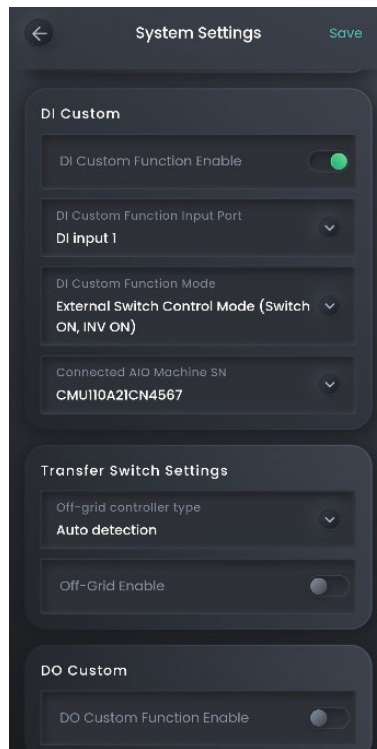
No.	Parameter name	Description
1	Ethernet	Displays the connection status of Fast Ethernet. Do not disconnect the network cable when the Internet connection is stable.
2	WLAN	<p>Displays the connection status of WLAN. Here you can configure the WLAN for all devices in the power station.</p> <ul style="list-style-type: none"> <li>● Before configuring the WLAN, please make sure that antennas are installed on devices.</li> <li>● Non-encrypted WLAN is not recommended as it may lead to Internet access failure.</li> <li>● When WLAN is the only connection path for the devices to access the internet, switching WLAN to any other wireless router will be prohibited.</li> </ul>
3	Cellular	<ul style="list-style-type: none"> <li>● Displays whether the 4G network is connected to the Internet.</li> <li>● When 4G is used for communication, users can view the monthly traffic usage and set a traffic</li> </ul>


<b>No.</b>	<b>Parameter name</b>	<b>Description</b>
		usage threshold for each month.

### Tips

It is recommended to use Fast Ethernet and WLAN for communication with inverters. When free 4G traffic of CommMod runs out, users must top up their accounts or replace an SIM card.

### 2.3.1.6 DI customization



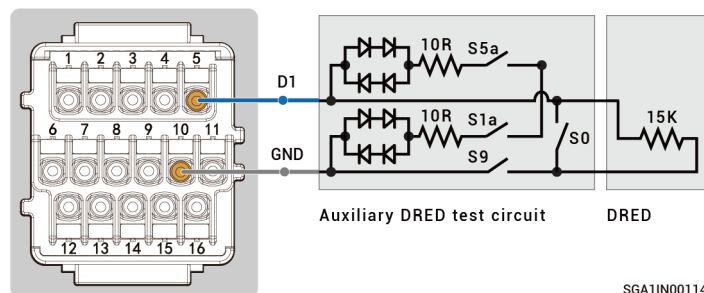
No.	Parameter name	Description
1	DI Custom Function Enable	When set to  , the DI custom function is enabled, and you can set related parameters. The function becomes unavailable when disabled.
2	DI Custom Function Input Port	Set the DI port to which the device connects to according to the wiring.
3	DI Custom Function Mode	<ul style="list-style-type: none"> <li>● If set to "External Switch Control mode (switch ON, INV ON)," when the connected device switch is turned on, the inverter is powered on, and when the device switch is turned off, the inverter is shut down.</li> <li>● If set to "DRM0 mode (switch ON, INV OFF)," when the connected device switch is turned on, the inverter is shut down, and when the device switch is turned off, the inverter is powered on.</li> <li>● If set to "Micro-grid Control mode: (Switch OFF: Off grid INV standby, On-grid INV ON)," when the</li> </ul>

No.	Parameter name	Description
		<p>connected device switch is turned off and grid power outage occurs, the AC side of the inverter is in standby mode. When the power grid is restored and connected to the grid, the inverter operates normally. When the device switch is turned on and grid power outage occurs, the inverter can operate in off-grid mode.</p> <ul style="list-style-type: none"> <li>● If set to "Micro-grid Control mode: (Switch ON: Off grid INV standby, On-grid INV ON)," when the connected device switch is turned on and grid power outage occurs, the AC side of the inverter is in standby mode. When the power grid is restored and connected to the grid, the inverter operates normally. When the device switch is turned off and a grid power outage occurs, the inverter can operate in off-grid mode.</li> <li>● If set to "Gateway Bypass mode (state of switch)," when the connected device switch is turned off and the bypass switch of Gateway is turned on, the inverter cannot operate in off-grid mode. When the device switch is turned on, and the bypass switch of Gateway is turned off, the inverter can operate in off-grid mode.</li> <li>● If set to "Transfer Switch Position II Status Detection," when the connected device switch is turned off, the transfer switch is in on-grid mode, and the inverter cannot operate in off-grid mode. When the device switch is turned on, the transfer switch is in off-grid mode, and the inverter can operate in off-grid mode.</li> </ul>
4	Connected AIO Machine SN	Set the SN of the inverter to which the device connects.

### 2.3.1.6.1 DRM0 parameter

According to AS/NZS 4777.2:2020+A1:2021, connecting the inverter to the power grid must meet the Demand Response Mode (DRM) function, of which DRM0 is mandatory.

Figure 2-1 Connection diagram



#### Tips

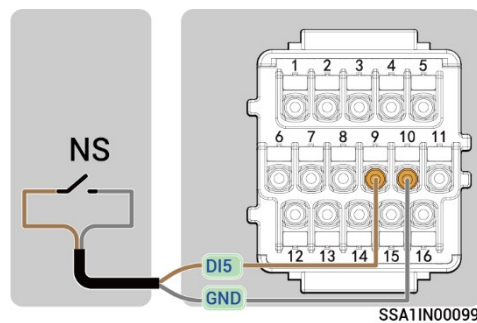
Before setting the DRM0 parameter, ensure that the DI1 of the device is not in use and that it is properly connected to the DRED device.

No.	Parameter name	Description
1	DI Custom Function Enable	<input checked="" type="checkbox"/>
2	DI Custom Function Input Port	DI Input 1
3	DI Custom Function Mode	DRM0 mode (switch ON, INV OFF) Notes: Switches S5a, S1a, and S9 of the DRED device are normally closed, and S0 is used to control the power on and off of the inverter. When S0 closes, the inverter is powered off, and when S0 opens, the inverter is powered on.
4	Connected AIO Machine SN	SN of the inverter connected to the DRED device.

### 2.3.1.6.2 NS protection parameter

In areas where VDE4105 standards apply, such as VDE-AR-N-4105, VDE-AR-N 4110, and VDE-AR-N 4120, power generating equipment in a power station must support connection with network and system protection (NS) devices.

Figure 2-2 Connection




#### Tips




- DI5 is recommended. If DI1-DI4 is not in use, any one of DI1 to DI5 can be connected to the NS protection device.
- Before setting parameters, ensure that the NS protection device is correctly connected.



No.	Parameter name	Description
1	DI Custom Function Enable	<input checked="" type="checkbox"/>
2	DI Custom Function Input Port	DI Input 5 (If the NS protection device is connected to another DI port, make settings based on the port)
3	DI Custom Function Mode	DRM0 mode (switch ON, INV OFF) Notes: When the power grid operates abnormally, the NS protection device is turned on, and the inverter automatically shuts down. When the power grid recovers, the NS protection device is turned off, and the inverter is powered on.
4	Connected AIO Machine SN	SN of the inverter connected to the NS protection device.

### 2.3.1.7 Others

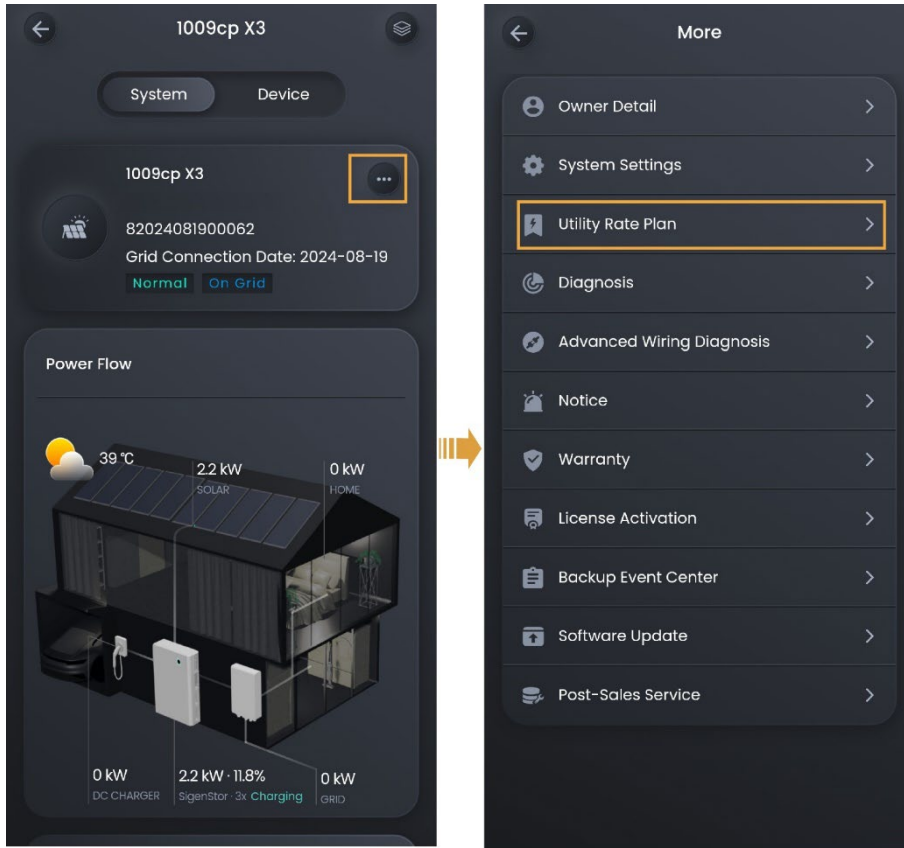
No.	Parameter name	Description
1	System Name	Used to set the name for a power station.
2	System Type	Set station type.
3	Lighting	When it is set to  , you can set the LED lighting effect according to your preference. When "LED Strips" is set to "Power Flow," the flowing water lighting effect from the top down indicates that the battery pack and charger are charging and the flowing water lighting effect from the bottom up indicates that the battery pack and charger are discharging. The steady-on lighting effect indicates that the battery pack and charger are not charging or discharging.
4	Maintenance	Used to bulk turn on/off all devices in the power station.
5	Grid Overvoltage and Islanding Switch Point	Used to set the on-grid-to-off-grid overvoltage switch point.
6	Grid Undervoltage and Islanding Switch Point	Used to set the on-grid-to-off-grid undervoltage switch point.
7	Grid Overfrequency and Islanding Switch Point	Used to set the on-grid-to-off-grid overfrequency switch point.
8	Grid Underfrequency and Islanding Switch Point	Used to set the on-grid-to-off-grid underfrequency switch point.
9	Energy Saving Mode	<ul style="list-style-type: none"> <li>● Performance: In this mode, devices operate normally and supply power to loads at high speed.</li> <li>● Energy Saving: In this mode, devices are in standby mode with low power consumption. After being connected to loads, devices take some time to respond to supply power to loads.</li> </ul>
10	Load threshold (enter energy saving state)	When "Energy Saving Mode" is set to "Energy Saving," you can set the load threshold in



No.	Parameter name	Description
		standby mode to reduce power loss. The default value is 0.5% of the sum of the maximum powers of inverters in parallel.
11	Grid Code	Specifies a grid code based on the country/region when devices are used.
12	Pack Preheating	Set the period during which the heating film in the battery pack is heated.
13	Off-grid controller type	Set the type of device that controls off-grid operation. <ul style="list-style-type: none"> <li>● Auto detection: Set to this parameter when the device of the company (for example, Gateway) controls off-grid operation.</li> </ul> Third-party backup power box: Set to this parameter when the device of a third-party company (for example, transfer switch) controls off-grid operation.
14	Off-Grid Enable	When the system allows the inverter to operate in off-grid mode, if it is set to  , the inverter operates in an off-grid mode in the event of a grid power outage.
15	DO Custom Function Enable	When it is set to  , the DO custom function is enabled, and a third-party device (for example, heat pump) can connect to the device of the company through the DO port.
16	DO Custom Function Input Port	Set the DO port to which the device connects to according to the wiring.
17	DO Custom Function Mode	Set the DO port mode.
18	Connected Device SN	Set the SN of the inverter to which the device connects through the DO port.
19	Grid connection point voltage control enable	The output power of the inverter affects the grid voltage when the grid voltage is low. The grid overvoltage/undervoltage protection may be triggered when the output power or absorbed power is too high. When this parameter is set to  , the power output is limited to prevent

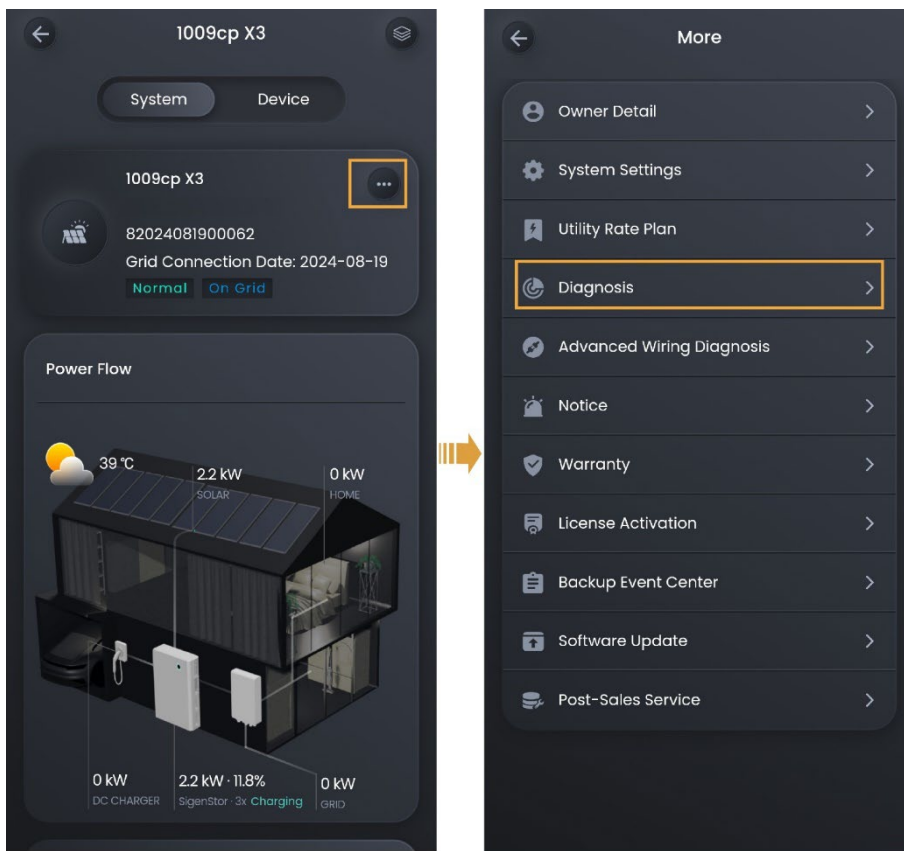
No.	Parameter name	Description
		triggering grid overvoltage/undervoltage protection.
20	Hard export limit control enable	When it is set to  , the device shuts down when the reverse power exceeds the threshold setting or Gateway/Power sensor is disconnected.
21	Hard export limit control threshold	<ul style="list-style-type: none"> <li>● When the actual grid feed-in power is greater than the "Hard export limit control threshold," the device shuts down.</li> <li>● When the actual grid feed-in power is lower than the "Hard export limit control threshold," the device powers on.</li> </ul>
22	Hard export limit control recover enable	If set to  , when the overrun protection is triggered, the power rises according to the "Grid Fault Recovery Power Gradient" setting.
23	Grid Fault Recovery Power Gradient (%/s)	Specifies the power rise gradient after the devices are connected to the grid after the power grid resumes normal operation.
24	System Report Download	Used to download station reports.

## 2.3.2 Setting rate plan



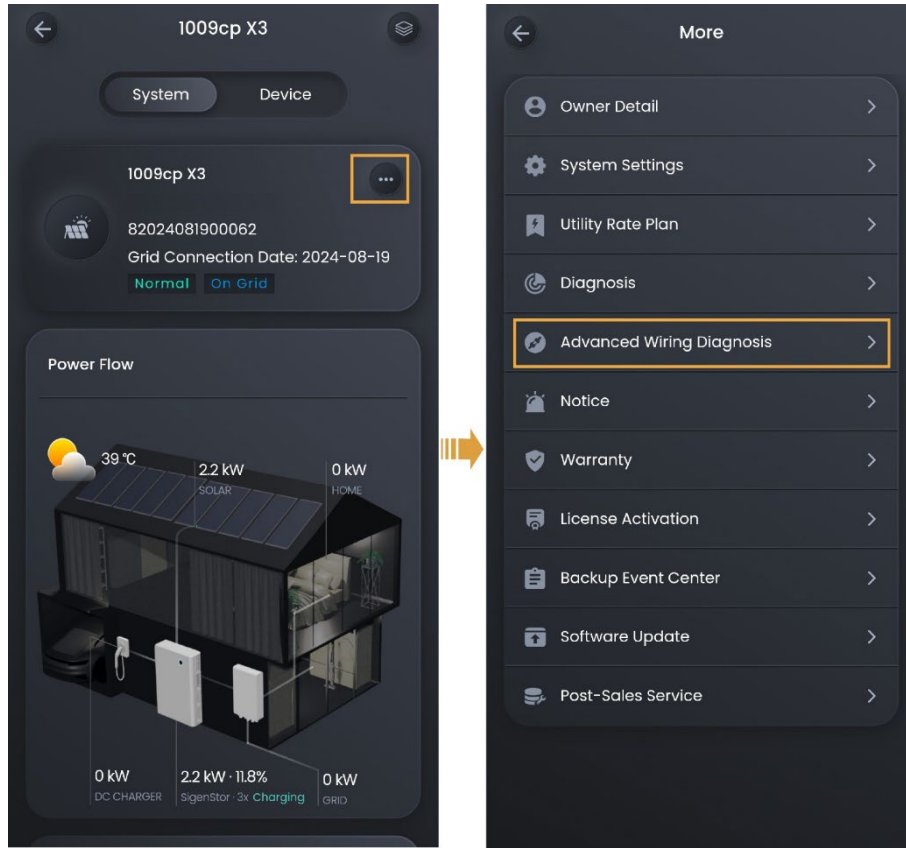
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## 2.3.3 Station status diagnosis



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## 2.3.4 Station connection diagnosis

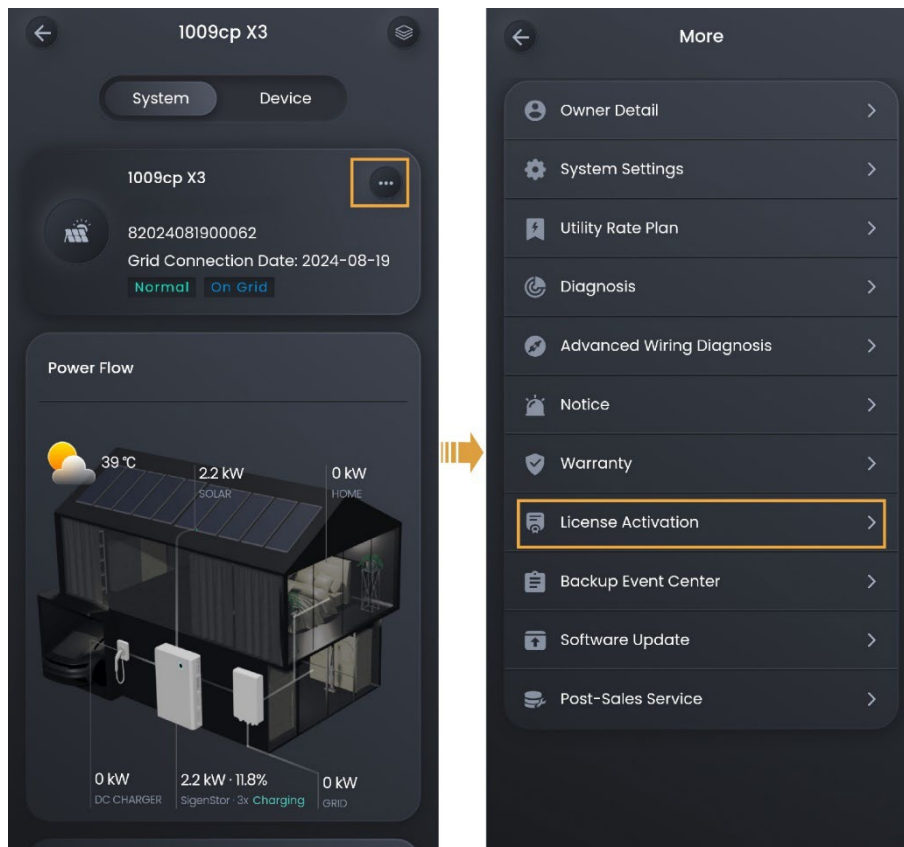


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## 2.3.5 License activation

### Tips

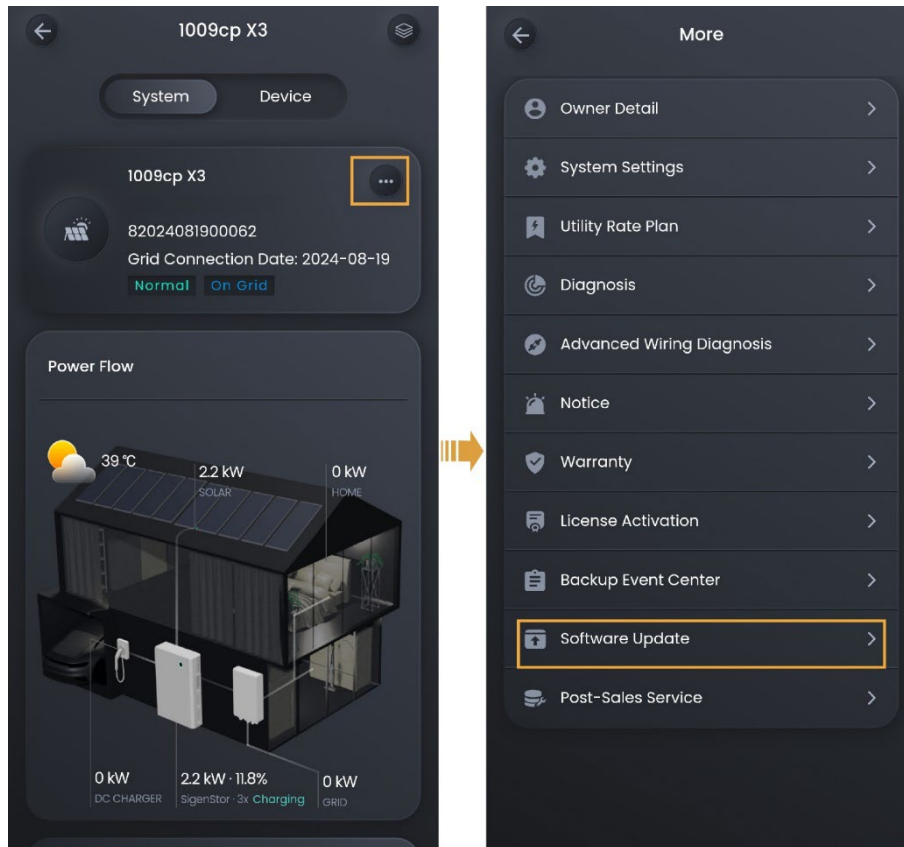
- **If Sigen Hybrid series inverters are expected to be applied in PV storage systems, users must purchase and activate the license.**
- **For how to purchase the license, please contact your sales representative.**



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## 2.3.6 Software upgrade

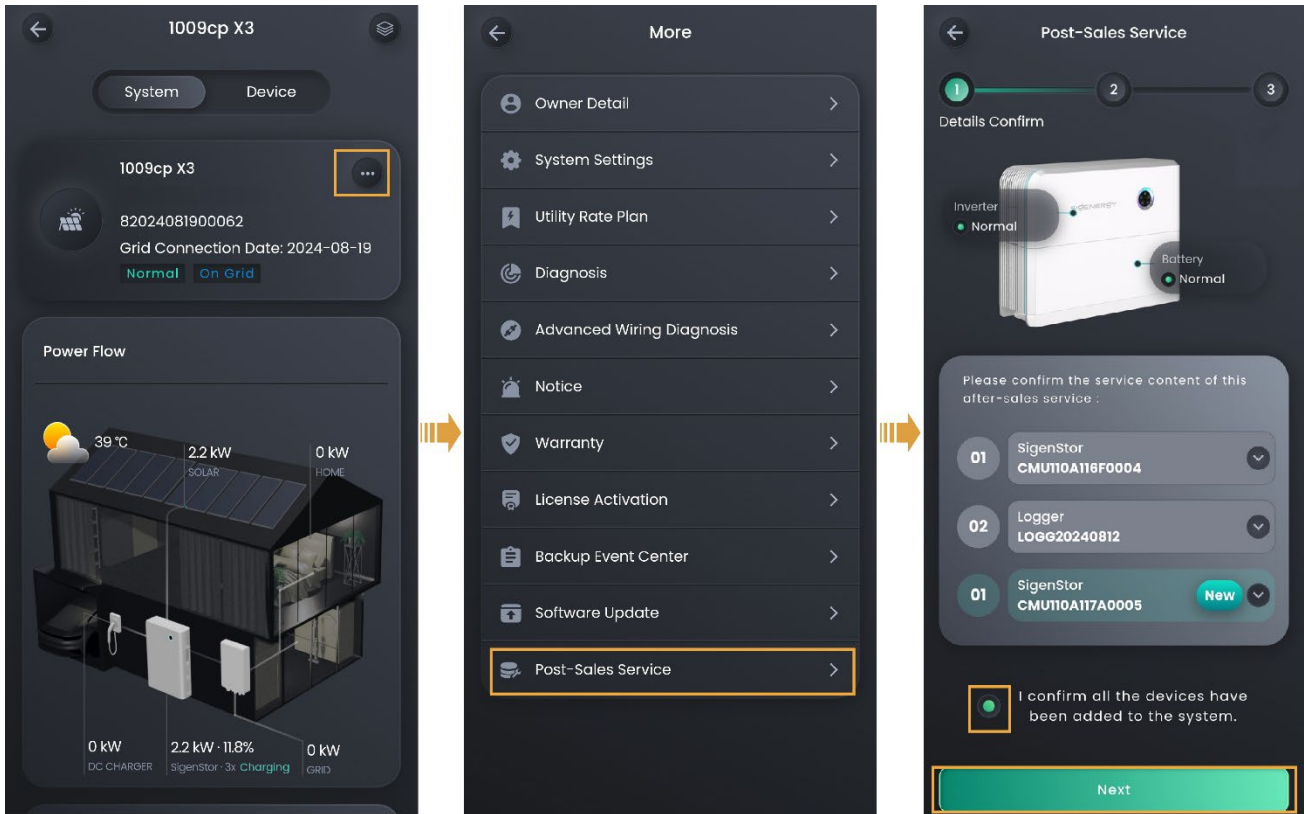
You can use this function to check whether the system software is updated to the latest version and upgrade the device to the latest version when necessary.



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## 2.3.7 After-sales service

After you add, replace, or remove devices, you must use this function to finally confirm your operations.



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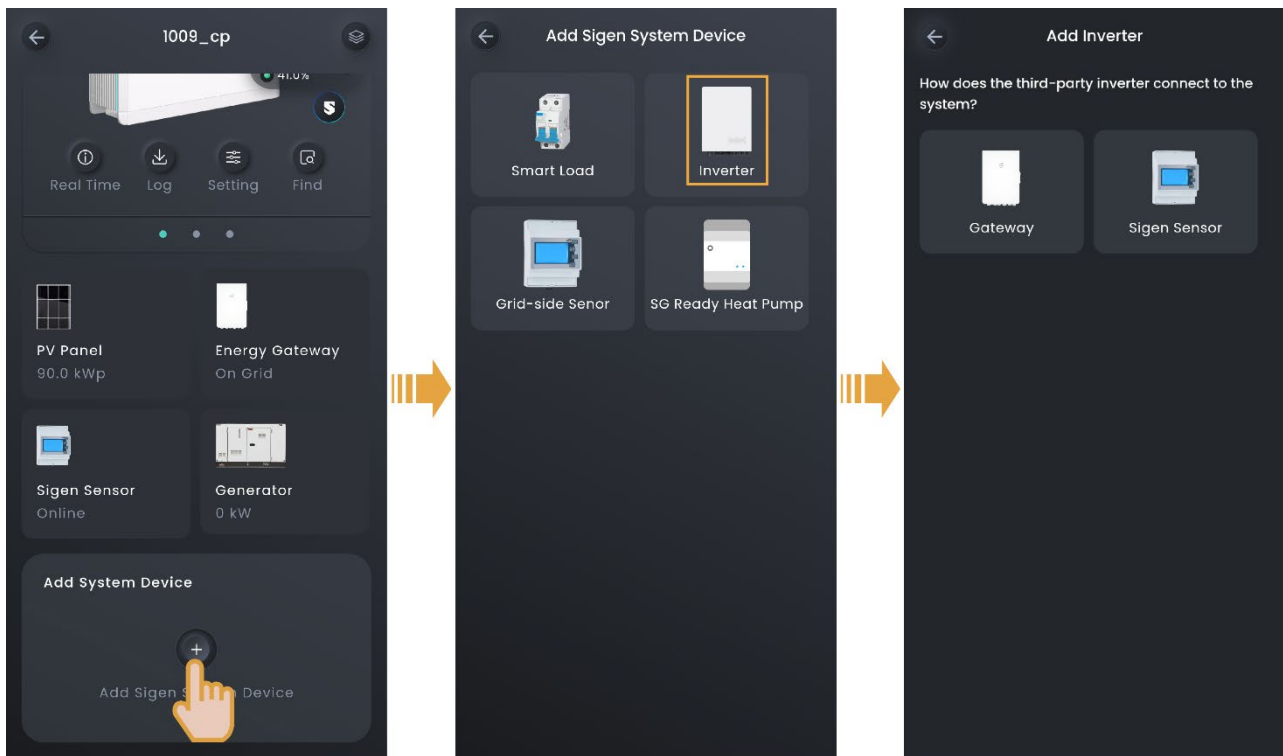


## 2.3.8 Adding device

### Tips

- **If you use our products, the system will automatically recognize and connect them. You can view device information on the "Device" screen.**
- **This section describes how to connect a third-party device.**

### 2.3.8.1 Third-party inverter



SSA1CM00005

#### Connecting using Gateway

##### Tips

Before connecting to a third-party inverter, ensure that the third-party inverter is connected to the smart load circuit breaker of the Gateway. For connection details, refer to the Installation Guide of the respective product.

On the "Device" screen, set related parameters based on the third-party inverter. Then, you can check detailed settings on the "Device" screen.

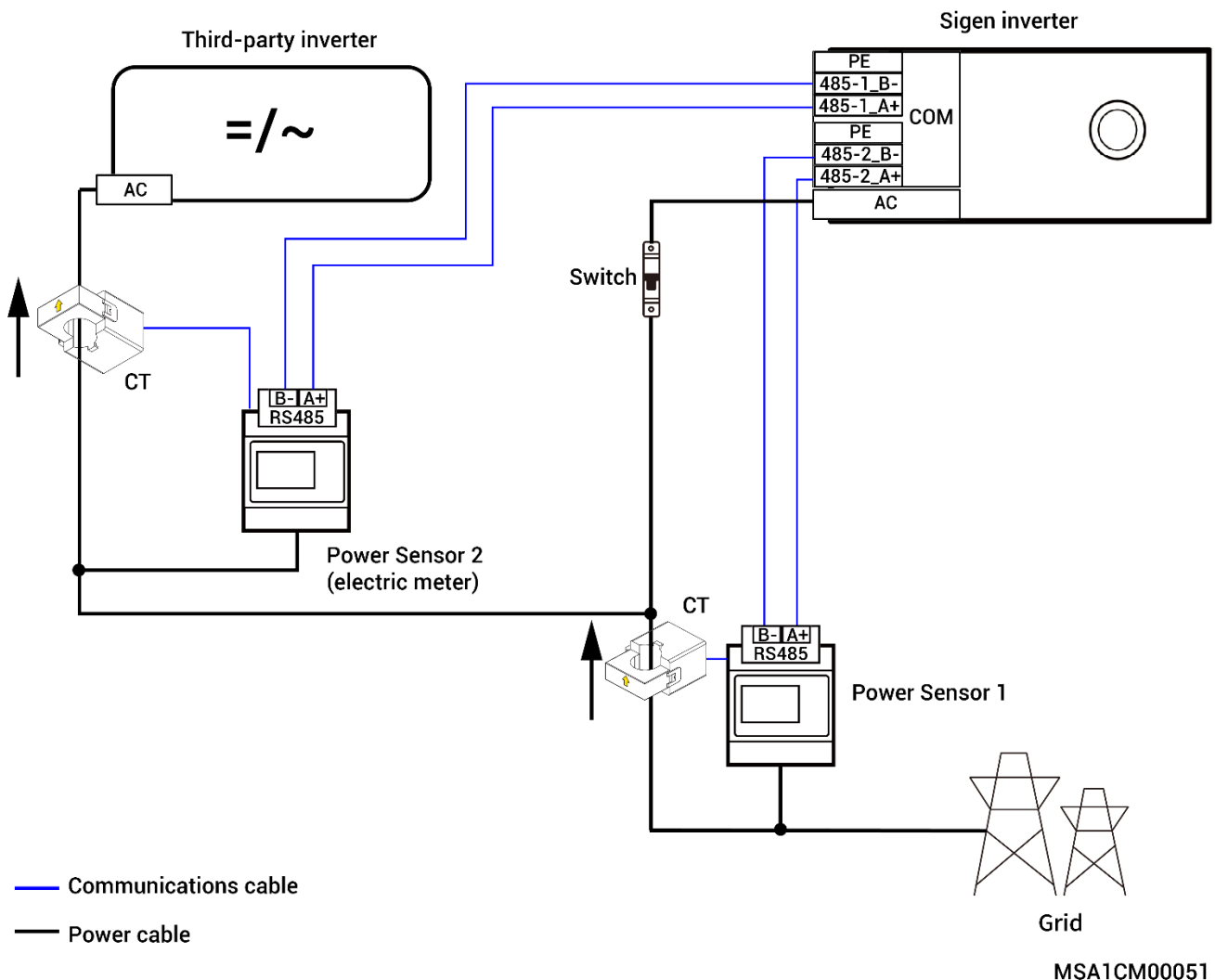
#### Connecting using an electric meter

##### Tips

**Before connecting to a third-party inverter, make sure that:**

- **The third-party inverter is properly connected to an electric meter which is purchased from our company.**
- **The electric meter is properly connected to the COM port of our inverter. For connection ports, please refer to the respective Installation Guide.**

Figure 2-3 Diagram of third-party inverter wiring connections



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The diagram displays the connections among different cables of equipment. The specific ports shall be determined by actual equipment.

On the "Device" screen, set related parameters based on the third-party inverter and the connected meter. Then, you can check detailed settings on the "Device" screen.

### Tips

- In the off grid state, when the operating power of the third-party inverter is  $\leq$  (load usage power + Sigen inverter charging power), the third-party inverter can operate normally.
- In the off grid state, when the operating power of the third-party inverter is

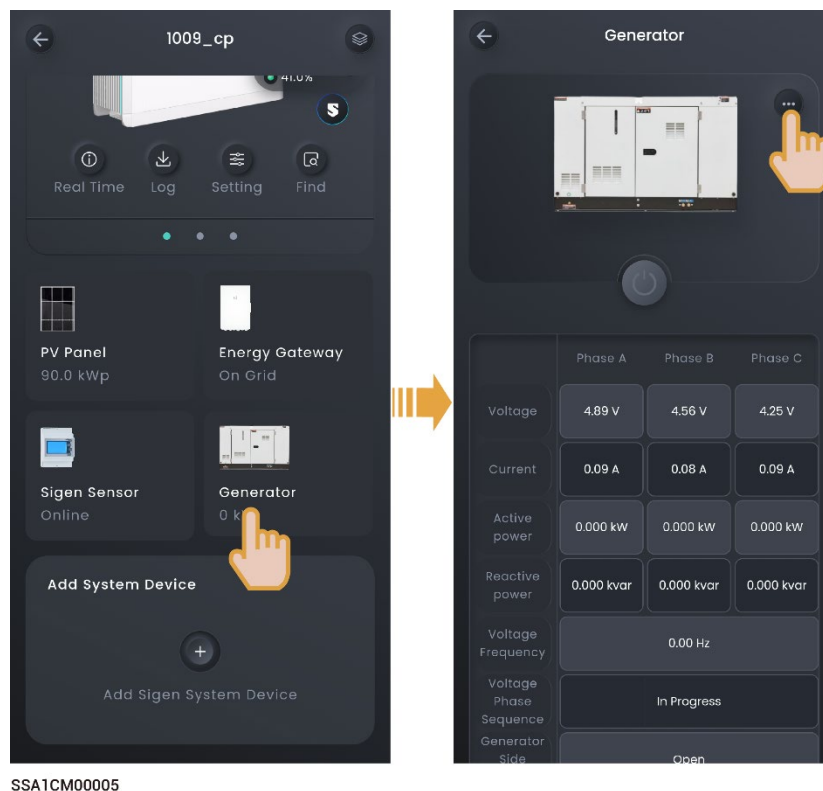
greater than (load usage power + Sigen inverter charging power), the third-party inverter will stop running.

### 2.3.8.2 Diesel generator

#### Tips

**Before connecting a diesel generator, please ensure that the Gateway that can be connected to the diesel generator has been configured in the networking and connected correctly. For details about the Gateway, please refer to the respective Installation Guide.**

The system can automatically recognize and connect the diesel generator. Check the details and make settings in "Device" → "GENERATOR".



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#### Manual start by operating the generator's switch



In this mode, you must switch on and off the system on the generator side.

No.	Parameter name	Description
1	Rated Power	Sets the rated power of the diesel generator.
2	Best Power Duty	To guarantee the optimal functioning status of the system, you are advised to control the output power of the diesel generator not more than 80%.

No.	Parameter name	Description
3	Battery Charging Cut-off SOC for Generator	When the SOC of the battery pack is lower than the "Battery Charging Cut-off SOC for Generator" setting, the diesel generator will charge the battery pack to the set value.

## two - wire - start

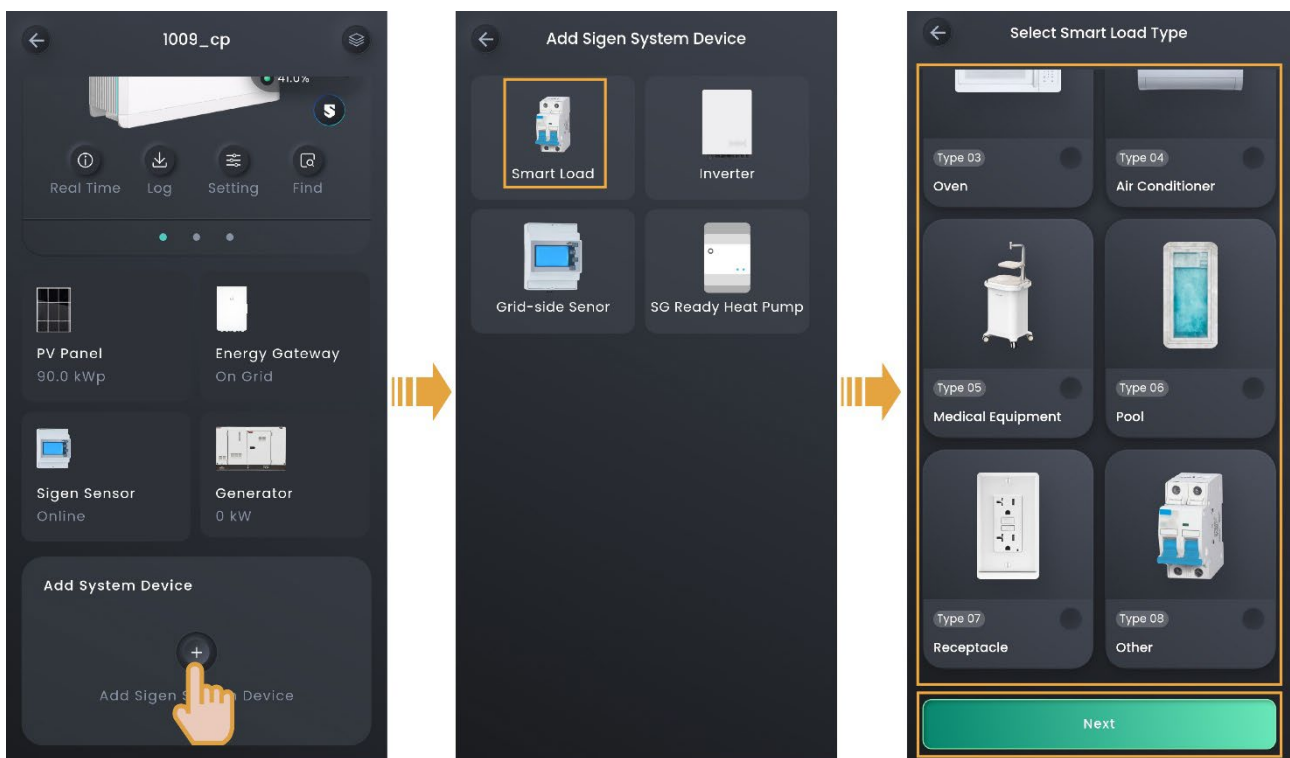
In this mode, you can start and stop the diesel generator in the App, or the diesel generator can start or stop automatically.

No.	Parameter name	Description
1	Operating Mode	<ul style="list-style-type: none"> <li>● Manual</li> <li>● Auto</li> </ul>
2	Generator Start	In "Manual" mode, when it is set to  , you can start or stop the diesel generator using the  icon in the App.
3	Rated Power	Sets the rated power of the diesel generator.
4	Best Power Duty	To guarantee the optimal functioning status of the system, you are advised to control the output power of the diesel generator not more than 80%.
5	Time of Use	In "Auto" mode, set the time period and SOC threshold for automatic power-on/off of the diesel generator.
6	Battery Charging Cut-off SOC for Generator	When the SOC of the battery pack is lower than the "Battery Charging Cut-off SOC for Generator" setting, the diesel generator will charge the battery pack to the set value.

### 2.3.8.3 Smart load

#### Tips



- **Before connecting a smart load, please ensure that a Gateway is configured in the networking.**
- **The number of smart loads that can be connected is determined by the supported capacity of the Gateway.**
- **After adding the smart load to the App, you can switch the smart load on and off through the App. Alternatively, the system can remotely control the equipment on and off based on the actual running conditions and the SOC threshold you set.**



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If you cannot locate the icon of the connected device, for example, an immersion heater, select "Other" and connect it. You can check the connected smart load on the "Device" screen.

## Operating Mode


No.	Parameter name	Description	
1	Manual	When "Manual" is set to  , you can power on and off smart loads using "⏻" in the App.	
2	Auto	SOC	When it is set to  , you can control the power-on/off of smart loads using SOC.
3		SOC Threshold for Load Activation	Sets the SOC threshold for power-on/off of smart loads. The load powers on when the actual value is greater than the set threshold and powers off when the actual value is lower than the set threshold.
4		Time of Use	Sets the time period for controlling power-on/off of smart loads using SOC.

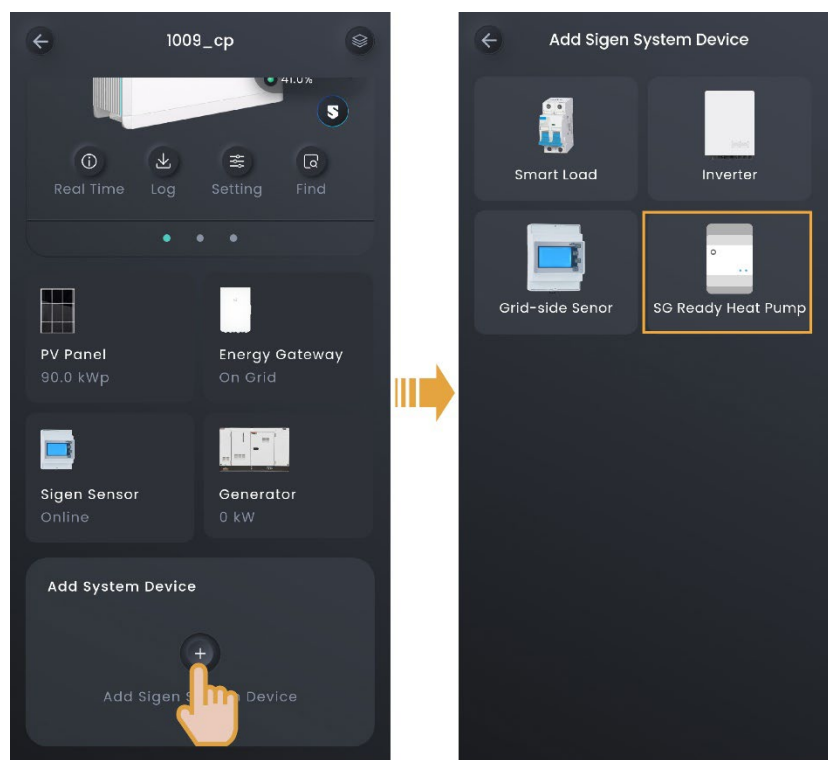


### 2.3.8.4 SG heat pump



#### Tips


Before connecting to a heat pump, make sure that:

- The heat pump has been properly connected to the DO port of the company's inverter, and the software version of the inverter enables users to connect the heat pump.
- "DO Custom Function Enable" in the "System Settings" menu has been set to .



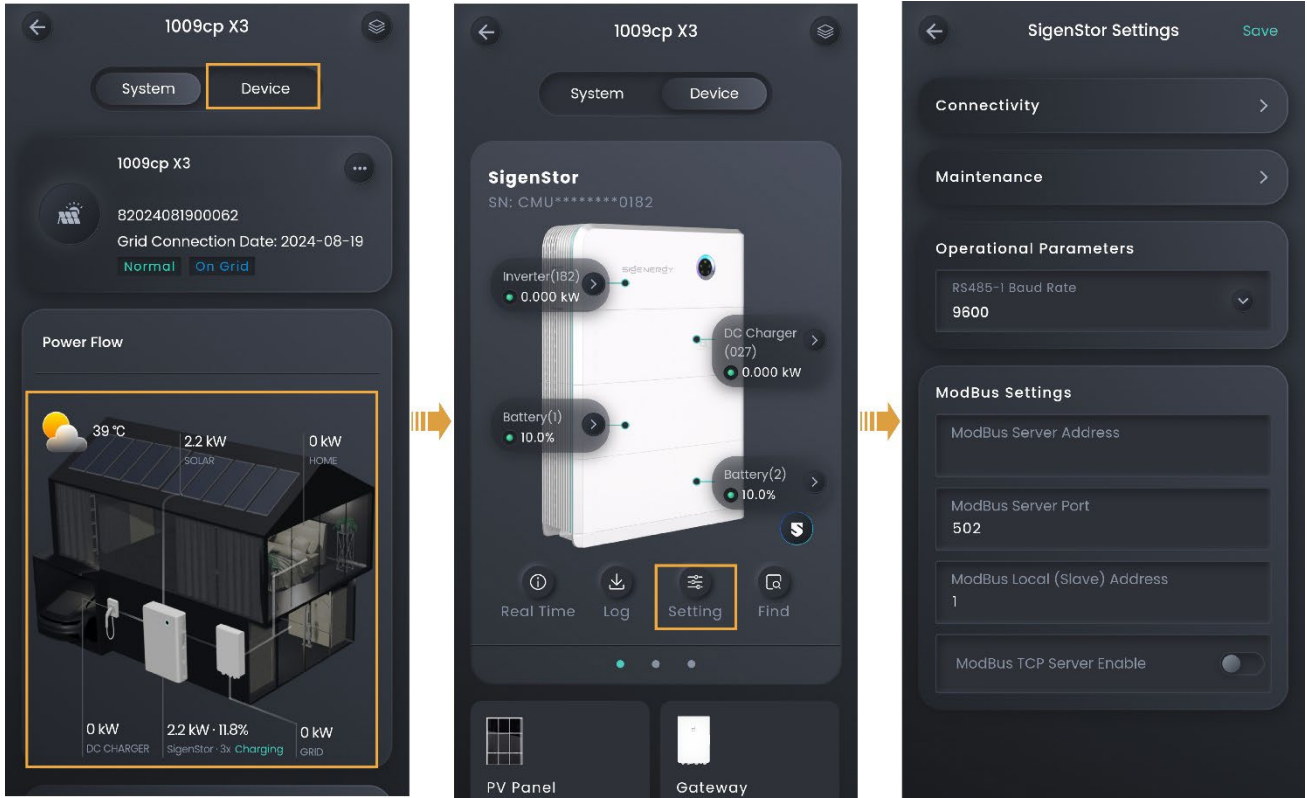
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No.	Parameter name	Description
1	Operating Mode	<ul style="list-style-type: none"> <li>● Manual</li> <li>● Auto</li> </ul>
2	Manual	In "Manual" mode, when it is set to  , you can start or stop the SG heat pump using the  icon in the App.
3	Min Running Time	Sets the minimum time for the heat pump to operate after starting.

No.	Parameter name	Description
4	PV Residual Power Control	In "Auto" mode, when it is set to  : <ul style="list-style-type: none"> <li>● When the surplus PV power is greater than the "SG Ready Heat Pump Min Starting Power" setting, the heat pump powers on.</li> <li>● When the surplus PV power is lower than the "SG Ready Heat Pump Min Starting Power" setting, the heat pump shuts down.</li> <li>● Surplus PV power = PV power - AC load power - energy storage charging power.</li> </ul>
5	SG Ready Heat Pump Power	In "Auto" mode, set the rated power of the heat pump during operation.
6	SG Ready Heat Pump Min Starting Power	In "Auto" mode, set the minimum starting power of the heat pump.
7	Max Daily Running Time	In "Auto" mode, set the maximum cumulative time for the heat pump to operate on the day.
8	Time of Use	In "Auto" mode, set the time period and SOC threshold for automatic power on/off of the SG heat pump.

## 2.4 Device parameter setup


### 2.4.1 SigenStor



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## 2.4.1.1 Internet connection

In the "Connectivity" area, you can check the Internet connection mode.

No.	Parameter name	Description
1	Ethernet	<ul style="list-style-type: none"> <li>● Displays the connection status of Fast Ethernet.</li> <li>● For Fast Ethernet, network parameters are automatically obtained using a DHCP server. To edit parameters, do the following:               <ol style="list-style-type: none"> <li>1. Configure a WLAN that can be normally connected to the Internet, or insert Sigen CommMod.</li> <li>2. Wait until "WLAN" or "Cellular" is displayed as "Connected", and disconnect the network cable.</li> <li>3. Set "Obtain IP address automatically" to  and edit parameters.</li> <li>4. Re-connect the network cable to the device.</li> </ol> </li> </ul>
2	WLAN	<p>Displays the connection status of WLAN. If the connection status is displayed as "Not connected", but you want to use the WLAN to connect to the Internet, do the following:</p> <ul style="list-style-type: none"> <li>● In parallel mode, identify the connection status of WLAN in "System Settings". If the status is displayed as "Connected", the device is communicated over WLAN, and no more action is required. If the status is displayed as "Not connected", configure the WLAN as described in 2.3.1.4 Grid scheduling.</li> <li>● In non-parallel mode, configure the WLAN as described in 2.3.1.4 Grid scheduling.</li> </ul>

No.	Parameter name	Description
3	Cellular	<p>Displays the connection status of 4G network. If the connection status is displayed as "Not connected" and you want to use the 4G network to access Internet, do the following:</p> <ul style="list-style-type: none"> <li>● In parallel mode, identify the connection status of 4G network in "System Settings". If the status is displayed as "Connected", the device is communicated over the 4G network, and no more action is required. If the status is displayed as "Not connected", please make sure that Sigen CommMod is inserted.</li> <li>● In non-parallel mode, please make sure that Sigen CommMod is inserted.</li> <li>● When 4G is used for communication, users can view the monthly traffic usage and set a traffic usage threshold for each month.</li> </ul>

### 2.4.1.2 History maintenance

By clicking "Maintenance", you can clear historical data.

#### Tips


- **When you click "Reset", the device restarts.**
- **When you click "Erase All Content", performance data within 5 minutes, alarms, and hourly/daily/monthly/yearly generating capacity, operation logs, device information will be cleared. Please exercise caution with this action.**

### 2.4.1.3 Power on/off

By clicking "Maintenance" and then "Power-off" or "Power-on", you can power the system on or off.

### 2.4.1.4 ModBus parameters

You need to set these parameters when the device is communicated with a third-party EMS over the ModBus-TCP protocol.

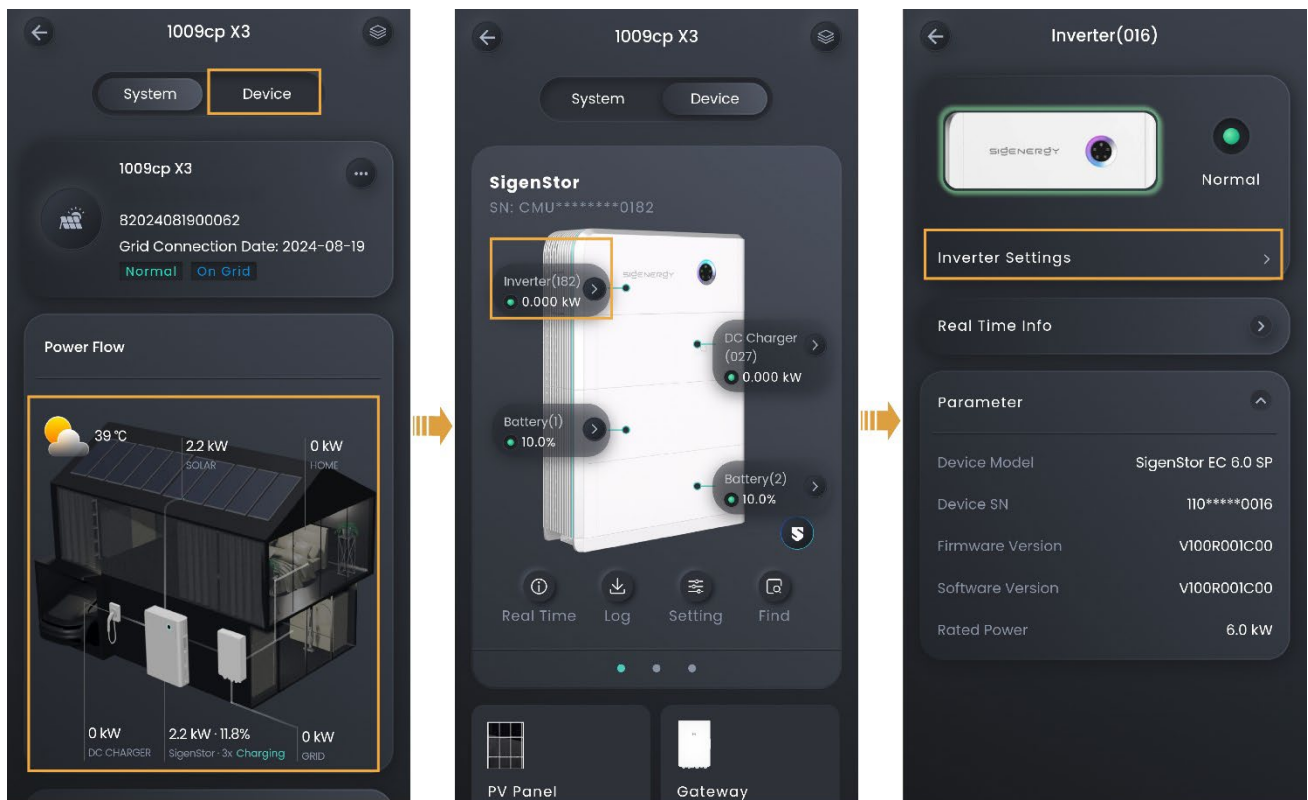
No.	Parameter name	Description
1	ModBus Server Address	Specifies the IP address of a third-party EMS server when the device functions as the Modbus TCP client.
2	ModBus Server Port	Specifies the port for the device to communicate with a third-party EMS when the device functions as the Modbus TCP client.
3	ModBus Local (Slave) Address	Specifies the Modbus address of the device when the Modbus protocol is used. You must set different Modbus addresses for devices in parallel mode.
4	ModBus TCP Server Enable	When this parameter is set to  , the device functions as the Modbus TCP server and enables connection with a third-party EMS.

## 2.4.1.5 Others

### Operational Parameters

No.	Parameter name	Description
1	RS485-1 Baud Rate	Specifies the data transfer rate of the RS485 port.

## 2.4.2 Inverter



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### IPS (only available for Italian grid code CEI-021)


No.	Parameter name	Description
1	IPS external command signal	Specifies IPS external command signal.
2	IPS local command signal	Specifies IPS local command signal.

### Power

No.	Parameter name	Description
1	Maximum apparent power	You can set this parameter to adjust the maximum apparent power of the device.



## System Parameters

No.	Parameter name	Description
1	Insulation impedance threshold	To ensure the safety of the equipment, the equipment cannot operate if the equipment detects that the measured insulation resistance to the ground output by the PV array is lower than the value set for this parameter.
2	PV input start voltage	You can set a lower starting voltage when few PV strings are connected.
3	Ground fault detection	When it is set to  , a grounding error alarm is generated when the device is not grounded or properly grounded.

## Voltage Protection

No.	Parameter name	Description
1	Level- <b>N</b> Overvoltage Protection Threshold	Specifies the level- <b>N</b> overvoltage threshold. When the actual voltage is greater than the set threshold, and the set protection duration is met, an alarm will be triggered on the device. On the contrary, an alarm will be cleared.
2	Level- <b>N</b> Overvoltage Protection Duration	Specifies the duration for level- <b>N</b> overvoltage protection.
3	Level- <b>N</b> Undervoltage Protection Threshold	Specifies the level- <b>N</b> undervoltage threshold. When the actual voltage is lower than the set threshold, and the set protection duration is met, an alarm will be triggered on the device. On the contrary, an alarm will be cleared.
4	Level- <b>N</b> Undervoltage Protection Duration	Specifies the duration for level- <b>N</b> undervoltage protection.
5	Ten-Minute Sliding Window Overvoltage Protection Threshold	Specifies the 10-minute overvoltage protection threshold. When the average voltage value in a 10-minute window is greater than the set threshold, and the set protection duration is met, an alarm will be triggered on the device. On the contrary, an alarm will be cleared.
6	Ten-Minute Sliding	Specifies a 10-minute overvoltage protection

No.	Parameter name	Description
	Window Overvoltage Protection Time	duration.


Note: **N** is a numeric value from 1 to 6. You can set a parameter for "Voltage Protection" to associate with "Grid Code". For available parameters, the screen display shall prevail.


## Frequency Protection


No.	Parameter name	Description
1	Level- <b>N</b> Overfrequency Protection Threshold	Specifies the level- <b>N</b> overfrequency threshold. When the actual grid frequency is greater than the set threshold, and the set protection duration is met, an alarm will be triggered on the device. On the contrary, an alarm will be cleared.
2	Level- <b>N</b> Overfrequency Protection Duration	Specifies the duration for level- <b>N</b> overfrequency protection.
3	Level- <b>N</b> Underfrequency Protection Threshold	Specifies the level- <b>N</b> underfrequency threshold. When the actual grid frequency is lower than the set threshold, and the set protection duration is met, an alarm will be triggered on the device. On the contrary, an alarm will be cleared.
4	Level- <b>N</b> Underfrequency Protection Duration	Specifies the duration for level- <b>N</b> underfrequency protection.

Note: **N** is a numeric value from 1 to 6. You can set a parameter for "Frequency Protection" to associate with "Grid Code". For available parameters, the screen display shall prevail.



## Frequency Setting


No.	Parameter name	Description
1	Overfrequency Derating Enable	The grid frequency is greater than the trigger value when it is set to  . This setting will limit the device from outputting active power.

No.	Parameter name	Description
2	Frequency for triggering overfrequency derating	Specifies the threshold for triggering derating upon overfrequency.
3	Overfrequency derating power change rate	The active power is recovered based on the gradient setting after the frequency is recovered.
4	Over-Frequency Derating Exit Frequency	Specifies the threshold to exit derating upon overfrequency. That is, when the grid frequency is lower than the exit threshold, the device outputs active power and derating stops.
5	Frequency response delay effective time	Set the time for waiting for the active power output of the device to change after derating upon overfrequency is triggered.
6	Overfrequency derating response delay	Set the time required for the output power of the device to start changing till reach 95% of the stable value after derating upon overfrequency is triggered.
7	Overfrequency Derating Power Reference Mode	<p>The power derates according to the set mode when derating upon overfrequency is triggered.</p> <ul style="list-style-type: none"> <li>● Freeze active power on trigger: Specifies the real-time active power when derating upon overfrequency is triggered.</li> <li>● Maximum active power: Specifies the maximum active power of the device.</li> <li>● Rated power: Specifies the rated power of the device.</li> </ul> <p>Remaining charge power capacity of battery: Specifies the real-time power + energy storage charging power when derating upon overfrequency is triggered.</p>
8	Overfrequency derating exit delay	If "Overfrequency derating exit frequency enable" is set to  , you can use this parameter to set the time for the device to


No.	Parameter name	Description
		stop output active power derating when derating upon overfrequency exits, provided that the grid frequency is lower than the "Over-Frequency Derating Exit Frequency" setting.
9	Overfrequency derating exit frequency enable	When it is set to  , "Overfrequency derating exit delay" takes effect, and you can set the "Overfrequency derating exit delay" value.

## Undervoltage Power Boost



No.	Parameter name	Description
1	Underfrequency rise power Enable	The grid frequency is lower than the trigger value when it is set to  , and the device outputs a higher active power.
2	Frequency for triggering of underfrequency rise power	Specifies the threshold for triggering power rise upon underfrequency.
3	Power recovery gradient of underfrequency rise	The active power is recovered based on the gradient setting after the frequency is recovered.
4	Under-Frequency Power Increase Exit Frequency	Specifies the threshold for exiting power rise upon underfrequency. That is, when the grid frequency is greater than the exit threshold, the device outputs active power, and the power rise stops.
5	Underfrequency power boost power reference mode	<p>The active power rises according to the set mode when power rise upon underfrequency is triggered.</p> <ul style="list-style-type: none"> <li>● Freeze active power on trigger: Specifies the real-time active power when power rise upon underfrequency is triggered.</li> <li>● Maximum active power: Specifies the maximum active power.</li> <li>● Remaining active power capacity of PCS: Specifies the rated power of the device.</li> </ul> <p>Remaining discharge power capacity of battery: Specifies the real-time power + energy storage discharging power when power rise upon underfrequency is triggered.</p>
6	Underfrequency power boost response delay	Set the time for waiting for the active power output of the device to change when power rise upon underfrequency is triggered.
7	Underfrequency power boost exit delay	If "Underfrequency power boost exit frequency enable" is set to  , you can use this

No.	Parameter name	Description
		parameter to set the time for the device to stop output active power rise when power rise upon underfrequency exits, provided that the grid frequency is greater than the "Under-Frequency Power Increase Exit Frequency" setting.
8	Under-Rise Power Response Time	Set the time required for the active power output of the device to start changing till it reaches 95% of the expected value after power rise upon underfrequency is triggered.
9	Underfrequency power boost exit frequency enable	When it is set to  , "Underfrequency power boost exit delay" takes effect, and you can set the "Underfrequency power boost exit delay" value.



## Voltage Rise Suppression

No.	Parameter name	Description
1	P-U Voltage Derating Enable	When it is set to  , the grid voltage, based on the P-U curve correspondence, regulates the active power output from the device.
2	P-U curve Points included	Specifies the ratio $P/P_n$ between the active power and the rated power that the device regulates in real time based on the ratio $U/U_n(\%)$ between the actual voltage and the rated voltage.
3	P-U curve power regulation time	Specifies the time required to regulate 95% of the active power output from the device based on the P-U curve correspondence due to grid voltage change.


## Grid Fault Reconnect

No.	Parameter name	Description
1	Grid Fault Recovery	When it is set to  , the device can be connected to the power grid only when the actual grid voltage and frequency are within the set range, and this state is maintained for the set duration after the power grid resumes normal operation.
2	Grid Fault Recovery Frequency Upper Limit	Specifies the allowable maximum frequency for connecting devices to the grid after the power grid resumes normal operation.
3	Grid Fault Recovery Frequency Lower Limit	Specifies the allowable minimum frequency for connecting devices to the grid after the power grid resumes normal operation.
4	Grid Fault Recovery Voltage Upper Limit	Specifies the allowable maximum voltage for connecting devices to the grid after the power grid resumes normal operation.
5	Grid Fault Recovery Voltage Lower Limit	Specifies the allowable minimum voltage for connecting devices to the grid after the power grid resumes normal operation.
6	Grid fault recovery time to grids	Specifies the time after which the actual grid voltage and frequency are within the set range, and the device waits for the grid connection after the power grid recovers normal operation.
7	AFCI Enables	When it is set to  , the device will conduct the DC arc testing.



## EMS Control

No.	Parameter name	Description
1	Single-Machine Active Power Dispatch Enable	When it is set to  , the power is scheduled for a single device, and you can set it to either active power mode or reactive power mode.  <b>Warning</b> Inverters with this parameter set cannot participate in EMS control.

## Grid Connection Startup Check


No.	Parameter name	Description
1	Startup Grid Connection Detection	When it is set to  , the device can be connected to the power grid only when the actual grid voltage and frequency are within the set range, and this state is maintained for the set duration.
2	Startup Grid Connection Detection Time	Specifies the time after which the actual grid voltage and frequency are within the set range, and the device waits for the grid connection after the device is powered on.
3	Startup Grid Connection Detection Frequency Upper Limit	Specifies the allowable maximum frequency for the grid connection after the device is powered on.
4	Startup Grid Connection Detection Frequency Lower Limit	Specifies the allowable minimum frequency for the grid connection after the device is powered on.
5	Startup Grid Connection Detection Voltage Upper Limit	Specifies the allowable maximum voltage for the grid connection after the device is powered on.
6	Startup Grid Connection Detection Voltage Lower Limit	Specifies the allowable minimum voltage for the grid connection after the device is powered on.
7	Startup Grid Connection Detection Power Gradient	Specifies the power rise gradient after the device is connected to the grid after being powered on.

## Islanding

No.	Parameter name	Description
1	Active Islanding	When it is set to  , the output power, frequency, or phase can be disturbed to a certain extent by using a control unit.
2	Passive Islanding	When it is set to  , the islanding effect will be detected by the change of output voltage, frequency, phase, or harmonics during the power outage.



## Reactive power Settings


No.	Parameter name	Description
1	Reactive power regulation mode	Regulate the reactive power according to the set mode.
2	Enable QU Curve Automatic Adjustment	When it is set to  , the reactive power is automatically regulated according to the time value set in "QU Curve Automatic Adjustment Time Constant."
3	Reactive power Q/S regulation	Regulates the reactive power output by percentage.
4	QU Curve Automatic Adjustment Time Constant	Set the time required for automatic regulation of reactive power when the QU curve is triggered due to grid voltage change.
5	Fixed value adjustment of reactive power	Regulates the reactive power output by the fixed value.
6	Power factor adjustment	Specifies the power factor.
7	PF-P/Pn curve Points included	Specifies the power factor of the device regulating the output power based on P/Pn(%) in real time.
8	PF-P/Pn adjustment time	Specifies the time required to regulate 95% of the reactive power output from the device based on the PF-P/Pn curve correspondence.
9	PF-U curve Points included	Specifies the power factor that the device regulates in real time based on the ratio U/Un(%) between the actual voltage and the rated voltage.
10	Q-P curve Points included	Specifies the ratio Q/Pmax between reactive power and maximum active power that the device regulates in real time based on the ratio P/Pmax between active power and maximum active power.
11	Q-P curve adjustment time	Specifies the time required to regulate 95% of the reactive power output from the device based on the Q-P curve correspondence.

No.	Parameter name	Description
12	Q-U curve Points included	Specifies the ratio Q/S between reactive power output and apparent power that the device regulates in real time based on the ratio $U/U_n(\%)$ between actual grid voltage and rated voltage.
13	Q-U curve trigger power	Specifies the $P/P_{max}$ at which the device triggers the Q-U curve function. The Q-U curve scheduling function is enabled when the actual power is greater than the set value.
14	Q-U curve exit power	Specifies the $P/P_{max}$ at the device that exists the Q-U curve function. The Q-U curve scheduling function is disabled when the actual power is lower than the set value.
15	Q-U curve power regulation time	Specifies the time required to regulate 95% of the reactive power output from the device based on the Q-U curve correspondence.

### Active power Settings


No.	Parameter name	Description
1	Active power regulation mode	Regulate the active power according to the set mode.
2	Percentage active power adjustment	Regulate the active power output by percentage.
3	Fixed value adjustment of active power	Regulate the active power output by the fixed value.

### Low Voltage Ride Through


No.	Parameter name	Description
1	Low Voltage Ride-Through Enable	When it is set to  , if low voltage occurs in a short time due to grid fault, the devices shall stay connected for short periods of time instead of immediately separating from the power grid.

No.	Parameter name	Description
2	Low Voltage Ride-Through Mode	The device outputs the related power (current) during low voltage ride-through according to the set mode.
3	Low Trigger Threshold	Low voltage ride-through is triggered when the grid voltage is lower than this parameter setting.
4	Low Voltage Ride-Through curve Points included	Sets the low voltage ride-through capability.
5	Low Voltage Ride-Through Current Zero Crossing Voltage Threshold	The device outputs zero current when the grid voltage is lower than this parameter setting.

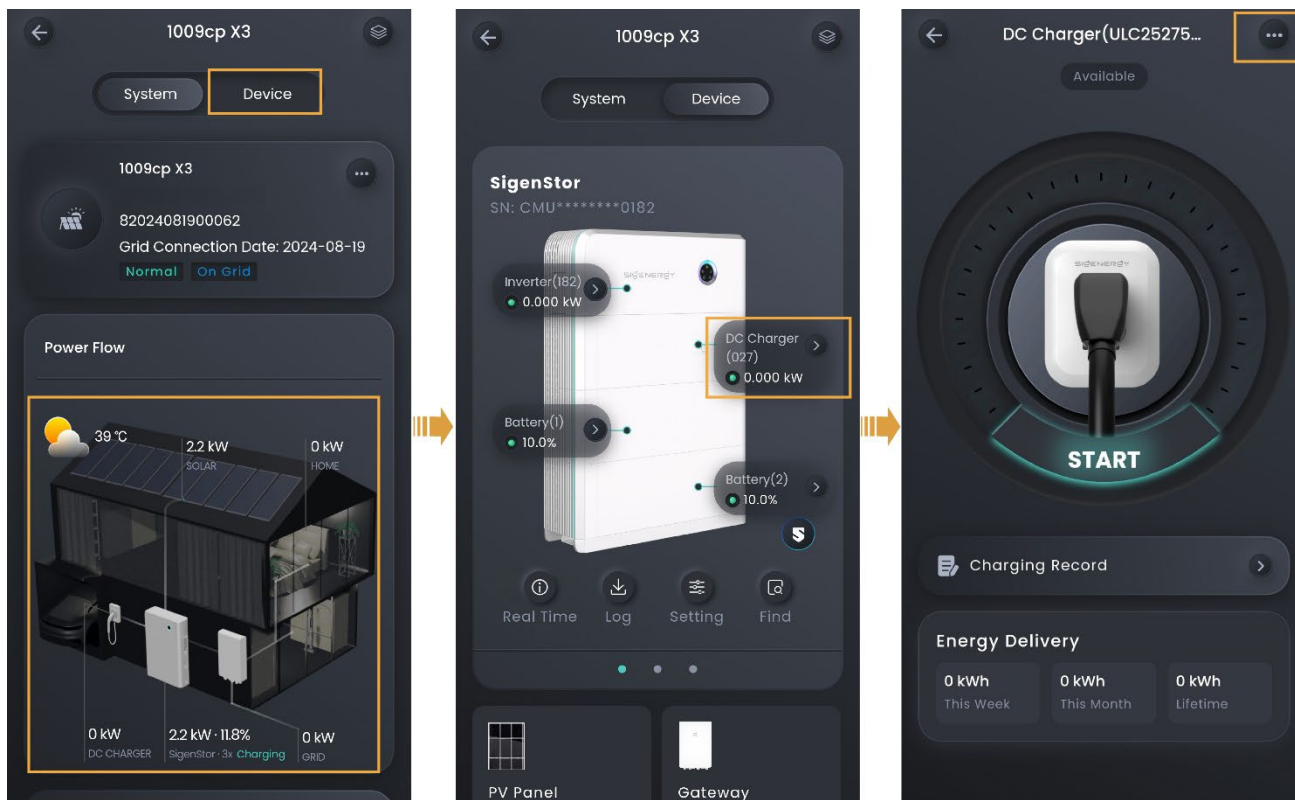
## High Voltage Ride Through

No.	Parameter name	Description
1	High Voltage Ride-Through Enable	When it is set to  , if high voltage occurs in a short time due to grid fault, the devices shall stay connected for short periods of time instead of immediately separating from the power grid.
2	High Voltage Ride-Through curve Points included	Sets the high voltage ride-through capability.
3	High Trigger Threshold	High voltage ride-through is triggered when the grid voltage is greater than this parameter setting.


## Fan parameters

No.	Parameter name	Description
1	External fan silent mode regulation	When it is set to  , the maximum fan speed is limited to reduce fan noise.

## 2.4.3 Sigen EV DC Charging Module



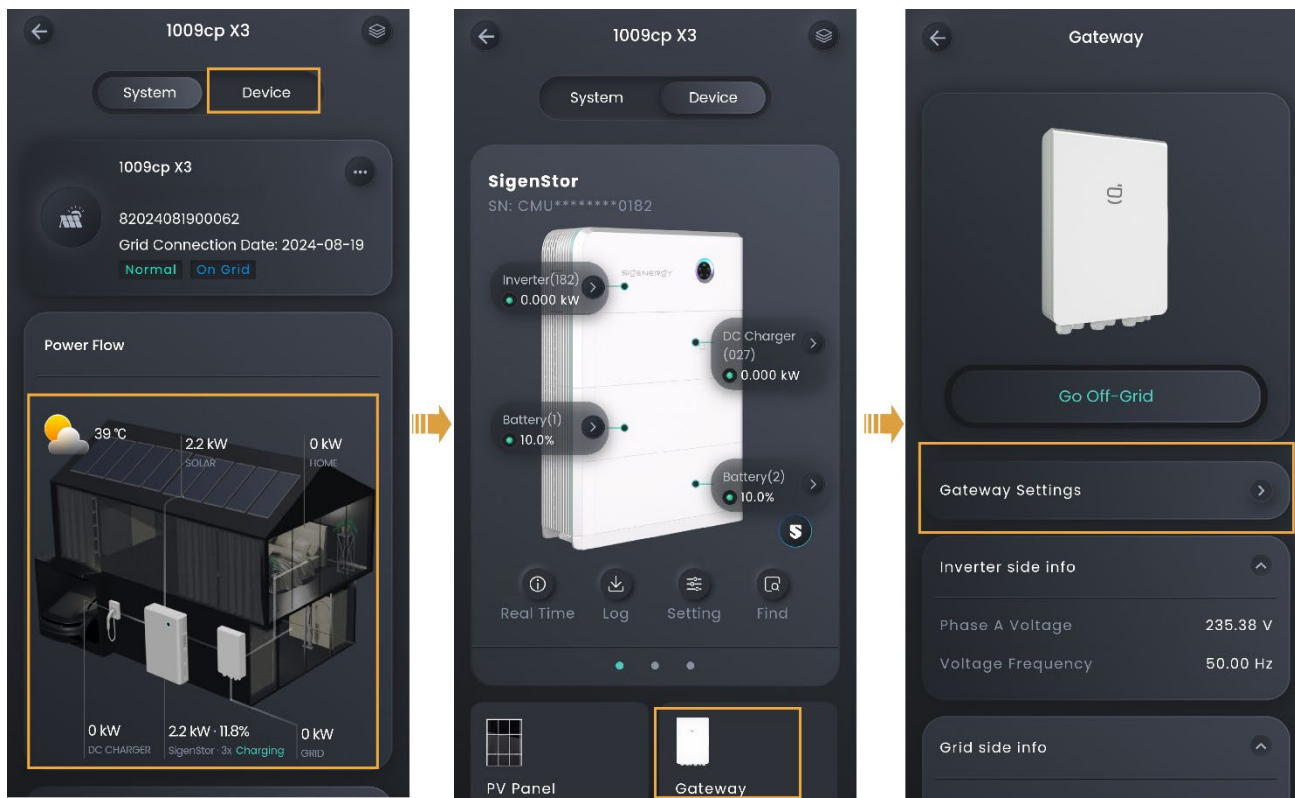
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No.	Parameter name	Description
1	Authorization	Set the charging authentication. When it is set to  , unauthenticated charging is allowed.
2	Card Management	Bind a Sigen RFID card.




### Tips

For use and precautions of the Sigen EV DC Charging Module, refer to the Sigen EV DC Charging Module User Manual.

## 2.4.4 Gateway



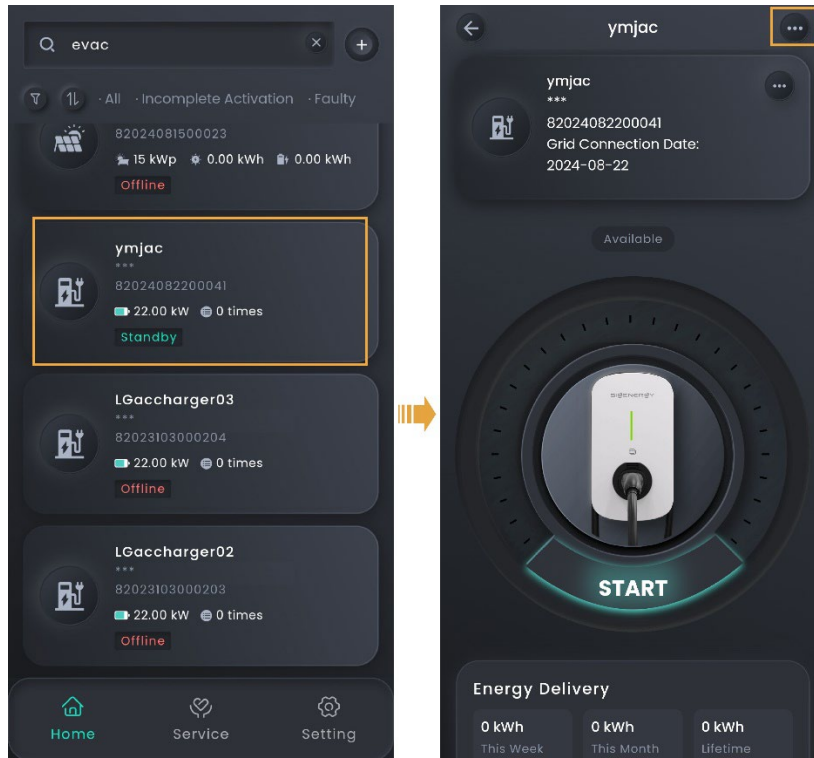
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No.	Parameter name	Description
1	Grid recovery delay time	Specifies the delay time after which the device starts after the grid resumes normal operation.
2	Neutral Grounding	When it is set to  , neutral grounding is enabled when the device operates in off-grid mode.
3	Off-Grid Enablement	When it is set to  , the device can operate in off-grid mode <sup>[1]</sup> .
4	Generator off-grid mode	When it is set to  , a diesel generator is supported to be connected from the grid port.

Note [1]: You can also go to "Gateway" → "Go-Off-Grid" to switch between on-grid and off-grid.

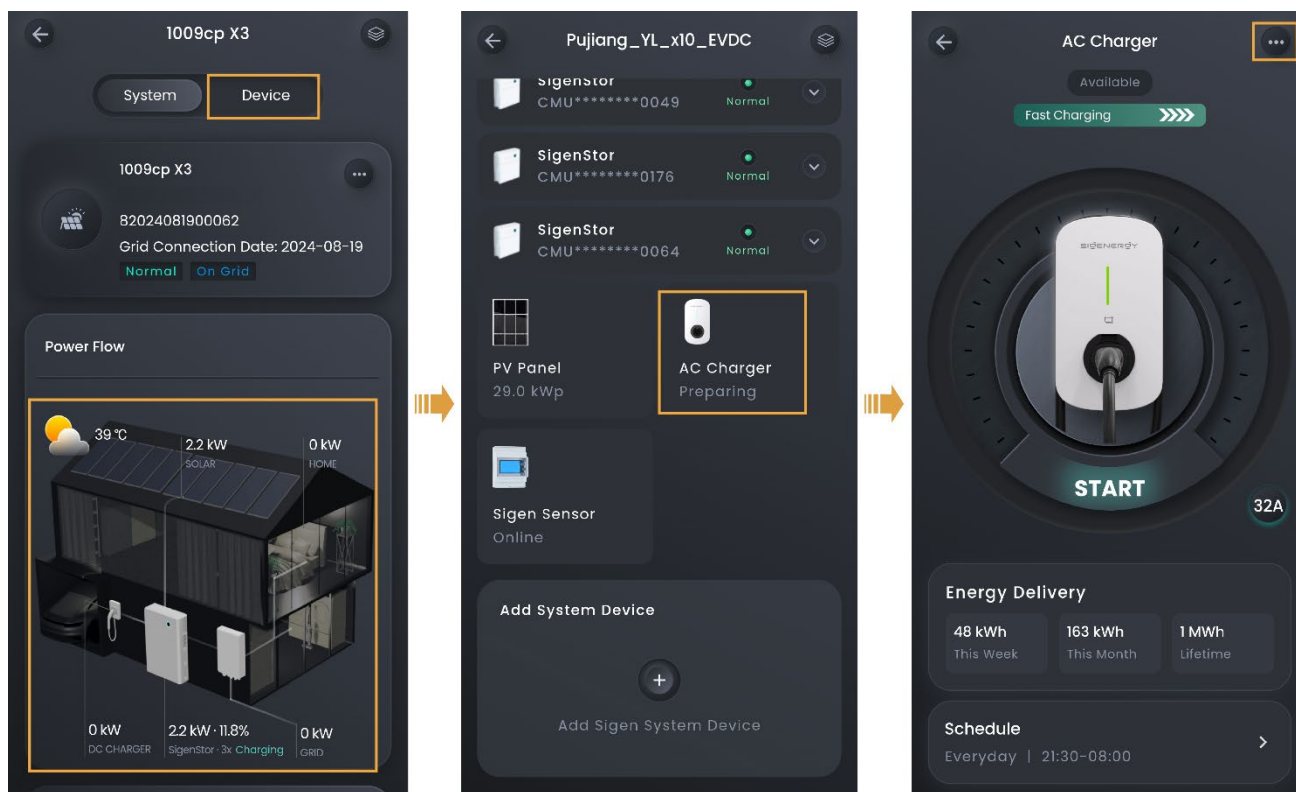
## 2.4.5 Sigen EV AC Charger

### Pure charging application






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## PV charging or PV storage & charging application



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No.	Parameter name	Description	
1	Charging Mode	Set the charging mode of Sigen EV AC Charger. Charging mode options include Fast Charging, Solar Boost Charging, and 100% PV Charging.	
2	OCPP Setting	When it is set to <input checked="" type="checkbox"/> , Sigen EV AC Charger can be connected to the OCPP server, and users can select the OCPP platform from the URL drop-down list.	
3	Authorization	Set the charging authentication. When it is set to <input type="checkbox"/> , unauthenticated charging is allowed.	
4	Card Management	Bind a Sigen RFID card.	
5	Advanced Mode	Output Mode	Select single-phase or three-phase output as needed.
6		Dynamic load management	When Power Sensor is installed in the networking and is not in off-grid state, and

No.	Parameter name		Description
			if it is set to  , Sigen EV AC Charger will support dynamic load management (DLM). Sigen EV AC Charger quickly and intelligently regulates the charging current (power) by comparing the power at the grid-connection point reported by the Power Sensor with the "Rated Household Circuit Breaker Current" set by the installer when creating new systems to prevent the Household Circuit Breaker in the distribution panel from being disconnected.
7	Output mode auto switch		When it is set to  , "Charging Mode" is "100% PV Charging." Three-phase output can be automatically switched to single-phase output when the PV power is low.
8	Connectivity	Ethernet	<ul style="list-style-type: none"> <li>● Displays the connection status of Fast Ethernet.</li> <li>● For Fast Ethernet, network parameters are automatically obtained using a DHCP server. To edit parameters, do the following:               <ol style="list-style-type: none"> <li>1. Configure a WLAN that can access the internet or insert a 4G SIM card.</li> <li>2. Wait until "WLAN" or "Cellular" is displayed as "Connected", and disconnect the network cable.</li> <li>3. Set "Obtain IP address automatically" to  and edit parameters.</li> </ol> </li> </ul> Re-connect the network cable to the device.
9		WLAN	Displays the connection status of WLAN. If the connection status is displayed as "Not connected" and you want to use the WLAN to access internet, select a WLAN hotspot supporting 2.4 GHz band. <p>Notes:</p> <ul style="list-style-type: none"> <li>● Non-encrypted WLAN is not</li> </ul>



No.	Parameter name	Description	
		<p>recommended as it may lead to Internet access failure.</p> <p>When WLAN is the only connection path for the devices to access the internet, switching WLAN to any other wireless router will be prohibited.</p>	
10	Cellular	<ul style="list-style-type: none"> <li>Displays the connection status of 4G network. If the connection status is displayed as "Not connected," and you want to use the 4G network to access the internet, ensure that you insert the 4G SIM card.</li> </ul> <p>When 4G is used for communication, users can view the monthly traffic usage and set a traffic usage threshold for each month.</p>	
11	Connectivity	Grid Code	Specifies a grid code based on the country/region when devices are used.
12		Home air circuit breaker	Specifies the rated current according to the home main incoming circuit breaker within the distribution panel.
13		Input circuit breaker rated current	Specifies the rated current according to circuit breakers connected to devices in the distribution panel.
14		Ground mode	Specifies the grounding type according to local grid type.
15		Phase Type	Specifies the phase type according to actual wiring.
16		Maintenance	Reset: The device restarts.

### Tips

For use and precautions of the Sigen EV AC Charger, refer to the Sigen EV AC Charger User Manual.

## 2.4.6 Downloading device logs

### Tips

**When a device fails, and the problem needs to be located, you can download device logs and send them to our technical personnel for analysis and troubleshooting.**

1. On the "Home" screen, click the name of the station where the device is installed.
2. Click the device in the energy flow chart in the "System" tab or the "Device" tab.
3. Download device logs on the "Log Download" screen.


## Chapter 3 Others

### 3.1.1 Changing account password


#### Method 1:

On the login screen, click "Forgot Password" to reset the login password.


#### Method 2:

Click "Setting" and  on the screen top to change "Password."

### 3.1.2 Changing account nickname

Click "Setting" and  on the screen top to modify "Nickname".

### 3.1.3 Changing account binding information

Click "Setting" and  on the screen top to change "Binding Information," for example, email address.

### 3.1.4 Viewing and exchanging points

Click "Setting" → "My Points" to view point details. You can also redeem your points for rewards.

### 3.1.5 Team and company management

If you want to authorize other installers to view and set up your power station or you want to view and set up the power station of other installers, click "Setting" → "Company Management".

**Authorize other installers:** Join the team with invitation code. You can join only one team.

**View other installers:** Copy "My Invitation Code" to the invitee and invite him to join your team.

### 3.1.6 Viewing App version

Click "Setting" → "About" to go to the viewing screen.

### 3.1.7 Upgrading mySigen

#### Tips


**To gain the best compatibility and performance, you are advised to upgrade the mySigen App regularly.**

Click "Setting" → "About" → "Version Update" and execute the upgrade process.

### 3.1.8 Configuring parameters on the "App Setting" screen

Click "Setting" → "App Setting" to go to the settings screen.

No.	Parameter name	Description
1	Dark Mode	Specifies the display style.
2	Language	Specifies the display language.
3	Temperature Unit	<ul style="list-style-type: none"> <li>● Sets the unit of temperature.</li> <li>● The unit of temperature commonly used in the local area is set by default. You can change this setting when needed.</li> </ul>

No.	Parameter name	Description
4	Notification	Sets the App push notification permission. This permission is set while the App is installed. You can make settings when needed.
5	Lab	Sets the access permission of Sigen AI. You can ask Sigen AI about the product knowledge when the parameter is set to  .
6	Diagnostic tool	If an exception occurs when you use the App, you can use this tool to generate operation logs and report to our customer support for analysis and solutions.

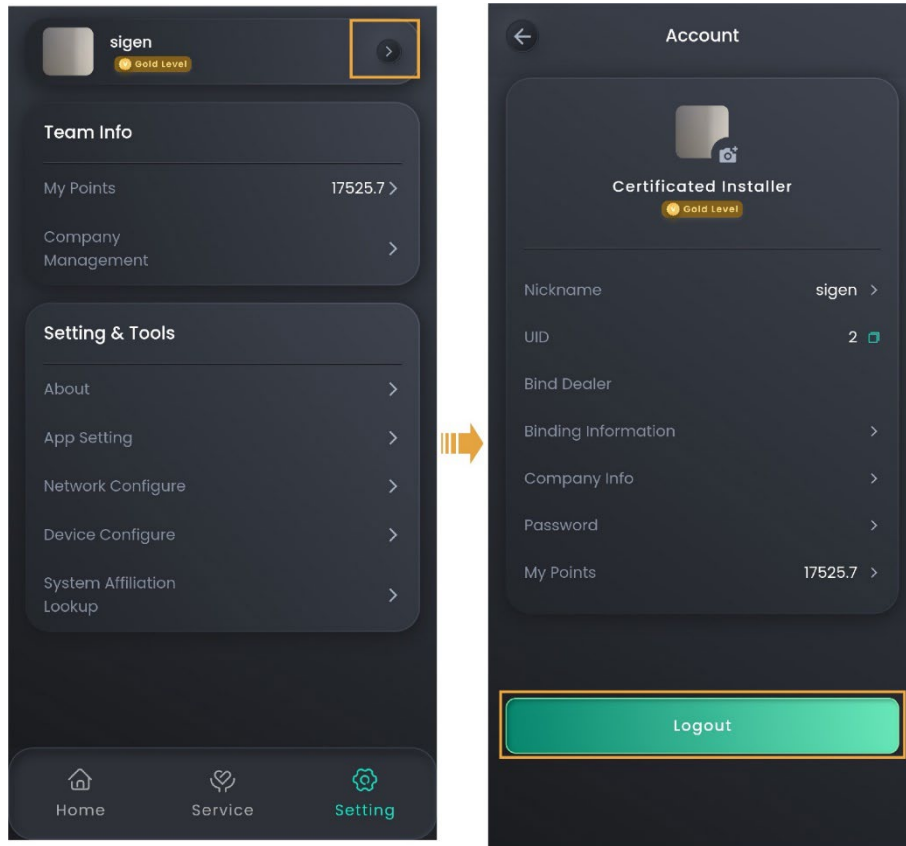
### 3.1.9 Owner consultation and request management

Click "Service" → "Service CRM" or "Dispatched" to check and manage owner consultation requests.

### 3.1.10 Support

Click "Service" → "Support" to get the contact information of your region or submit a work order.

# Chapter 4 Logout

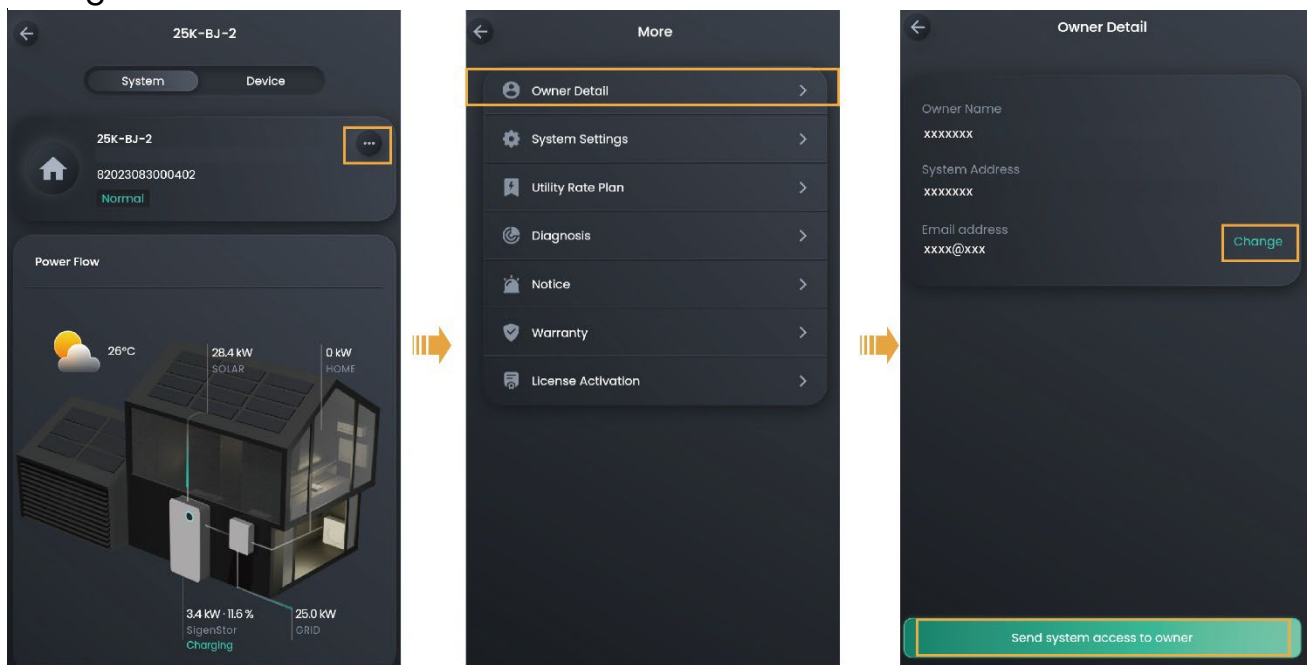


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# Chapter 5 FAQs

## 5.1 What should you do if the owner has not received the account activation email?

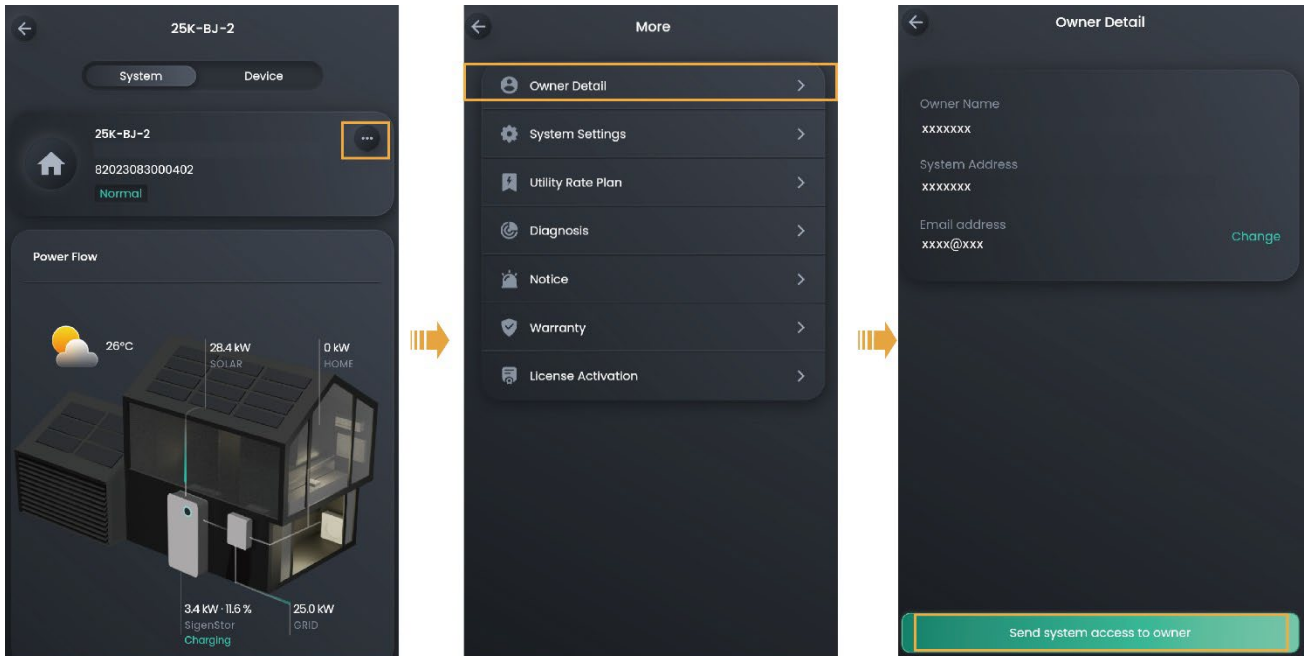
- Check whether the email from the "sigencloud" account was received in the Spam folder.
- If not, check whether the email address of the owner is correct. If the email address is incorrect, please set the email address and push the notification again.



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## 5.2 What should you do if the owner account activation times out and cannot be operated?

Please push the account activation notification again and ask the owner to activate the account within 24 hours.



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## 5.3 What should you do if you have a problem with creating new systems or other actions?


- Click "Service" → "Support" to get the contact information of your region.
- Please visit <https://www.sigenergy.com> and go to "Contact Us" → "Local Contacts" to get the contact information.

## 5.4 What should you do if you have not received emails (verification code or logs) from the system?

- Check whether the email from the "sigencloud" account was received in the Spam folder.
- Push the notification again.



## 5.5 What should you do if you want to disconnect WLAN when the communication mode changes from WLAN to FE?

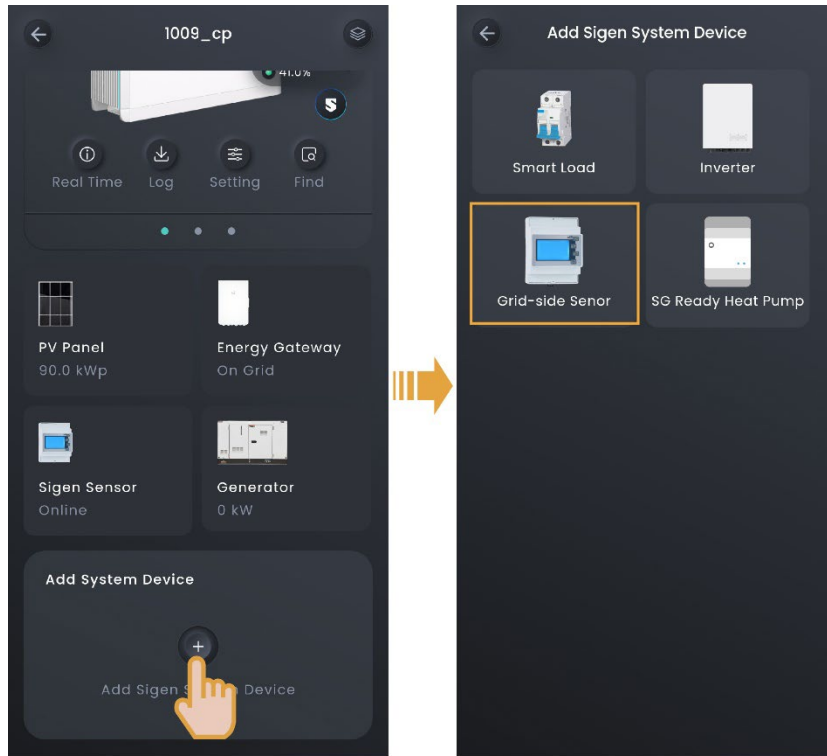
1. Insert the network cable into the device.
2. On the "Home" screen, click the station name you want to set.
3. Click  next to the station name and click "System Settings" → "Connectivity".
4. Wait until "Ethernet" is connected, click "WLAN", and then select any WLAN and enter an invalid password.

## 5.6 How do I connect a power sensor if the RS485\_2 port of the inverter is faulty?

You can connect a power sensor to the RS485\_1 port of the inverter. You must manually add a power sensor after the cable is properly connected.

### Tips

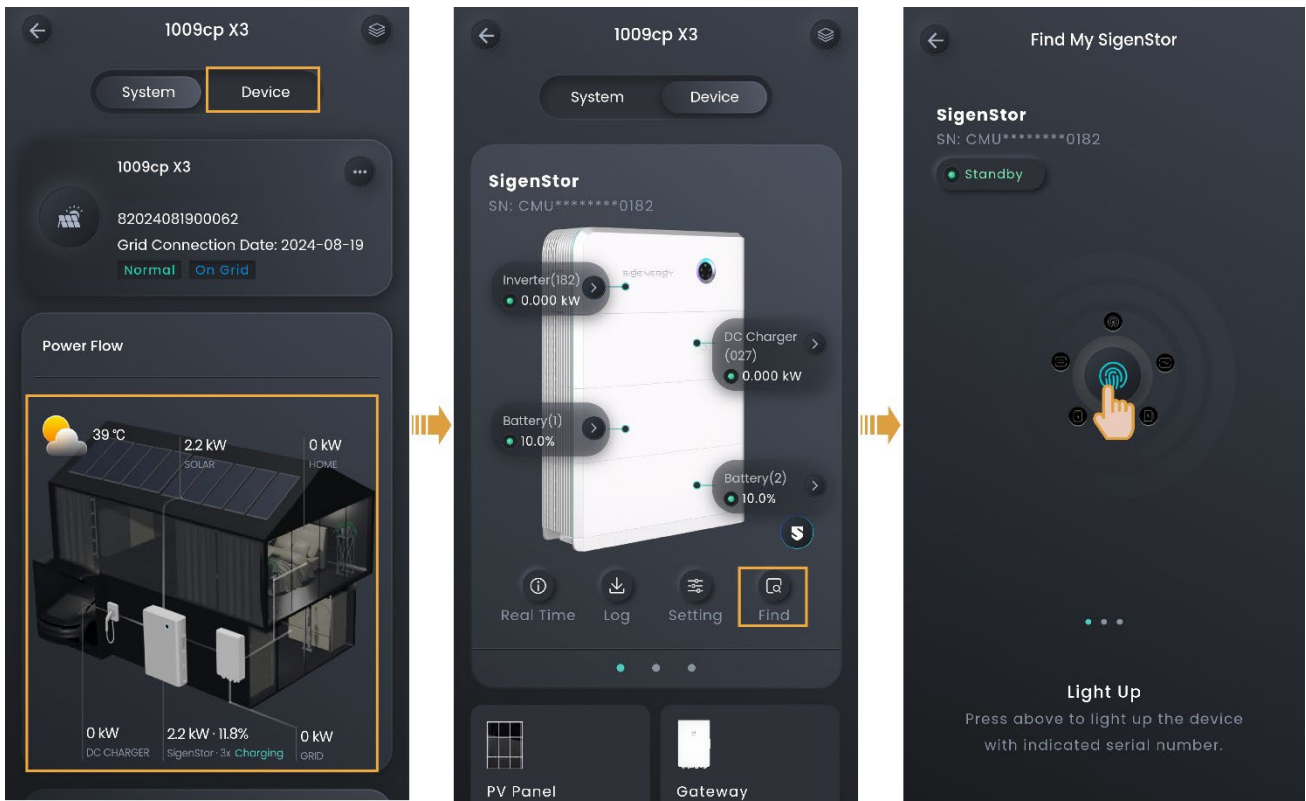
When the RS485\_1 port is connected to a power sensor, do not connect other devices simultaneously. Otherwise, the power control may be affected.



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## 5.7 In grid connection scenarios, how can I quickly identify where SigenStor is installed?

You can light up the LED of SigenStor in the App and locate the SigenStor.



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## 5.8 How do I reconnect the network when the device network connection is lost?

You can re-configure the network settings using a device hotspot in "Setting" → "Network Configure" or "Device Configure."

## 5.9 How do I check whether the device is connected in parallel with other ones?

You can check this in "Setting" → "System Affiliation."