mySigen App

Installer Manual

Version: 04

Release date: 2025-03-10



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Revision History

Version	Date	Description
04	2025.03.10	Updated 2.2.1 Station operation information. Updated 2.2.2 Operation information of Sigen EV AC Charger. Updated 2.3.1.1 Energy storage working mode. Updated 2.3.1.2 Charge & discharge and backup capacity. Added 2.3.1.3 Peak Shaving Control Mode. Updated 2.3.1.4 Export/Import limitation parameters. Updated 2.3.1.6 Internet connection. Updated 2.3.1.8 Others. Added 2.3.7 After-sales service. Updated 2.3.8.2 Generator. Updated 2.3.8.3 Smart load. Updated 2.3.8.4 SG heat pump. Added 2.3.8.5 Shelly smart switch. Updated 2.4.1.1 Internet connection. Updated 2.4.2 Inverter. Updated 2.4.5 Sigen EV AC Charger. Updated 3.1.8 Configuring parameters on the "App Setting" screen.

Version	Date	Description
		Added 5.8 How do I reconnect the network when the device network connection is lost? Added 5.10 How to recharge the Sigen CommMod data when it is used up?
03	2024.10.09	Updated 2.2.2 Operation information of Sigen EV AC Charger. Added 2.2.5 Viewing backup event record. Updated 2.3.1.1 Energy storage working mode. Added 2.3.1.5 Grid scheduling. Updated 2.3.1.6 Internet connection. Added 2.3.1.7 DI customization. Updated 2.3.1.8 Others. Added 2.3.4 Station connection diagnosis. Added 2.3.6 Software upgrade. Added 2.3.7 After-sales service. Added 2.3.8 Adding device. Updated 2.4.1.1 Internet connection. Updated 2.4.2 Inverter. Added 2.4.3 Sigen EV DC Charging Module. Updated 2.4.4 Gateway. Updated 2.4.5 Sigen EV AC Charger. Added 3.1.3 Changing account binding information.

Version	Date	Description
		Added 3.1.4 Viewing and exchanging points. Updated 3.1.8 Configuring parameters on the "App Setting" screen. Updated 3.1.10 Support. Added 5.6 How do I connect a power sensor if the RS485_2 port of the inverter is faulty? Added 5.7 In grid connection scenarios, how can I quickly identify where SigenStor is installed? Added 5.8 How do I reconnect the network when the device network connection is lost? Added 5.9 How do I check whether the device is connected in parallel with other ones?
02	2024.03.22	Updated 1.3 Creating new systems. Updated Chapter 2 Routine O&M of power station and device. Added 2.2.2 Operation information of Sigen EV AC Charger. Updated 2.3.1 Parameters on the "System Settings" screen. Added 2.3.2 Setting rate plan. Added 2.3.5 License activation. Updated 2.4 Device parameter setup Added 3.1.5 Team and company management. Added 3.1.9 Owner consultation and request

Version	Date	Description
		management. 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
Danger	Danger. Failure to comply will result in death or serious personal injury.
Warning	Warning. Failure to comply will result in serious personal injury or property damage.
Caution	Caution. Failure to comply will result in property damage.
Tips	Important or key information, and supplementary operation tips.

Chapter 1 Creating new systems and commissioning

Tips

- **This document takes version 2.2.0 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.

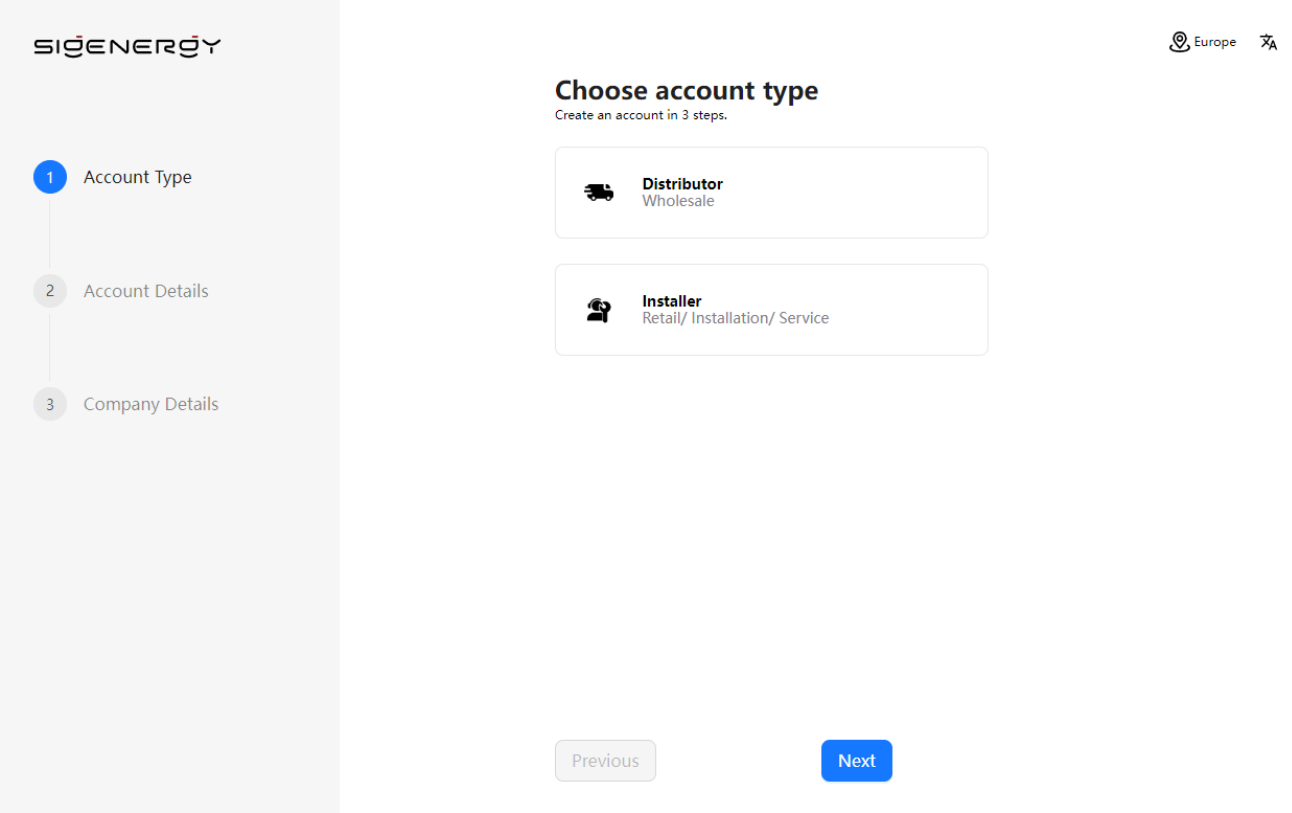




1.2 Registration of installer account

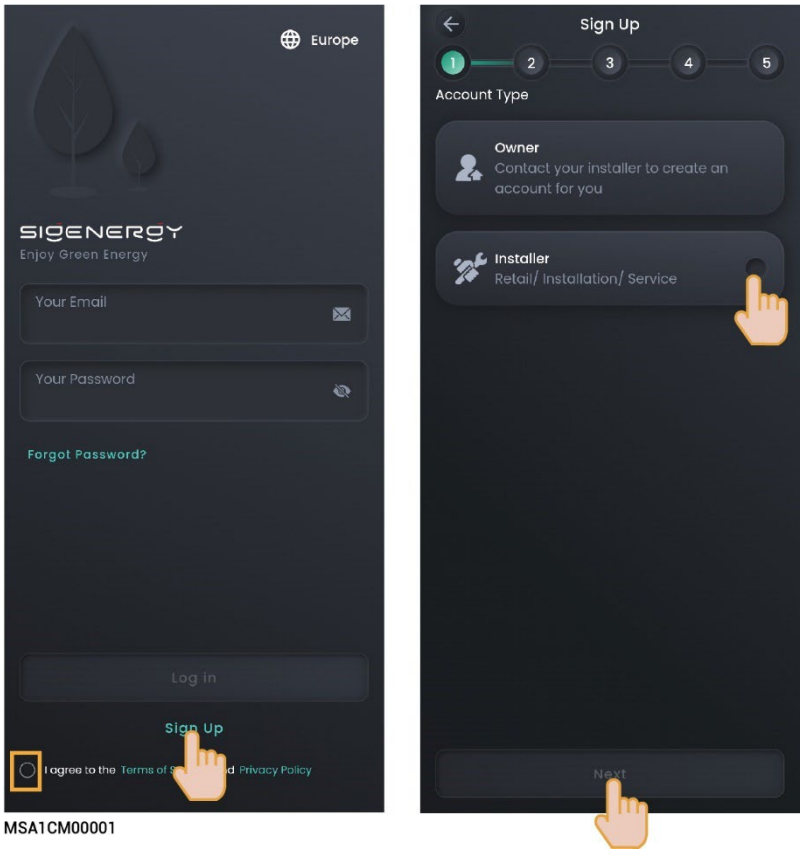
Method 1: Web-based operation

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



Method 2: App-based operation

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



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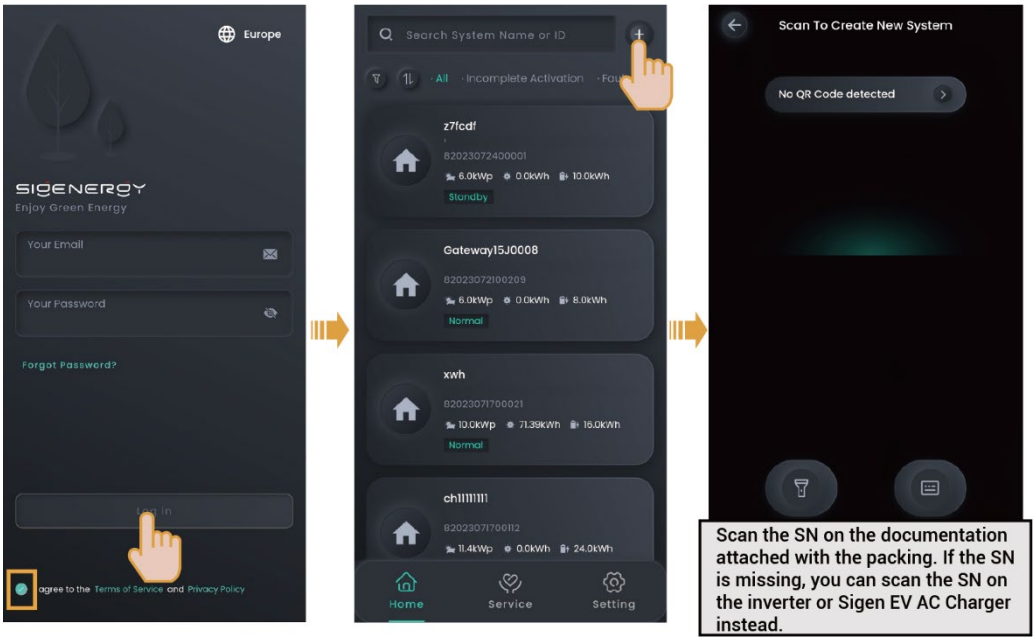
1.3 Creating new systems

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 success.		Detection status indicator. This icon indicates detection failure.
	Device status indicator. This icon indicates		Device status indicator. This icon indicates "Power-off."

Icon	Description	Icon	Description
	"Normal" or "Standby.”		
	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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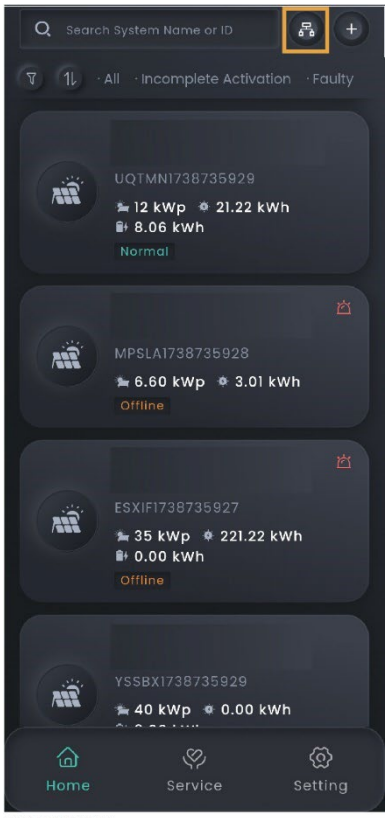
After Sigencloud has set up logical integration, the upper right corner will show .

Click it to view the logical integration information.



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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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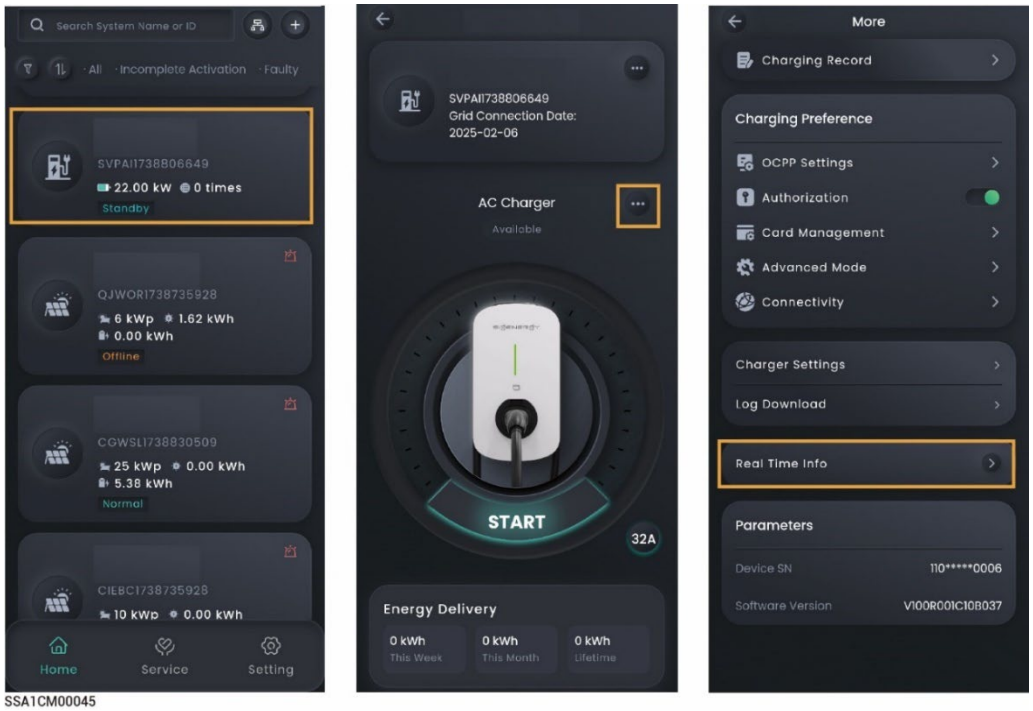
Tips

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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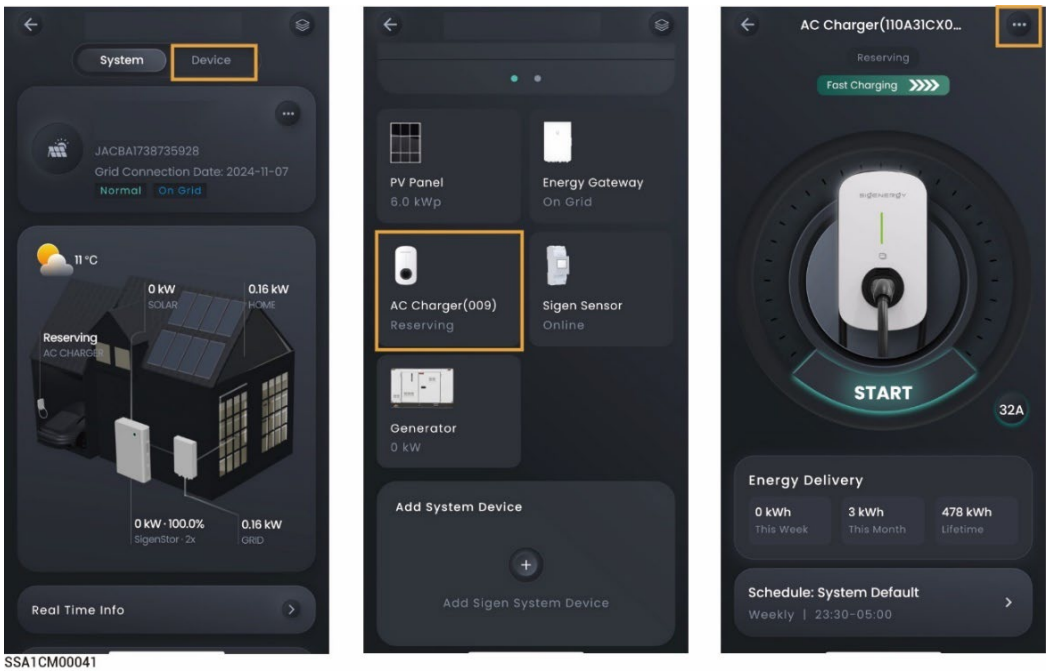
PV charging or PV storage & charging application



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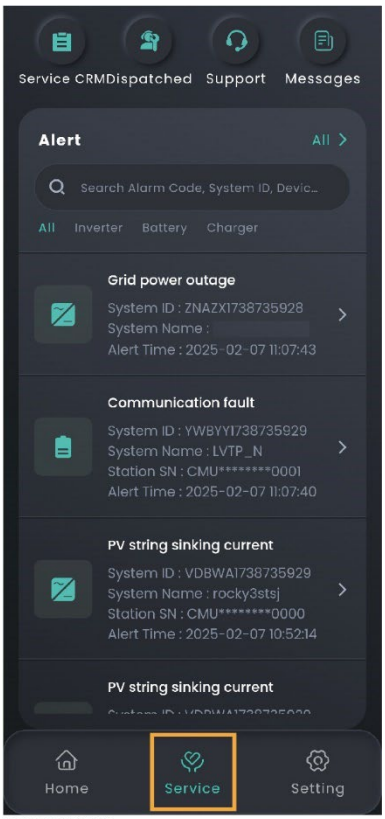
2.2.3 Alarm information

2.2.3.1 Alarms of all station

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



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2.2.3.2 Alarm of a single station/Sigen EV AC Charger

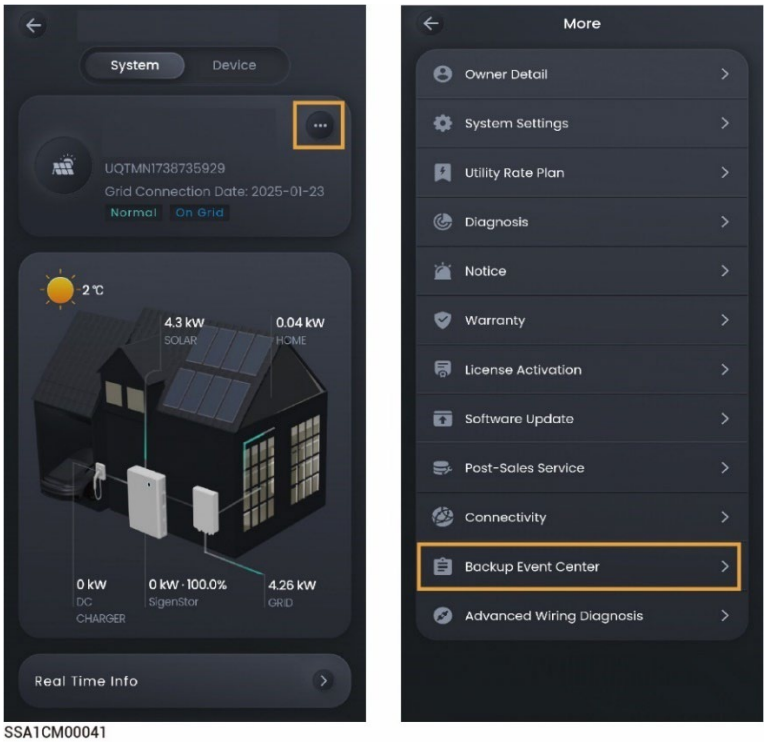
1. On the "Home" screen, click the station name you want to query.
2. Click  next to the station name and click "Notice" to view the alarm of this station.

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.



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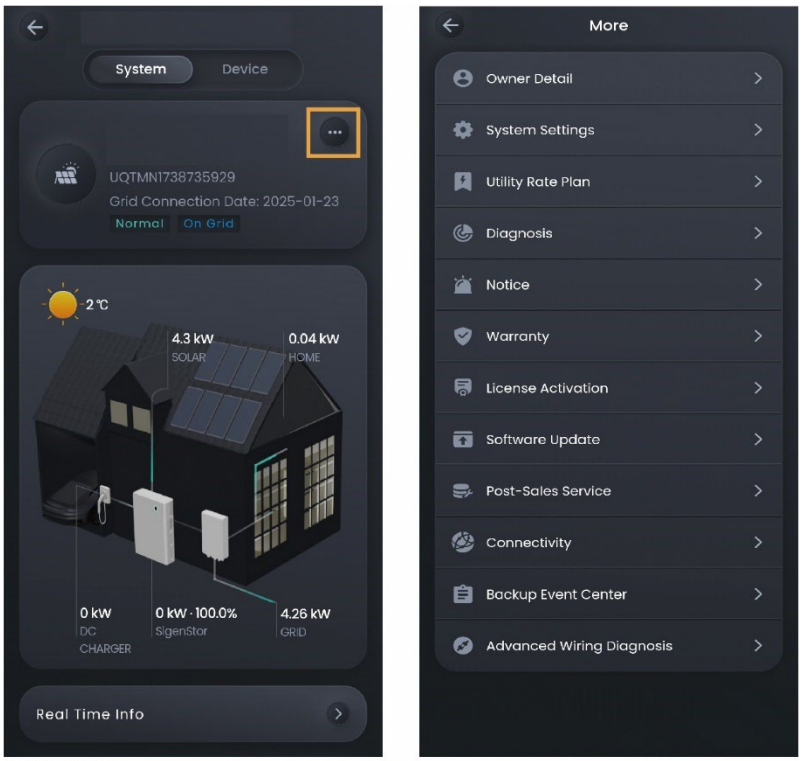
2.3 Station parameter setup

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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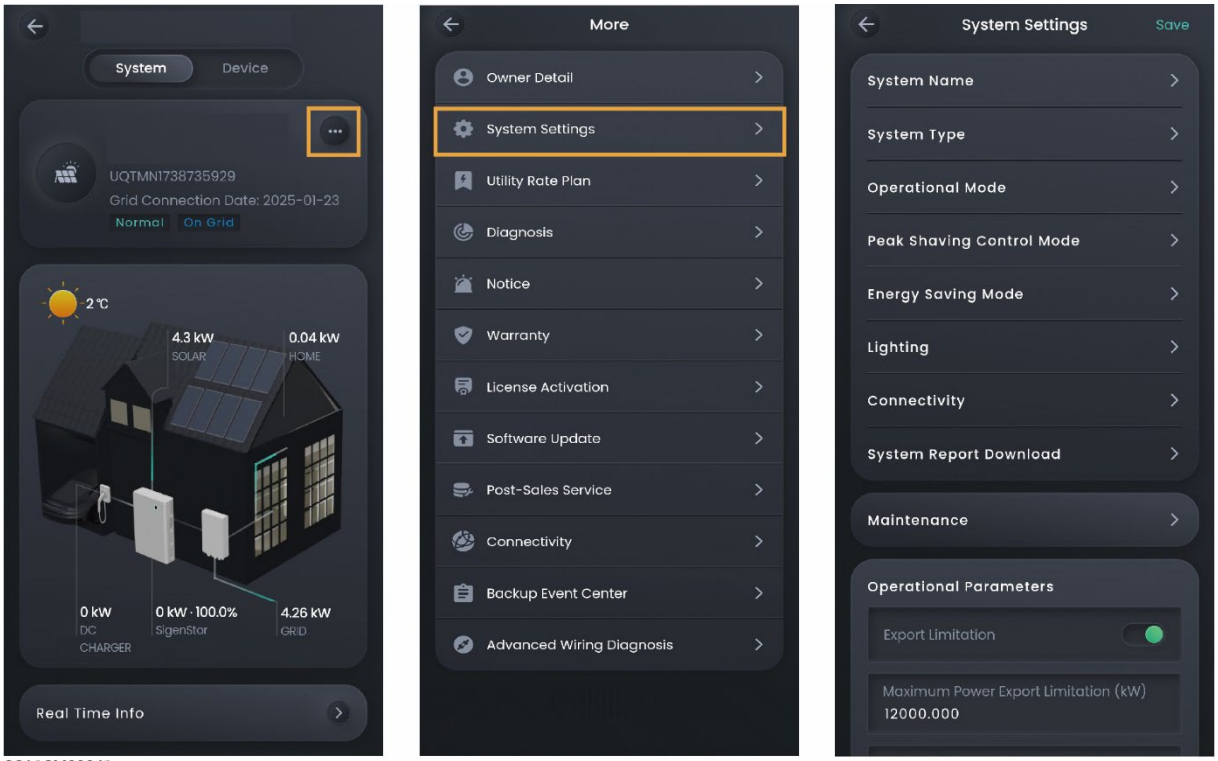
2.3.1 Parameters on the "System Settings" screen



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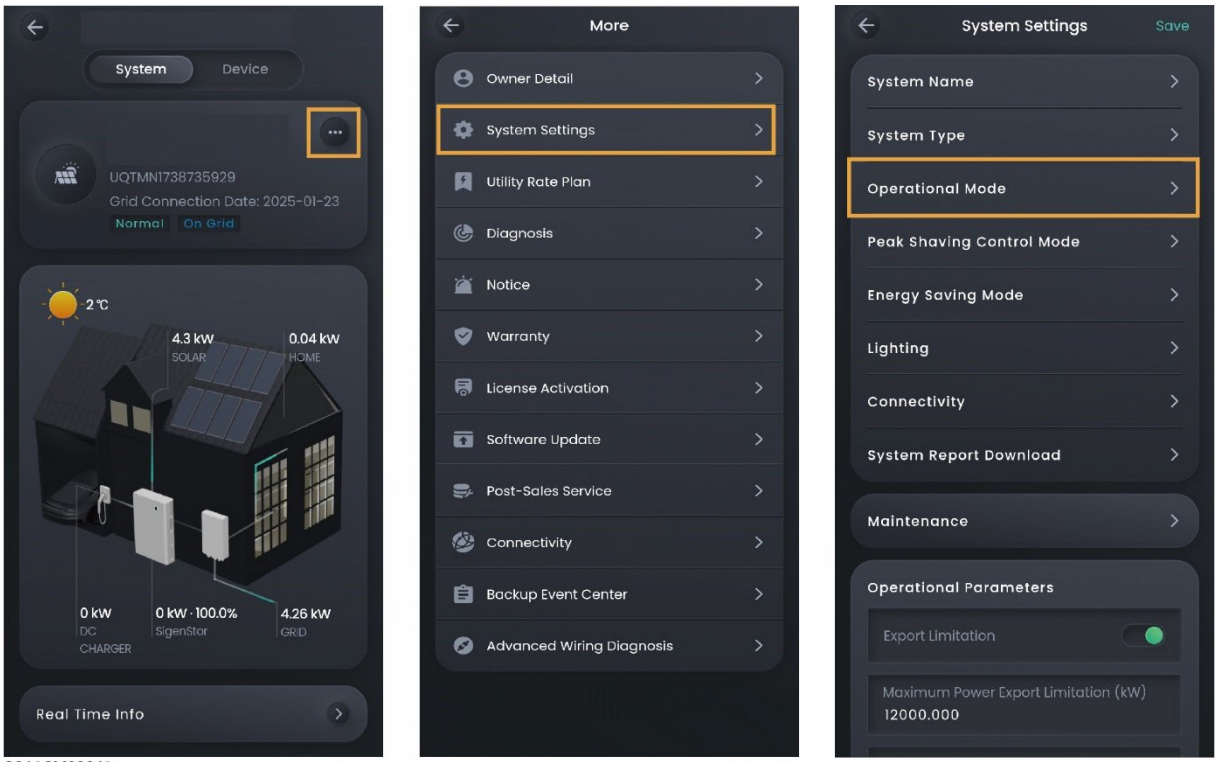
Tips

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

2.3.1.1 Energy storage working mode

Tips

- **The SigenStor energy storage system is mainly used in household rooftop power station systems and small power station on-grid systems in C&I scenarios.**
- **The energy storage system supports multiple working modes, namely: "Sigen AI Mode," "Self-Consumption Mode," "Time-based Control Mode," "Fully Fed to Grid Mode," "Remote EMS Mode," and "Load Shedding Mode."**
- **Some countries support Load Shedding Mode, which is subject to the App interface display.**



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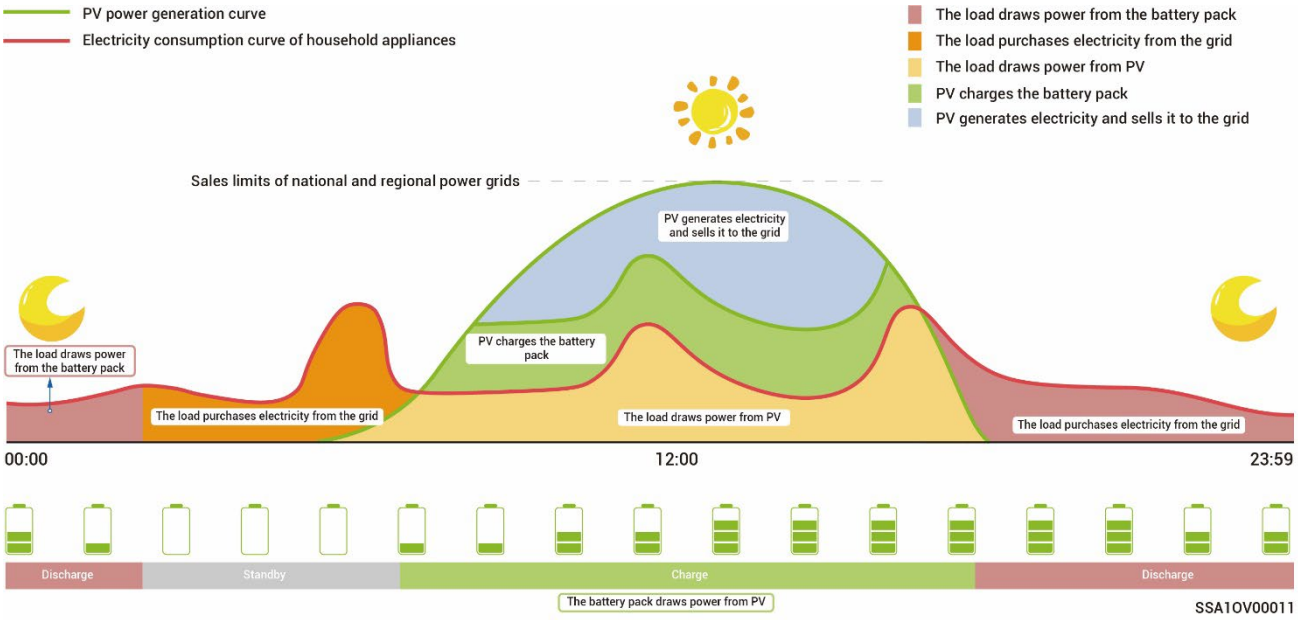
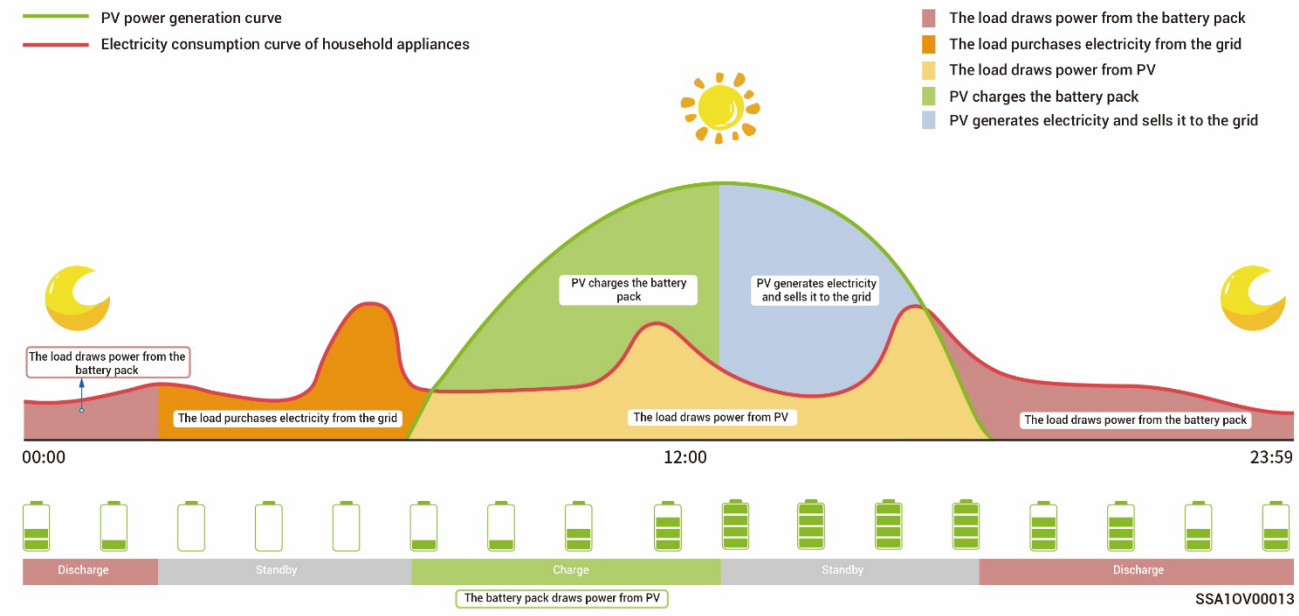
2.3.1.1.1 Sigen AI Mode

By obtaining local peak and valley electricity prices and weather data, combined with user electricity consumption habits, the Sigen AI Mode can customize intelligent electricity usage solutions to maximize customers' cost savings.



2.3.1.1.2 Self-Consumption Mode

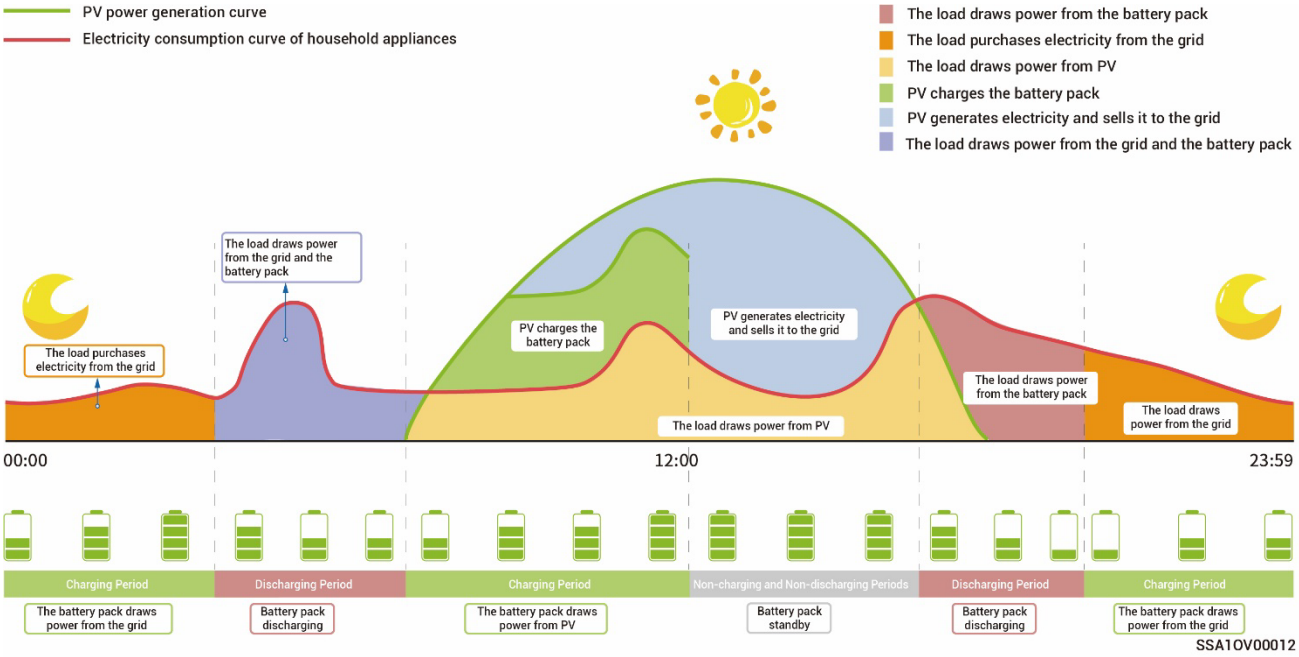
- When there is sufficient solar power, the electric energy generated by the PV system will first be used to power the loads, with any excess energy being stored in the batteries. Any remaining surplus energy will be sold to the grid. When there is insufficient solar power, the batteries will release 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.
- This mode is suitable for areas with high electricity prices or zero-power grid connection restrictions.



2.3.1.1.3 Time-based Control

- The charging period, discharging period, and self-consumption period need to be set manually.When electricity prices are high, the surplus power from photovoltaic power generation and battery power can be sold to the grid, and the battery can be charged during periods of low electricity prices to save electricity bills.
- If no period is set, the energy storage system will be in standby mode without discharging. The photovoltaic power will prioritize supplying the load, and the surplus power will be used for charging energy storage system. *
- Up to 24 charging and discharging or self-consumption periods can be set.
- It is suitable for areas with peak and valley electricity prices and significant price differences.

*When entering this period, the battery capacity will be recorded. When the photovoltaic power is greater than the load, the remaining photovoltaic power will charge the battery. When the photovoltaic power is less than the load, the battery can be discharged to the load. However, when the battery capacity decreases and approaches the battery capacity value when entering this period, the battery will stop discharging.



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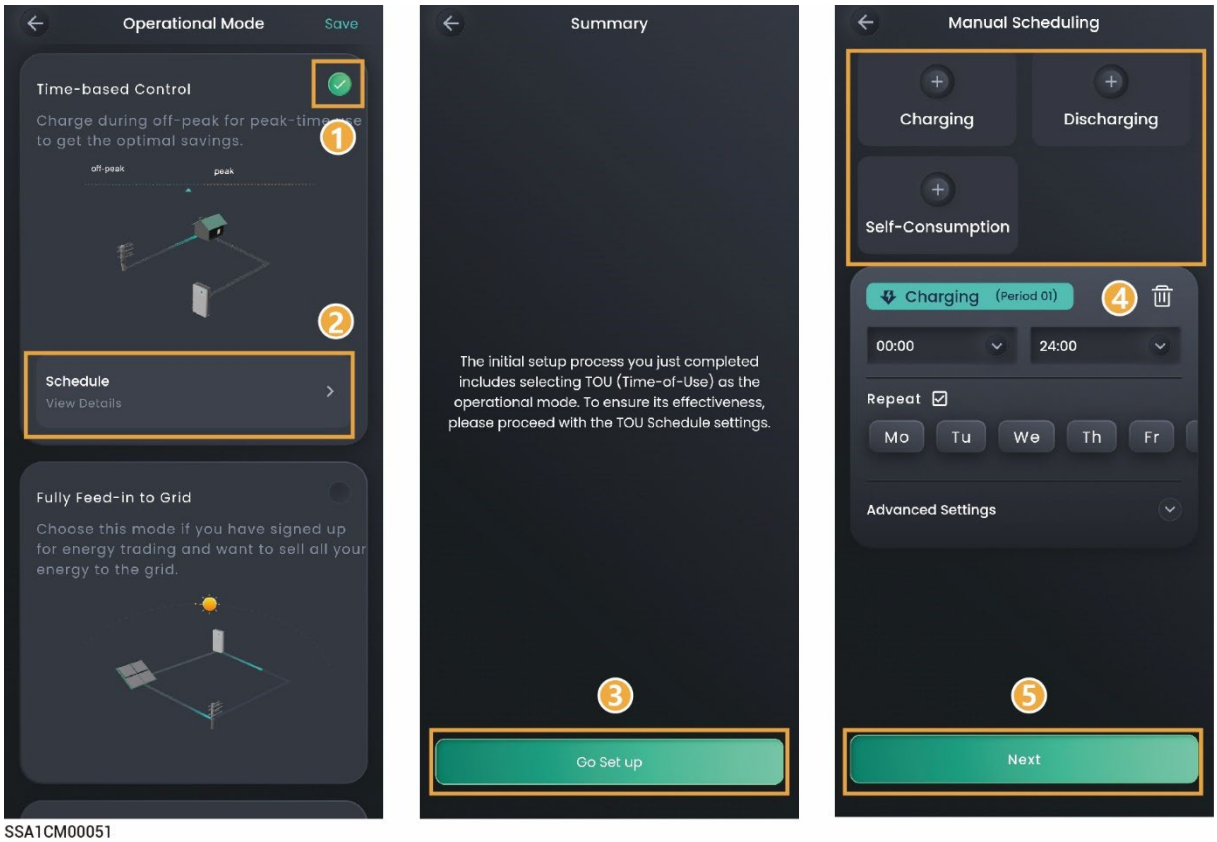

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No.	Parameter name		Description
1	Charging	Maximum charging power for BAT	During this period, the sum of the charging power of all battery packs in the system cannot be greater than the

No.	Parameter name		Description
			"PACK maximum charging power."The system default is infinity.
2		Grid Charging Cut-off SOC	Set the cut-off charging capacity value for the battery pack to be charged from the grid during this period.The system default is 100%.
3		Maximum power for importing from grid	The maximum power that can be imported from the grid during this period. System default values are effective according to the parameters in System Settings -> Operational Parameters.
4		Maximum Charging Power from Grid to BAT	The maximum power that the grid charges the battery pack during this period. The system default value is infinity.

No.	Parameter name		Description
5	Discharging/	Maximum discharging power for BAT	During this period, the sum of the discharging power of all battery packs in the system cannot be greater than the "PACK maximum discharging power." The system default is infinity.
6		Maximum power for exporting to grid	The maximum power that the system is allowed to export to the grid during this period. System default values are effective according to the parameters in System Settings -> Operational Parameters.
7		Maximum Discharging Power from BAT to Grid	The maximum power that the battery pack discharges to the grid during this period. The system default value is infinity.
8	Self-Consumption	Maximum power for importing from grid	The maximum power that can be imported from the grid during this period. System default values are effective according to the parameters in System Settings -> Operational Parameters.
9		Maximum power for exporting to grid	The maximum power that the system is allowed to export to the grid during this period. System default values are effective according to the

No.	Parameter name		Description
			parameters in System Settings -> Operational Parameters.

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.

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

- Supports scheduling of energy storage system through third-party EMS system.
- Supports third-party EMS with RS-485 communication.Please make sure that the RS485-1 port cable of the device is properly connected and that the baud rate is set correctly according to the description in section 2.4.1.5 Others.(Non-grid connection scenario)
- It supports third-party EMS with ModBus-TCP communication. Please ensure that you have completed the setup according to the description in section 2.4.1.4 ModBus parameters.

2.3.1.1.6 Load Shedding Mode

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. (currently only supported in South Africa)

2.3.1.2 Charge & discharge and backup capacity

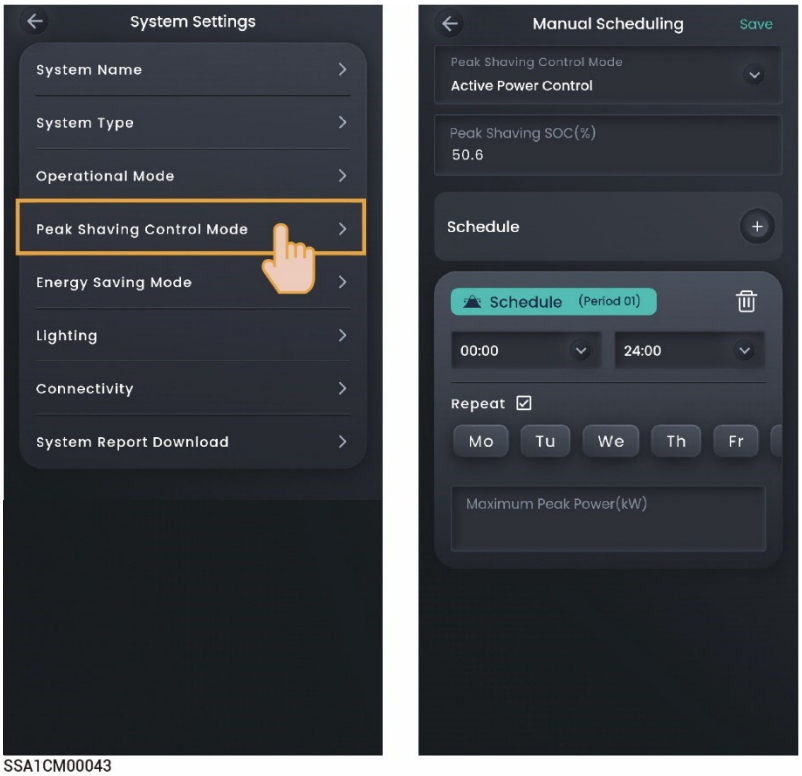


No.	Parameter name	Description
1	Charge Cut-off SOC	Sets the capacity at which the battery pack stops charging.
2	Discharge Cut-off SOC	Sets the capacity at which the battery pack stops discharging. ● Value 0 is not recommended for this parameter to avoid irreversible attenuation due to failure to charge the battery pack in time. ● The priority is given to "Backup Capacity" in backup power networking mode, while the parameter is applied in non-backup power networking mode.

No.	Parameter name	Description
3	Backup Reserve SOC	• You can set this parameter when a gateway exists in the network. • 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. • 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.

2.3.1.3 Peak Shaving Control Mode

- 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. This mode is suitable for areas with peak and valley electricity prices and significant price differences.
- The Peak Shaving function can be used with all working modes, configuring the maximum peak power drawn from the grid to reduce the maximum peak power drawn from the grid during peak periods, thereby lowering the electricity bill.



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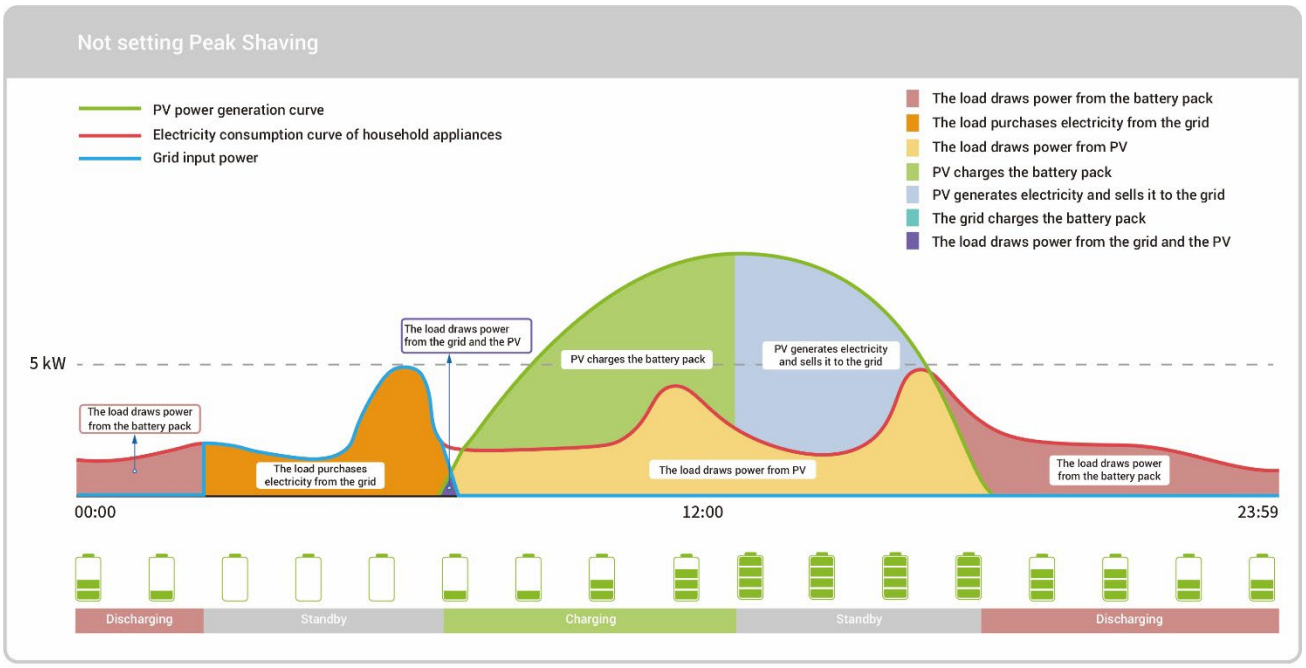
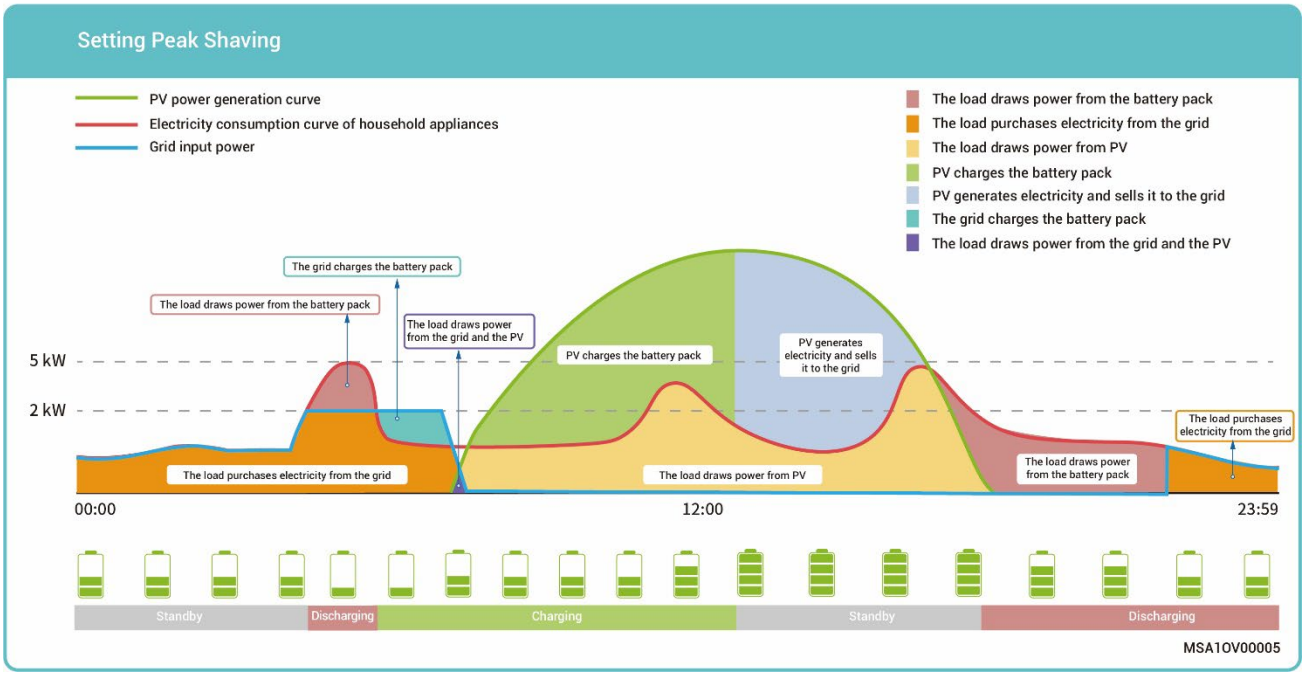
Active Power Control

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	Schedule	A maximum of 24 timetables can be added.
3	Maximum Peak Power	Set the maximum peak power for drawing electricity from the grid for household loads and battery packcharging.

Example 1: Self-Consumption Mode Settings for Peak Shaving

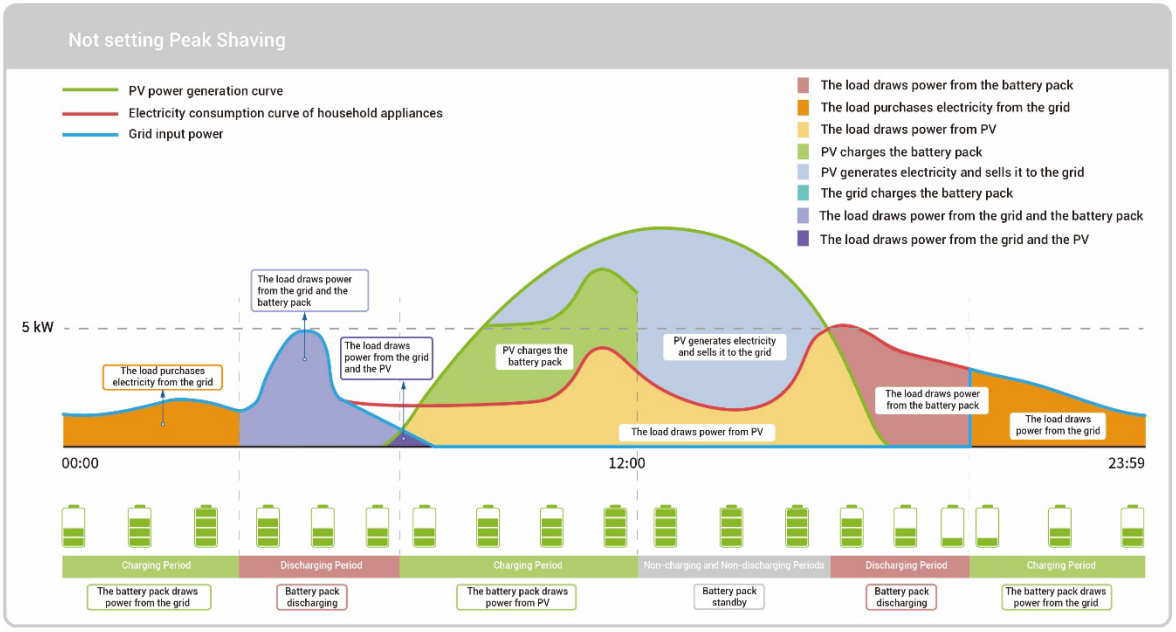
Assume that the peak shaving SOC is set to 50% and the maximum peak power is 2kW. Because Total electricity bill = Cost at peak power + cost for electricity usage + other costs. Wherein, peak power refers to the maximum power imported from the grid. After Self-Consumption Mode is set to Peak Shaving, the power purchased from the grid drops from 5 kW to 2 kW, so the total electricity bill is reduced.

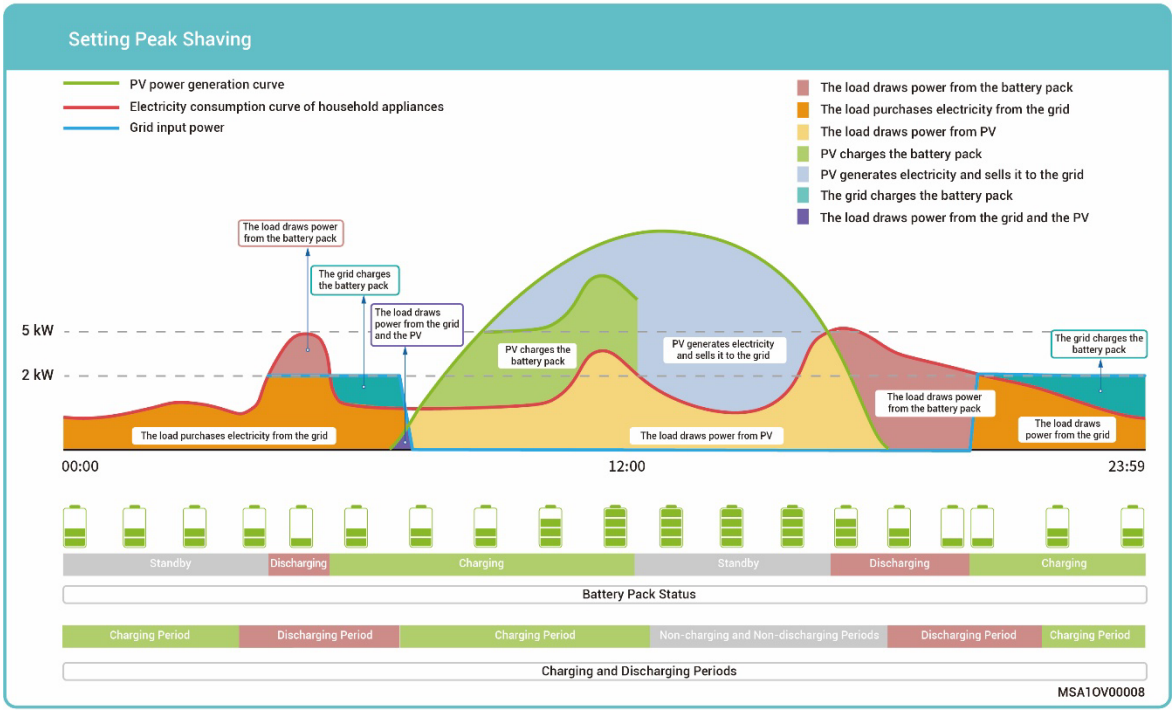




Example 2: Time-based Control Mode Settings for Peak Shaving

Assume that the peak shaving SOC is set to 50% and the maximum peak power is 2kW. Because 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. After Time-based Control Mode is set to Peak Shaving, the power purchased from the grid drops from 5 kW to 2 kW, so the total electricity bill is reduced.

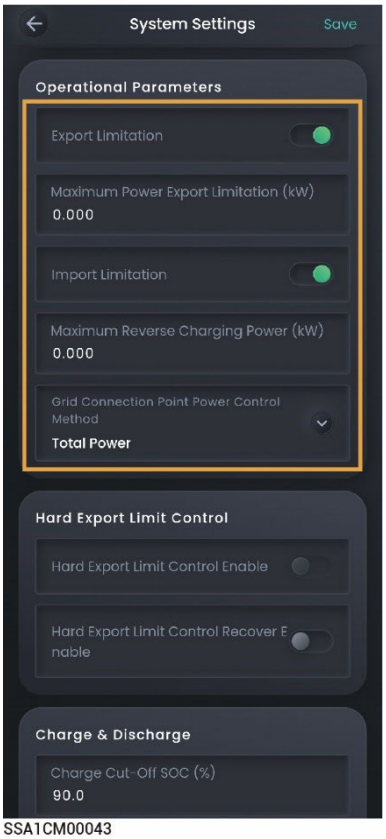




2.3.1.4 Export/Import limitation parameters

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.**
- **Before setting the export/import limitation parameters, ensure that the meter or Gateway is connected to the system wiring.**
- **The parameter display may differ depending on the device model. The actual screen display shall prevail.**



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No.	Parameter Name	Description
1	Export Limitation	When set to , the grid connection point is allowed to output power.
2	Maximum Power Export Limitation	Set the maximum power value output by the grid connection point.
3	Maximum Power Import Limitation	When set to , the grid connection point is allowed to input power.

No.	Parameter Name	Description
4	Maximum Power Import Limitation	Set the maximum power value input by the grid connection point.
5	Grid Connection Point Power Control Method	● Total Power: The grid connection point is controlled according to the total three-phase power, meaning the sum of the three-phase power cannot exceed the Maximum Power Export Limitation and Maximum Reverse Charging Power. ● Power Per Phase: The grid connection point is controlled independently for each phase, that is, the power of each phase cannot exceed 1/3 of the Maximum Power Export Limitation and 1/3 of the Maximum Reverse Charging Power.

2.3.1.5 Grid scheduling

2.3.1.5.1 Power regulation

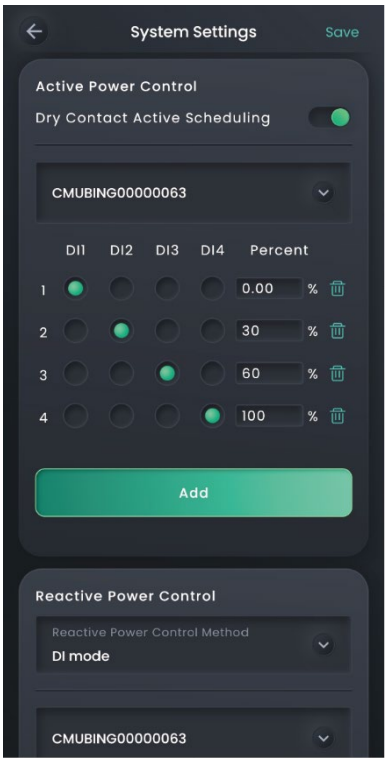
Tips

- 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.

2.3.1.5.2 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.



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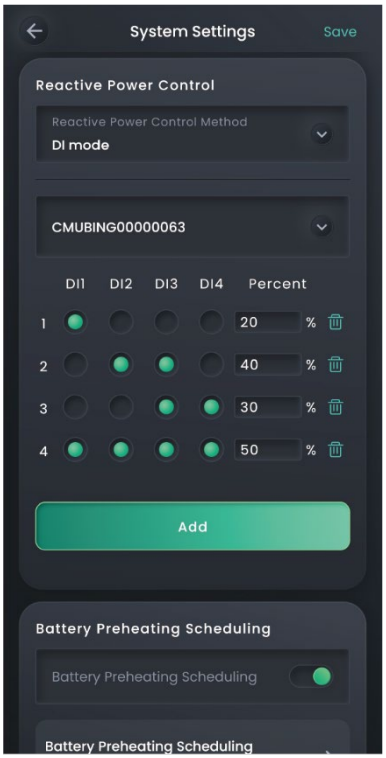
No.	Parameter name	Description
1	Dry Contact Active Scheduling	When it is set to , you do not need to set the SN for a single device. For multiple devices, drop down and select the SN of the device connected to the Ripple Control Receiver. You can view the SN on the side of the device.
2	DI1, DI2, DI3, DI4	 indicates that the switch set on the DI cable is turned on and it is low level.  indicates that the switch set on the DI cable is turned off and it is high level. The parameters shown in the figure are for reference

No.	Parameter name	Description
		only. Configure these parameters as needed. ● The status combination of DI1 to DI4 must not be duplicated. Otherwise, a command parsing error occurs. ● If the actual DI signal does not match the setting in the App, the device will operate at the maximum active power command (100%).
3	Percent (%)	● 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. ● Positive percentage values indicate inversion (inverter outputs active power), whereas negative values indicate rectification (inverter absorbs active power). ● Supports adding up to 16 percentage value configurations.

2.3.1.5.3 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.



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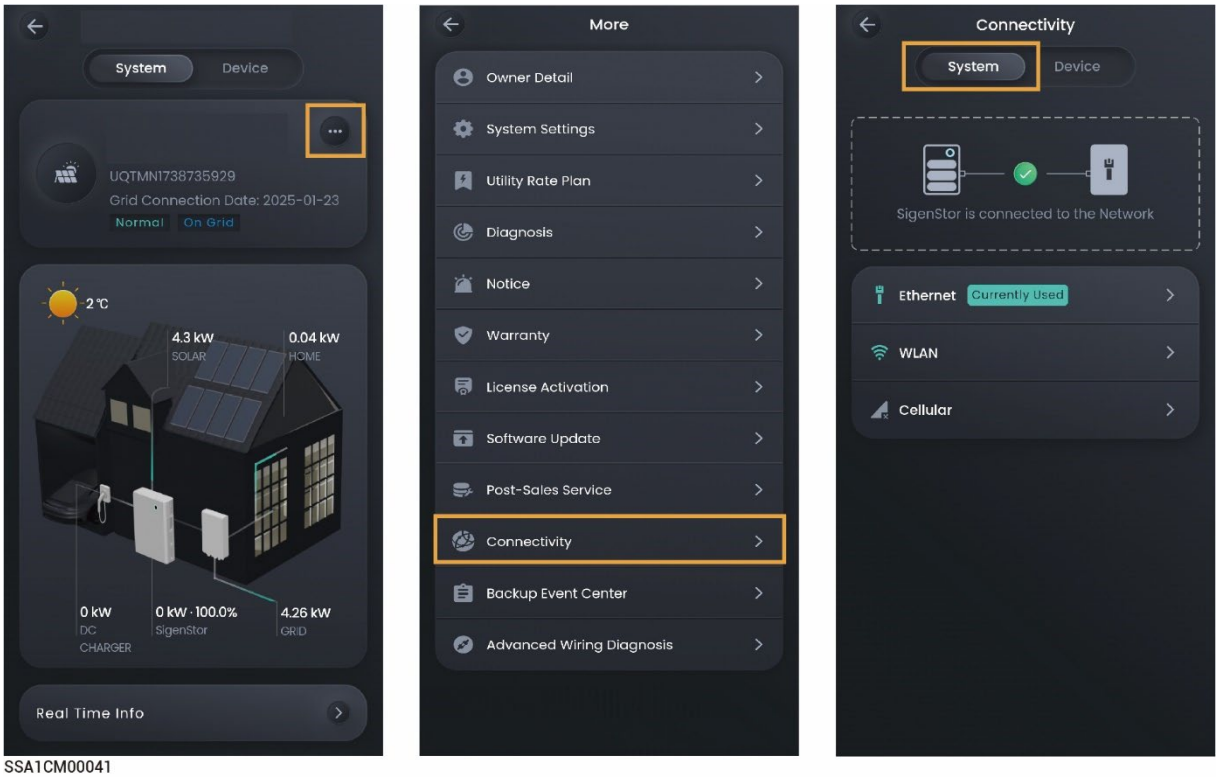
No.	Parameter name	Description
1	Reactive Power Control Mode	• No Output: If the grid operator does not require the power station to regulate the voltage at the grid connection point and does not need to implement reactive power compensation, devices can maintain the output with pure active power. In this case, set to "No Output." • DI mode: Set to "DI mode" when setting dry contact reactive scheduling parameters. • Grid connection point power factor control: When a distributed power station needs to

No.	Parameter name	Description
		implement distributed reactive power compensation to reduce or avoid power-factor-adjusted electricity cost and increase power station revenue, you must set "Grid connection point power factor control." ● 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.
2	DI1, DI2, DI3, DI4	 indicates that the switch set on the DI cable is turned on and it is low level.  indicates that the switch set on the DI cable is turned off and it is high level. ● The parameters shown in the figure are for reference only. Configure these parameters as needed. ● The status combination of DI1 to DI4 must not be duplicated. Otherwise, a command parsing error occurs. ● If the actual DI signal does not match the setting in the App, the device will operate at the minimum reactive power command (0%).
3	Percent (%)	● 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. ● Positive percentage values indicate the output of capacitive reactive power (raising voltage), whereas negative values indicate the output of inductive reactive power (lowering voltage). ● Supports adding up to 16 percentage value configurations.

2.3.1.6 Internet connection

Click "Connectivity" to view the communication method of the power station connecting to the network.



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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	Displays the connection status of WLAN. Here you can configure the WLAN for all devices in the power station. ● Before configuring the WLAN, please make sure that antennas are installed on devices. ● Non-encrypted WLAN is not recommended as it may lead to Internet access failure. ● When WLAN is the only connection path for the devices to access the internet, switching WLAN to any other wireless router will be prohibited.
3	Cellular	● Displays whether the 4G network is connected to the Internet. ● When 4G is used for communication, users can

No.	Parameter name	Description
		view the monthly traffic usage and set a traffic 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.

2.3.1.7 DI customization



SSA1CM00043

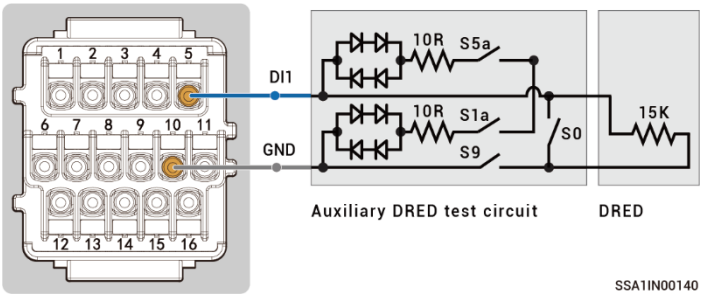
No.	Parameter name	Description
1	DI Custom Function Enable	When set to , the DI custom function is enabled, and you can set related parameters. The function becomes unavailable when disabled.
2	DI Custom Function Input Port	Set the DI port to which the device connects to according to the wiring.
3	DI Custom Function Mode	● 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. ● 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. ● If set to "Micro-grid Control mode: (Switch OFF: Off

No.	Parameter name	Description
		grid INV standby, On-grid INV ON)," when the 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. ● 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. ● 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. ● 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.
4	Connected AIO Machine SN	Set the SN of the inverter to which the device connects.

2.3.1.7.1 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



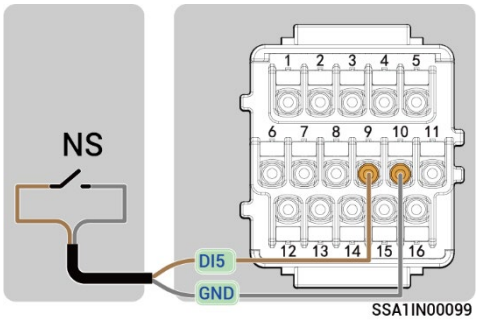
> **Tips**
>
> Before setting the DRM0 parameter, ensure that the DI1 of the device is not in use and that it is properly connected to the DRED device.

No.	Parameter name	Description
1	DI Custom Function Enable	
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.

2.3.1.7.2 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	
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.

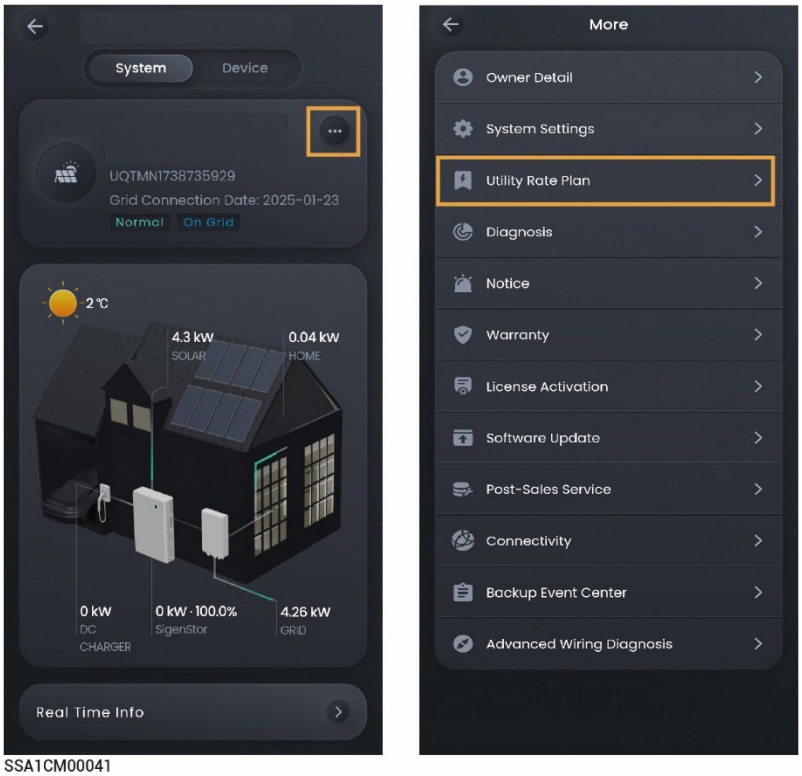
2.3.1.8 Others

No.	Parameter name	Description
1	System Name	Used to set the name for a power station.
2	System Type	Used to set the station type.
3	Peak Shaving Control Mode	Used to set the Peak Shaving Control Mode.
4	Energy Saving Mode	Used to set the Energy Saving Mode.
5	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.
6	Maintenance	Used to bulk turn on/off all devices in the power station.
7	Grid Overvoltage and Islanding Switch Point	Used to set the on-grid-to-off-grid overvoltage switch point.
8	Grid Undervoltage and Islanding Switch Point	Used to set the on-grid-to-off-grid undervoltage switch point.
9	Grid Overfrequency and Islanding Switch Point	Used to set the on-grid-to-off-grid overfrequency switch point.
10	Grid Underfrequency and Islanding Switch Point	Used to set the on-grid-to-off-grid underfrequency switch point.
11	Energy Saving Mode	• Performance: In this mode, devices operate normally and supply power to loads at high speed. • 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

No.	Parameter name	Description
		loads.
12	Load threshold (enter energy saving state)	When "Energy Saving Mode" is set to "Energy Saving," you can set the load threshold in standby mode to reduce power loss. The default value is 0.5% of the sum of the maximum powers of inverters in parallel.
13	Grid Code	Specifies a grid code based on the country/region when devices are used.
14	Pack Preheating	Set the period during which the heating film in the battery pack is heated.
15	Off-grid controller type	Set the type of device that controls off-grid operation. ● Auto detection: Set to this parameter when the device of the company (for example, Gateway) controls off-grid operation. ● 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.
16	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.
17	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.
18	DO Custom Function Input Port	Set the DO port to which the device connects to according to the wiring.
19	DO Custom Function Mode	Set the DO port mode.
20	Connected Device SN	Set the SN of the inverter to which the device connects through the DO port.
21	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

No.	Parameter name	Description
		power is too high. When this parameter is set to , the power output is limited to prevent triggering grid overvoltage/undervoltage protection.
22	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.
23	Hard export limit control threshold	• When the actual grid feed-in power is greater than the "Hard export limit control threshold," the device shuts down. • When the actual grid feed-in power is lower than the "Hard export limit control threshold," the device powers on.
24	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.
25	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.
26	System Report Download	Used to download station reports.

2.3.2 Setting rate plan



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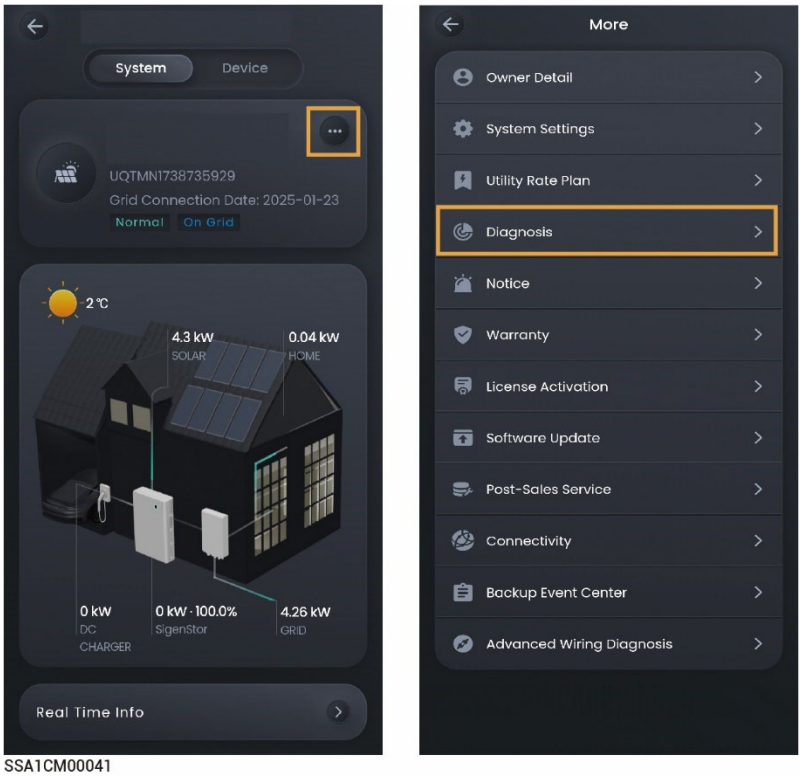
2.3.3 Station status diagnosis



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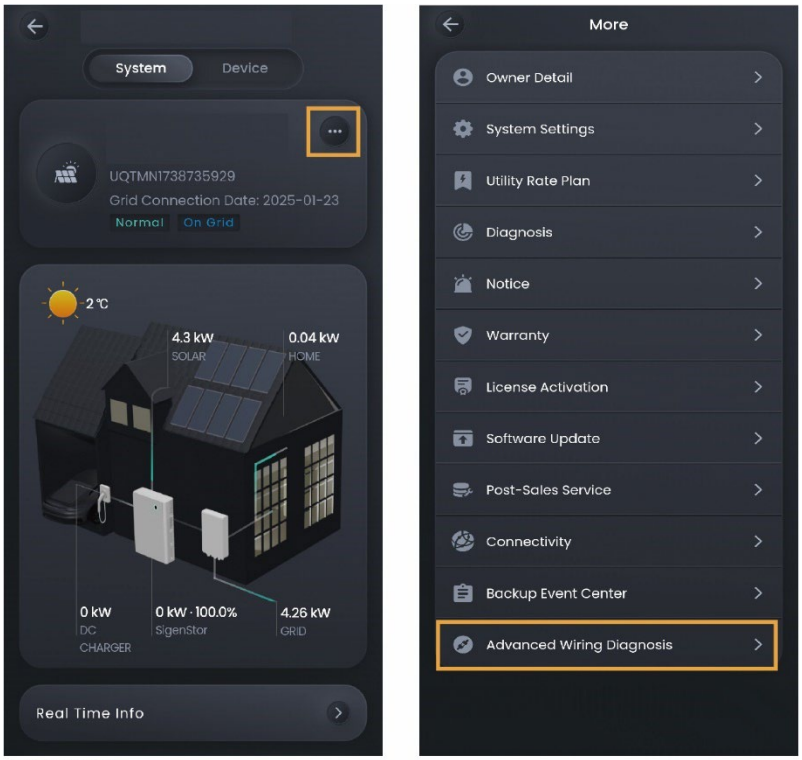
2.3.4 Station connection diagnosis



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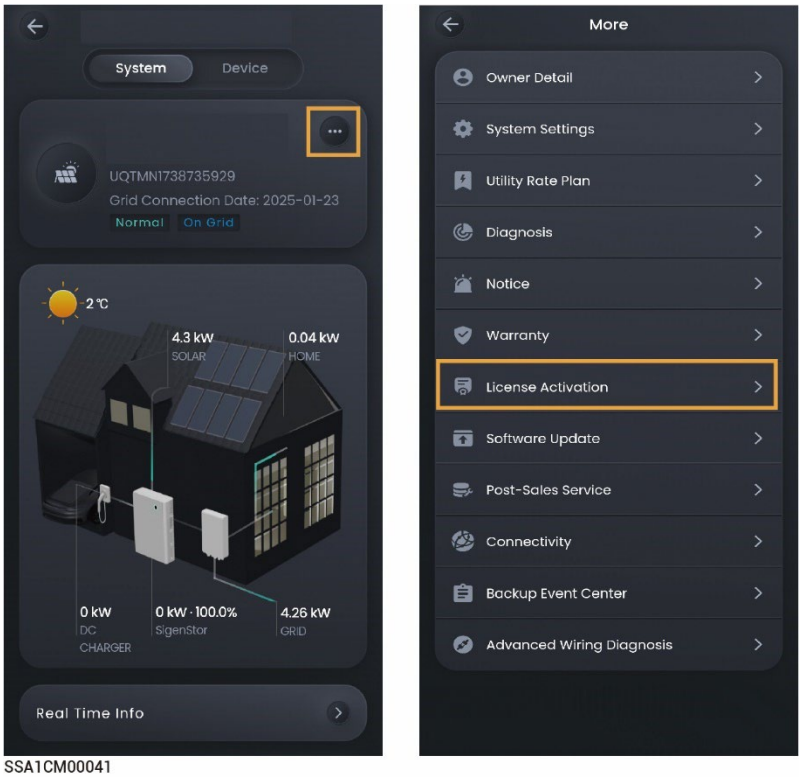
2.3.5 License activation

Tips

- **If Sigen Sigen Hybrid SP, Sigen Hybrid SP AU, Sigen Hybrid TP, Sigen Hybrid TP AU, Sigen Hybrid TPLV 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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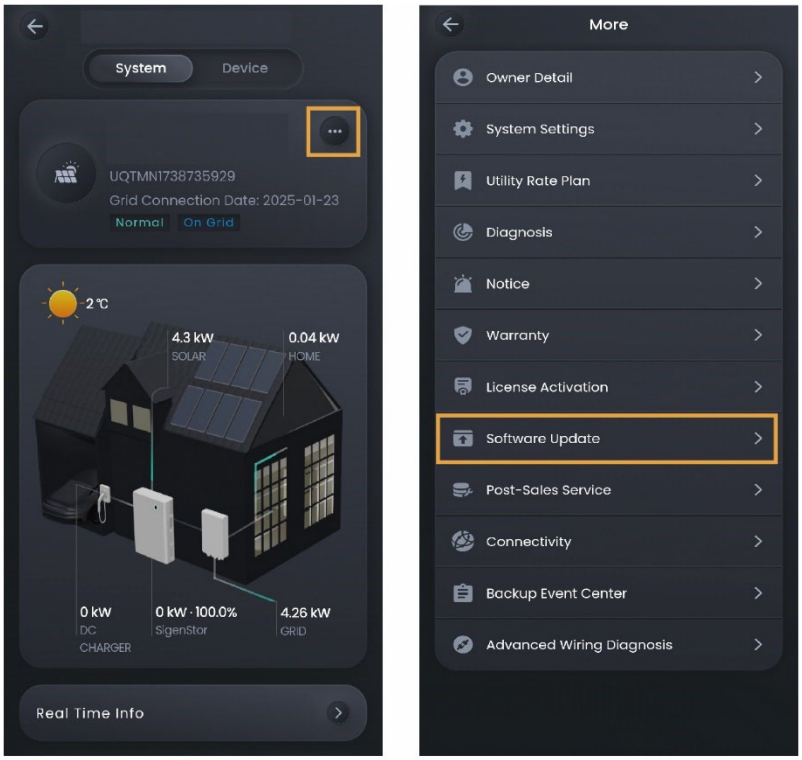
2.3.6 Software upgrade

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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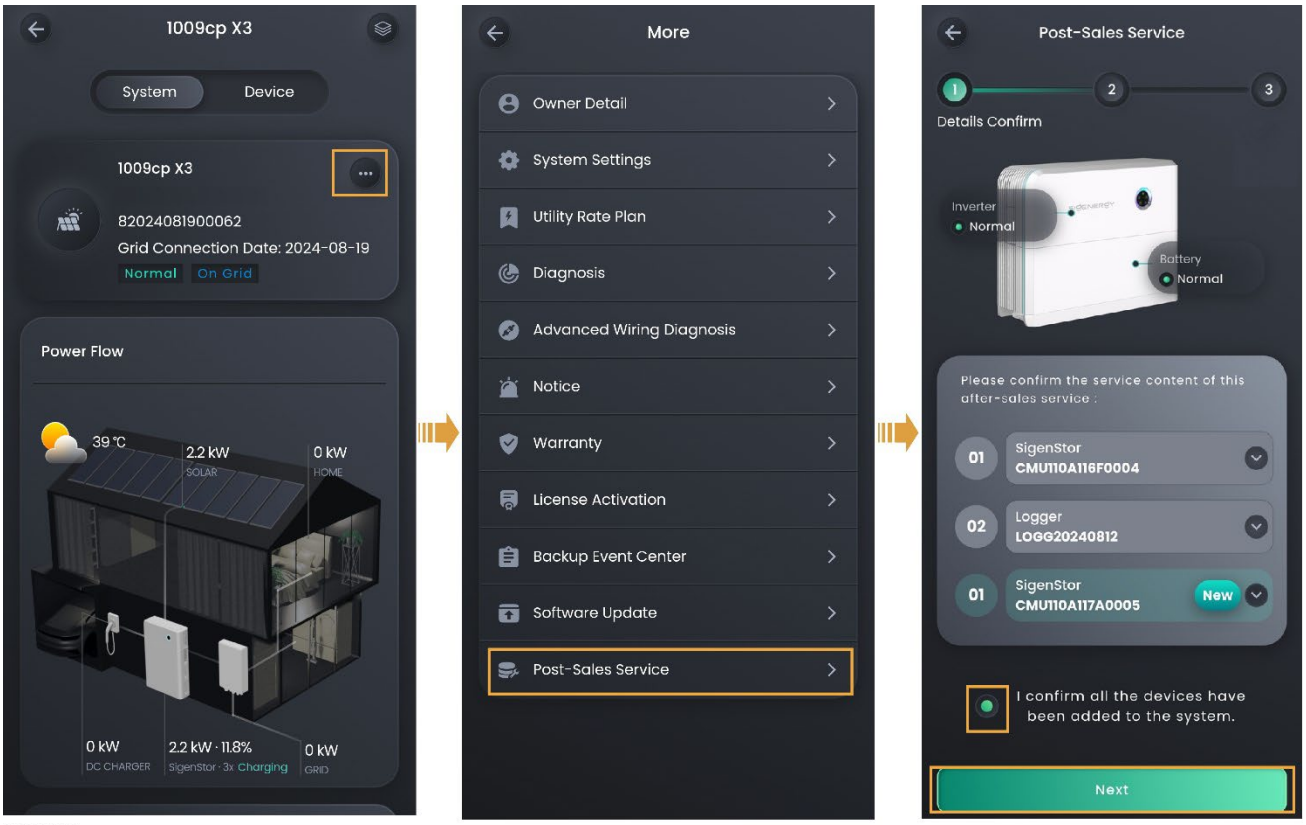
2.3.7 After-sales service

After you add, replace, or remove devices (such as batteries, EVDC, and EVAC), you must use this function to finally confirm your operations.



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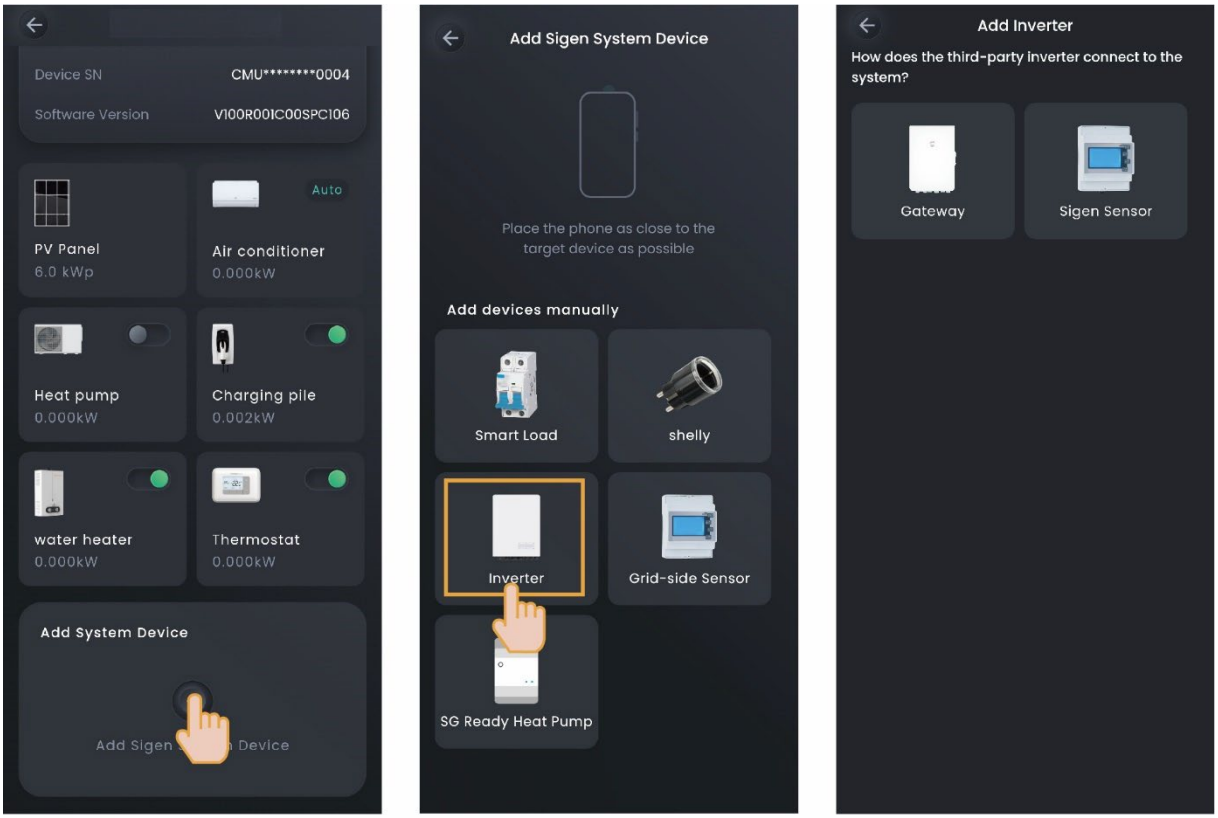
2.3.8 Adding device

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



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Method 1: Connecting using Gateway

Tips

- **Only third-party inverters that not support off-grid functionality are allowed to connect.**
- **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.**

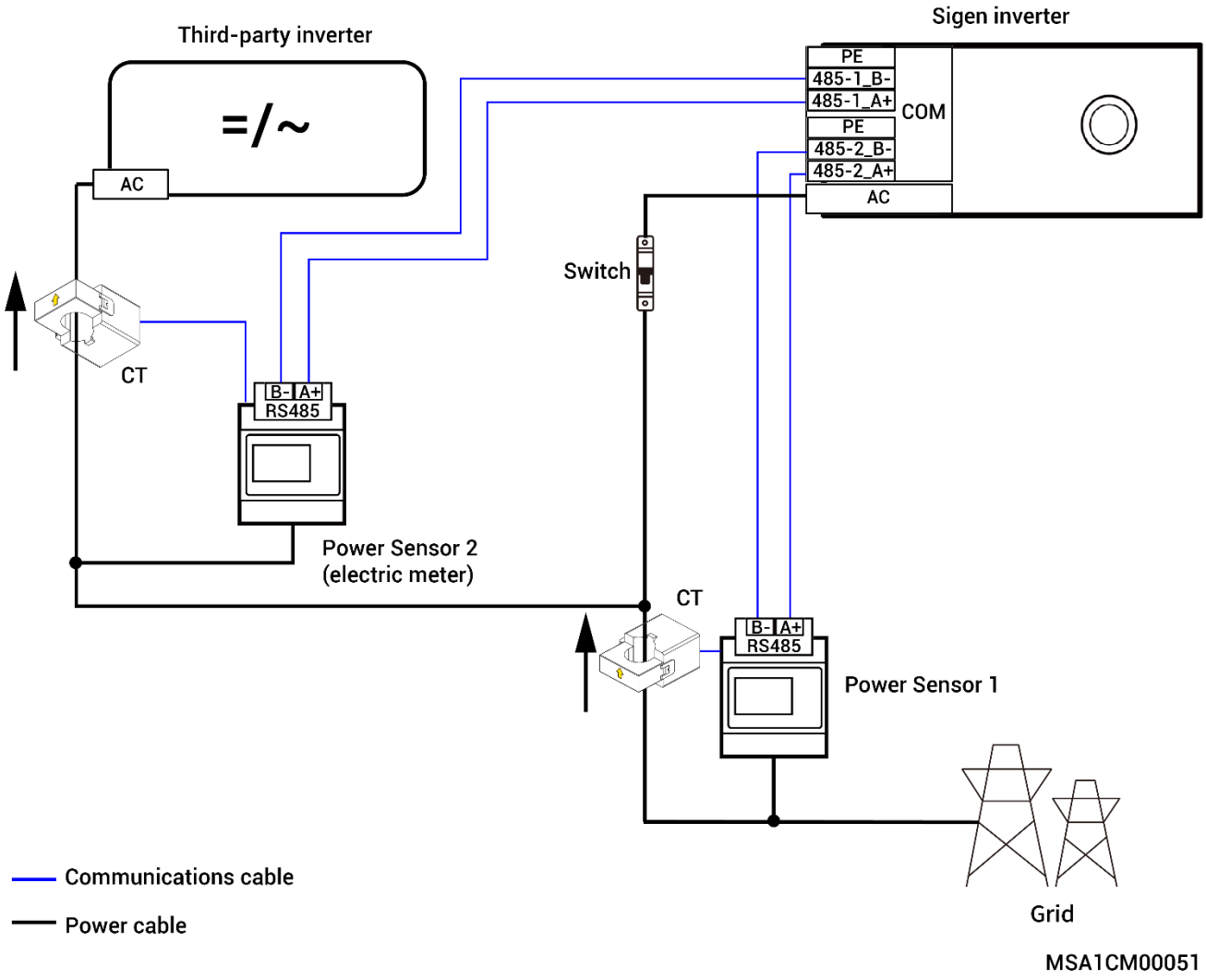
Method 2: Connecting using an electric meter

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



Tips

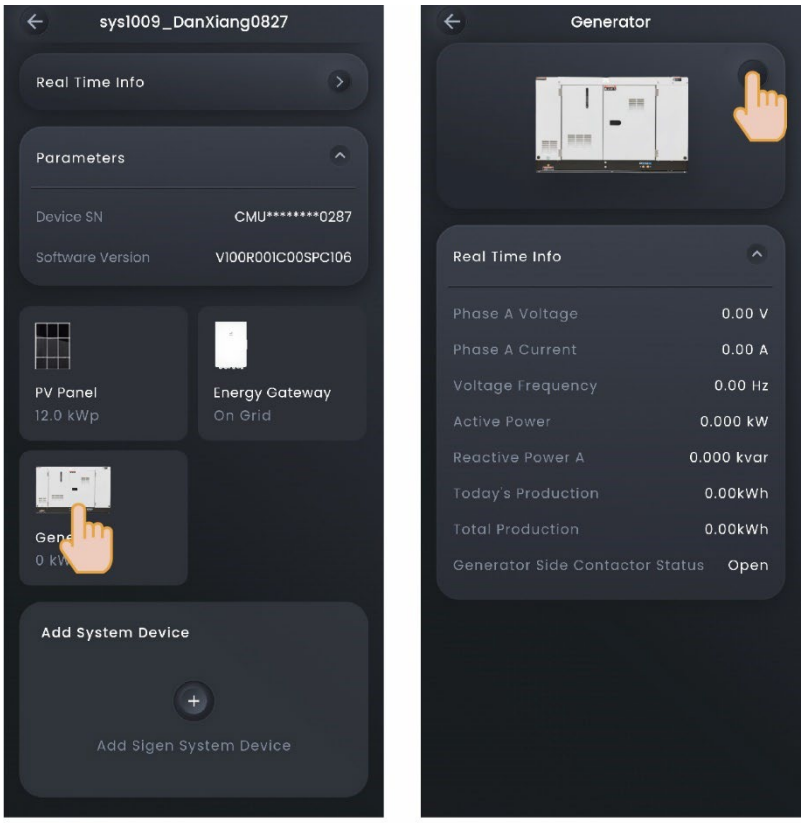
- **The diagram displays the connections among different cables of equipment. The specific ports shall be determined by actual equipment.**
- **On the "Device" screen, set related parameters based on the third-party inverter and the connected meter. Then, you can check detailed settings on the "Device" screen.**
- **In the grid off grid state, when the operating power of the third-party inverter is ≤ (load usage power + Sigen inverter charging power), the third-party inverter can operate normally.**
- **In the grid 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 Generator

Tips

Before connecting a Generator, please ensure that the Gateway that can be connected to the 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 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 Generator.
2	Maximum Power Duty	To guarantee the optimal functioning status of the system, you are advised to control the output power

No.	Parameter name	Description
		of the Generator not more than 80%.
3	Minimum Power Duty	To ensure that the Generator does not run at no-load, it is suggested to control the output power of the Generator. The recommended default value is 0%.
4	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 Generator will charge the battery pack to the set value.

two - wire – start

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

No.	Parameter name	Description
1	Operating Mode	• Manual • Auto
2	Generator Start	In "Manual" mode, when it is set to , you can start or stop the Generator using the  icon in the App.
3	Rated Power	Sets the rated power of the Generator.
4	Maximum Power Duty	To guarantee the optimal functioning status of the system, you are advised to control the output power of the Generator not more than 80%.
5	Minimum Power Duty	To ensure that the Generator does not run at no-load, it is suggested to control the output power of the Generator. The recommended default value is 0%.
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 Generator will charge the battery pack

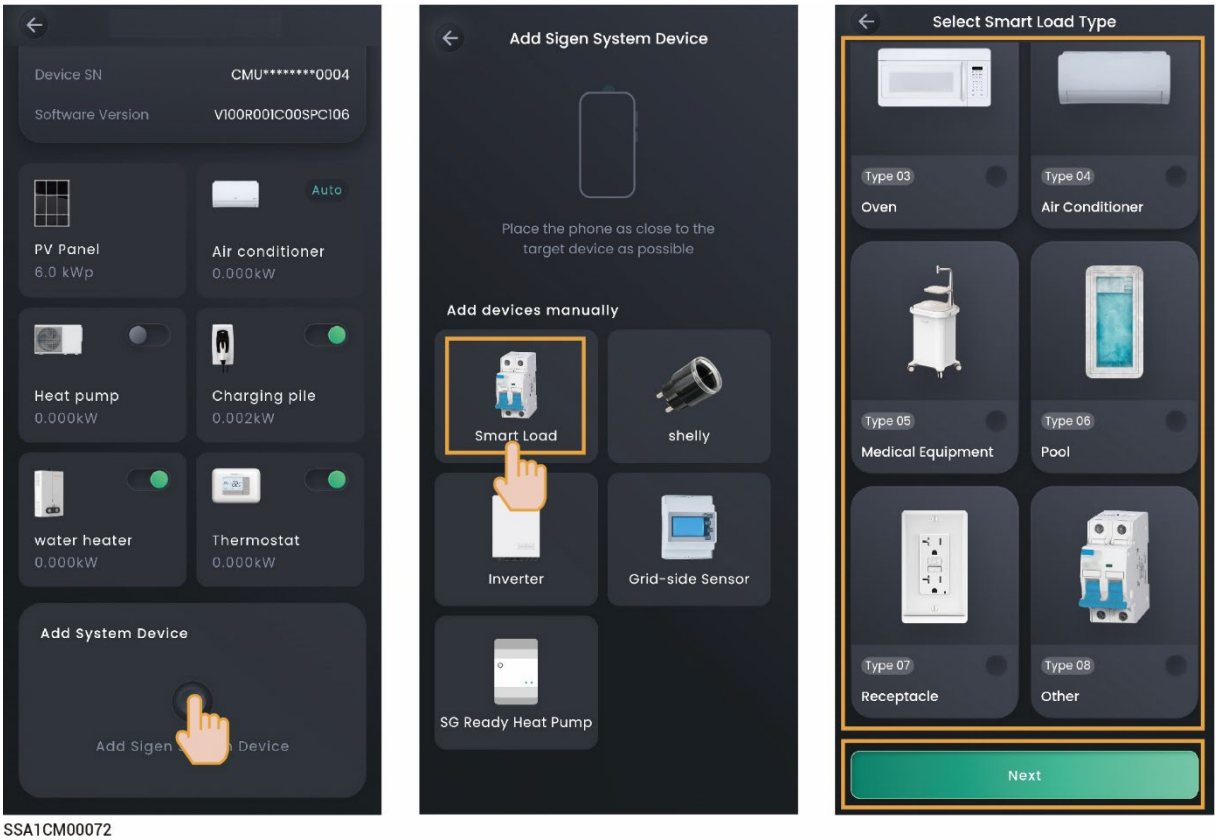
No.	Parameter name	Description
		to the set value.
7	Exercise	In "Auto" mode, when it is set to , the startup mode can be set. ● Duration: Set the runtime duration. ● Interval: Set the scheduled start interval. ● Day In Week: Set the scheduled start date. ● Start Time: Set the scheduled start time.
8	Load Condition	In "Auto" mode, when it is set to , you can set the Load Power Measurement Type. ● Total Load Power ➢ Generator Start Tatal Load Power Threshold: Total load power threshold for Generator start.When the total load power is greater than the threshold, the Generator is started. ➢ Generator Stop Tatal Load Power Threshold: Total load power threshold for Generator stop.When the total load power is less than the threshold, the Generator is stopped. ● Maximum Power Per-phase ➢ Generator Start Per-phase Load Power Threshold: The generator will start when the power per phase is greater than the set parameter. ➢ Generator Stop Per-phase Load Power Threshold: The generator will shut down when the power per phase is less than the set parameter.
9	Time of use	In "Auto" mode, when it is set to , you can set a schedule to start the Generator. ● Auto Start SOC: When the battery SOC is greater than the threshold, the Generator is started. ● Auto Stop SOC: When the battery SOC is less

No.	Parameter name	Description
		than the threshold, the Generator is stopped. ● Maximum Power Duty: To guarantee the optimal functioning status of the system, you are advised to control the output power of the Generator not more than 80%.

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 Schedule you set.**



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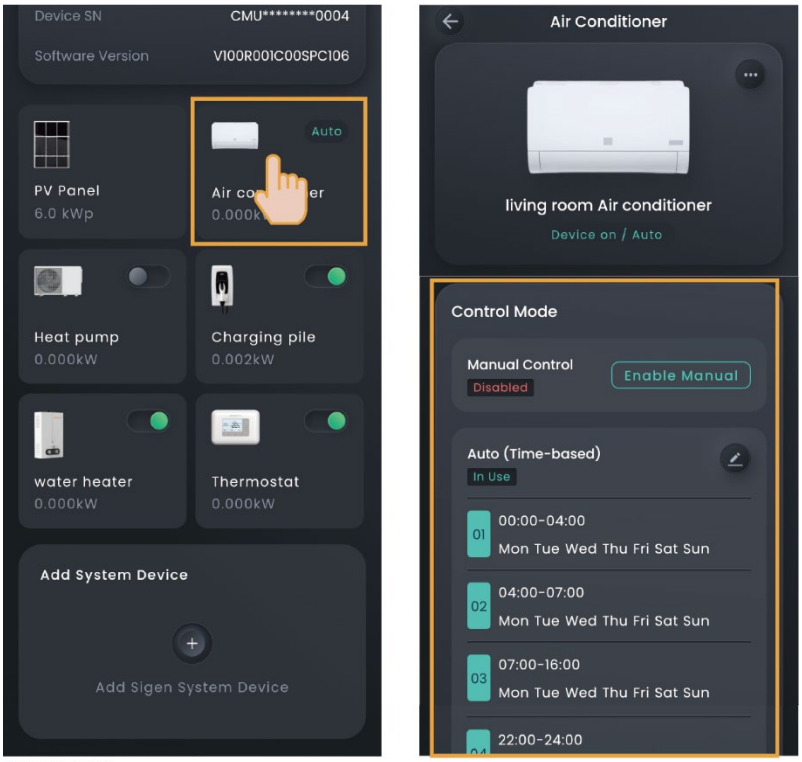
If you cannot locate the icon of the connected device, for example, an immersion heater, select "Other" and connect it. You can check the connected smart load on the "Device" screen.

On the device interface, click the smart load you want to configure to set the smart load control mode.



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Control Mode

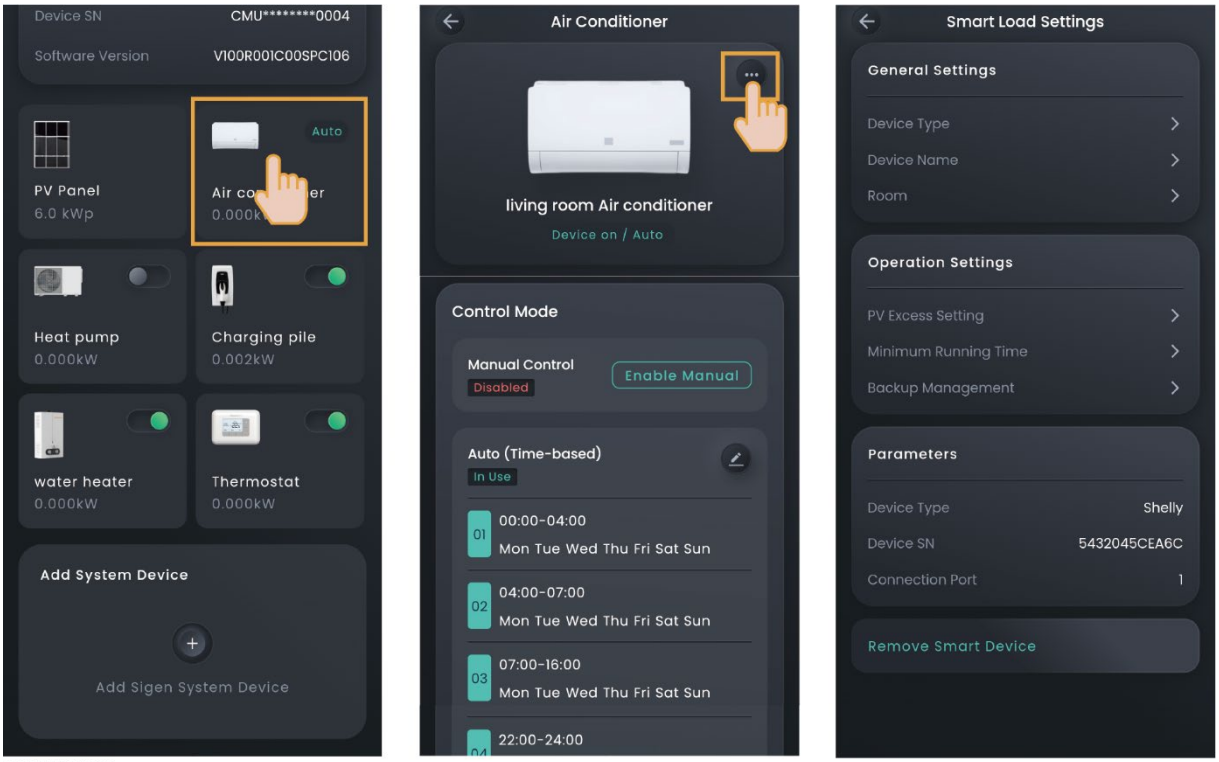
No.	Parameter name		Description
1	Manual		● When it is displayed as In Use, you can turn on and off the Smart Load through "" on the App. ● When displayed as Disable, You can click "Enable Manual" to switch to manual mode.
2	Auto（Time-based）		● When displayed as In Use, it indicates automatic control mode. You can modify or add a schedule. ● When displayed as Disable, you can click "Set a Schedule" → "Yes, save and use" to switch to automatic mode.
3	Schedule	Energy Source Control	Set the Energy Source Type. The following three modes can be set: ● Depends on System

No.	Parameter name		Description
			➢ Battery Boost: When set to , home batteries charge smart loads. ● Surplus PV Only ➢ Starting Power: Set the starting power of the smart load, which can be checked on the smart load's label. ➢ Rated Power: Set the rated power of the smart load, which can be checked on the smart load's label. ➢ Battery Boost: When set to , home batteries charge smart loads. ● Battery Level Control ➢ Device Activation Threshold: The smart load will activate when the actual SOC is greater than the set parameter. ➢ Device Deactivation Threshold: The smart load will deactivate when the actual SOC is less than the set parameter.
4	Ready by	Activation For	Total running time. Before the time set in Be Ready By, if the running time on that day is less than the set value, the smart load will be turned on.
5		Be Ready By	Set the running time. It is used in conjunction with the total running time.
6	Resume Schedule		If a schedule has been added, you can click to delete the schedule parameters.

On the device interface, click the smart load you want to configure → click "



" in the upper right corner to set the smart load parameters.



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Smart Load Settings

No.	Parameter name		Description
1	General Settings	Device Type	Set the smart load type.
2		Device Name	Set the smart load name.
3		Room	Set the room where the smart load is located.
4	Operation Settings	PV Excess Setting	• Starting Power: Set the starting power of the smart load, which can be checked on the smart load's label. • Rated Power: Set the rated power of the smart load, which can be checked on the smart load's label.
5		Minimum Running	Set the minimum running time for the

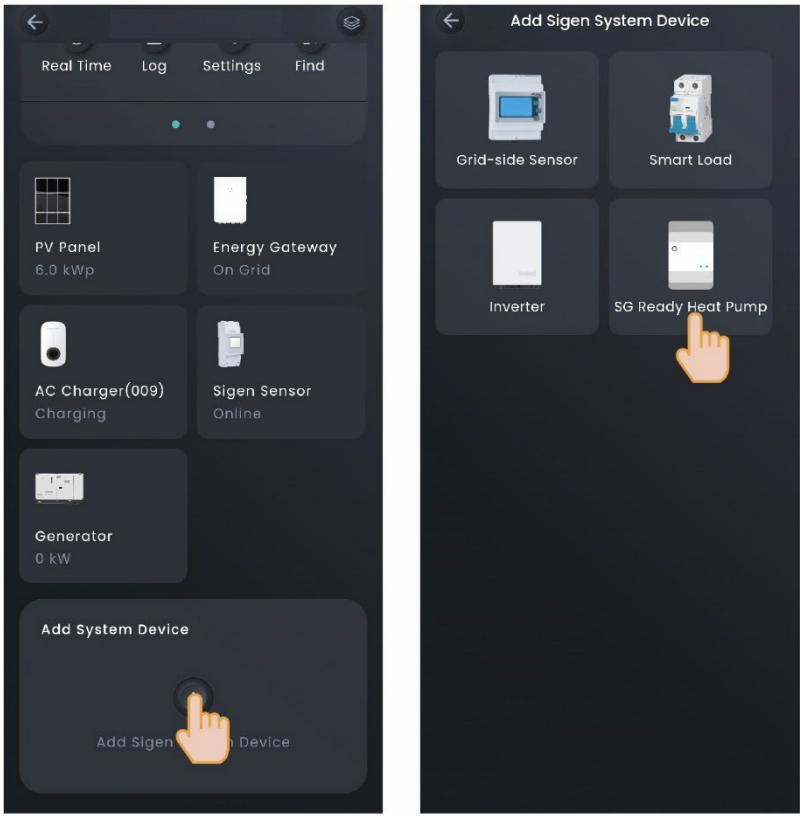
No.	Parameter name		Description
		Time	smart load.
6		Backup Management	● When Essential Load is set to , you can set the backup power SOC. ➢ Cut-in: The smart load will activate when the actual SOC is greater than the set parameter. ➢ Cut-off: The smart load will deactivate when the actual SOC is less than the set parameter.
7	Remove Smart Device		Click to remove the smart load.

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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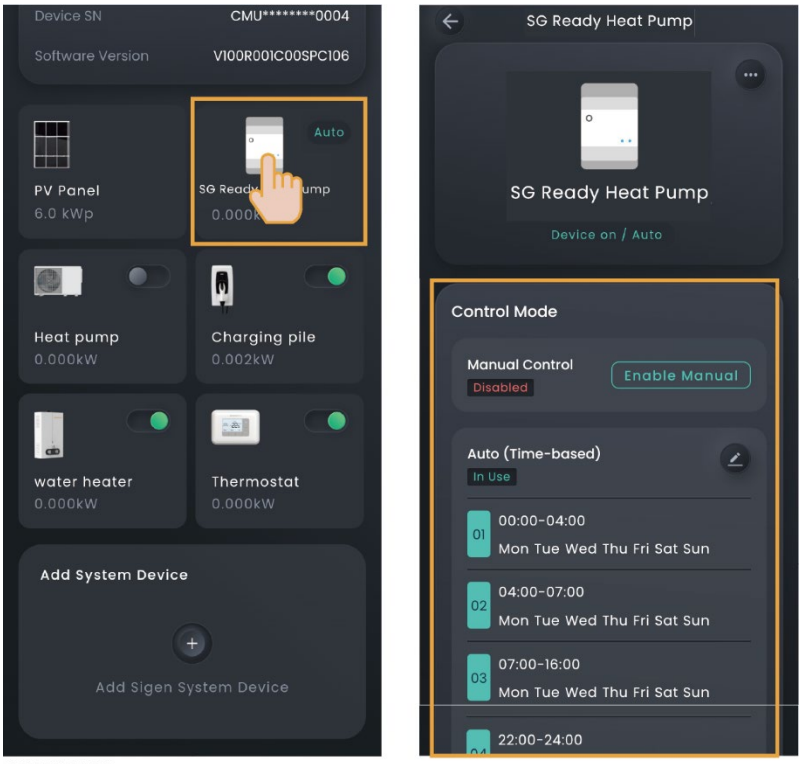
On the device interface, click the SG heat pump to set the SG heat pump control mode.



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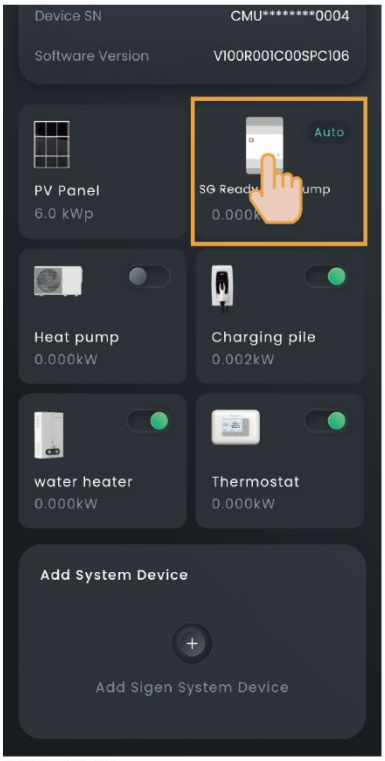
Control Mode

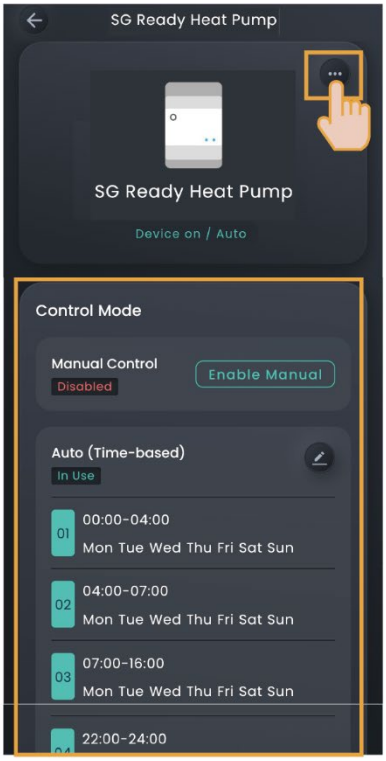
No.	Parameter name		Description
1	Manual Control		● When it is displayed as In Use, you can turn on and off the SG heat pump through "" on the App. ● When displayed as Disable, You can click "Enable Manual" to switch to manual mode.
2	Auto (Time-based)		● When displayed as In Use, it indicates automatic control mode. You can modify or create a schedule. ● When displayed as Disable, you can click "Set a Schedule" → "Yes, save and use" to switch to automatic mode.
3	Schedule	Energy Source Control	Set the Energy Source Type. The following three modes can be set: ● Depends on System

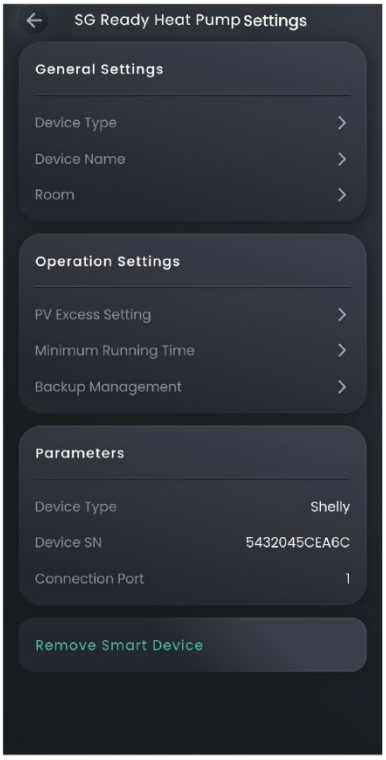
No.	Parameter name		Description
			➢ Battery Boost: When set to , it can charge using the home battery. ● Surplus PV Only ➢ Starting Power: Set the starting power of the SG heat pump, which can be checked on the SG heat pump's label. ➢ Rated Power: Set the rated power of the connected device, which can be checked on the SG heat pump's label. ➢ Battery Boost: When set to , the home battery charges the SG heat pump. ● Battery Level Control ➢ Device Activation Threshold: The SG heat pump will activate when the actual SOC is greater than the set parameter. ➢ Device Deactivation Threshold: The SG heat pump will deactivate when the actual SOC is less than the set parameter.
4	Ready by	Activation For	Total running time. Before the time set in Be Ready By, if the running time on that day is less than the set value, the SG heat pump will be turned on.
5		Be Ready By	Set the running time. It is used in conjunction with the total running time.
6	Resume Schedule		If a schedule has been added, you can

No.	Parameter name	Description
		click to delete the schedule parameters.

On the device interface, click SG heat pump → Click "" in the upper right corner to set the SG heat pump parameters.







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SG Ready Heat Pump Settings

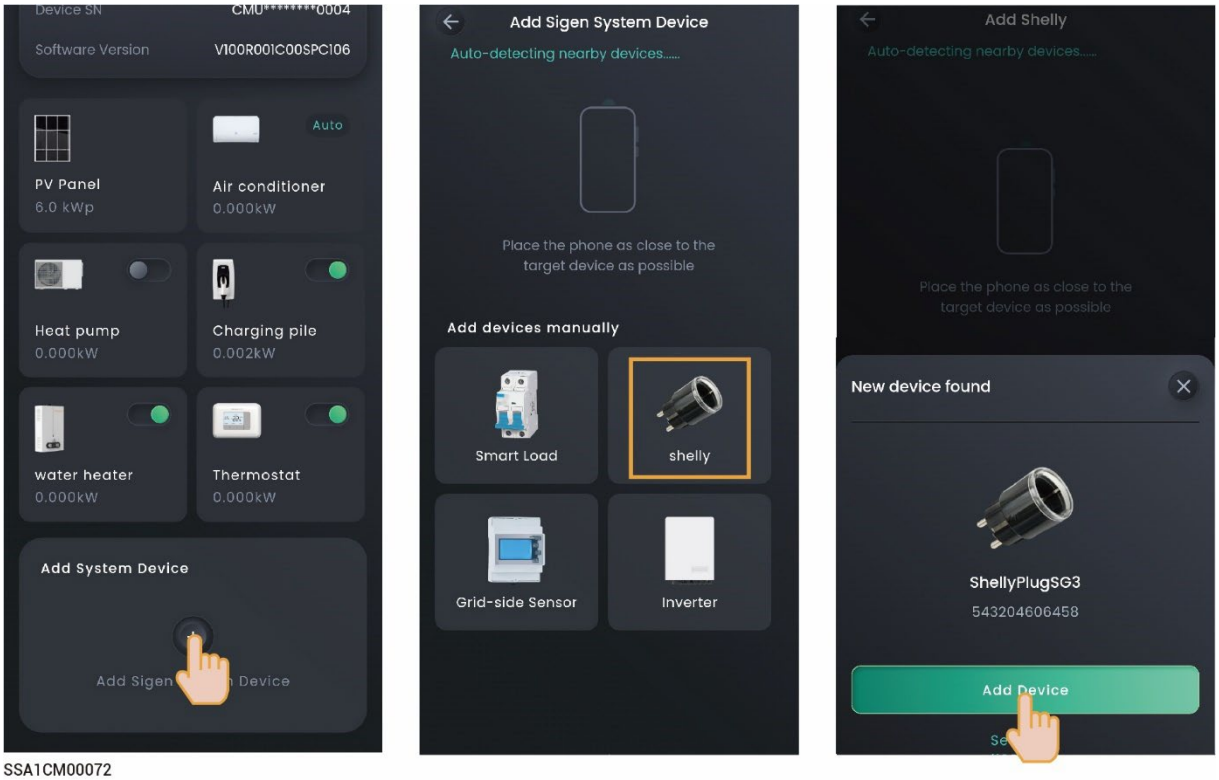
No.	Parameter name		Description
1	General Settings	Device Name	Set the device name.
2		Room	Set the room where the device is located.
3	Operation Settings	PV Excess Setting	• Starting Power: Set the starting power of the SG heat pump, which can be checked on the SG heat pump's label. • Rated Power: Set the rated power of the connected device, which

No.	Parameter name		Description
			can be checked on the SG heat pump's label.
4		Minimum Running Time	Set the minimum running time for the device.
5		Backup Management	• When Essential Load is set to , you can set the backup power SOC. ➢ Cut-in: The SG heat pump will activate when the actual SOC is greater than the set parameter. ➢ Cut-off: The SG heat pump will deactivate when the actual SOC is less than the set parameter.
6	Remove Smart Device		Click to remove the SG heat pump.

2.3.8.5 Shelly smart switch

Tips

- **Shelly needs to connect to the same WLAN network as SigenStor.**
- **You need to turn on the Bluetooth feature before connecting to Shelly.**



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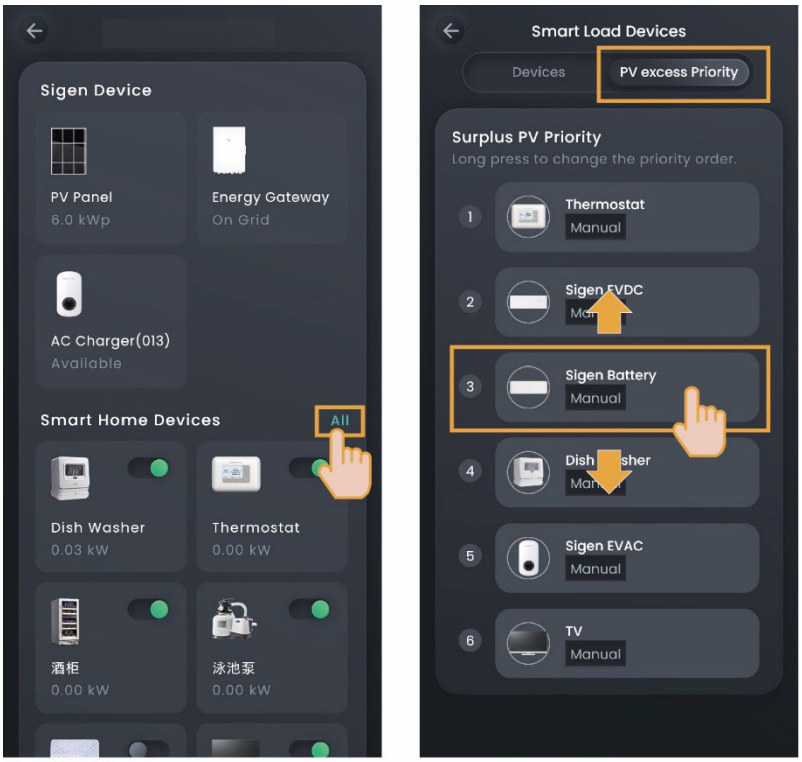
2.3.8.6 Adjust load priority

Select the load and drag it up or down to adjust the load priority.



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2.4 Device parameter setup

2.4.1 SigenStor



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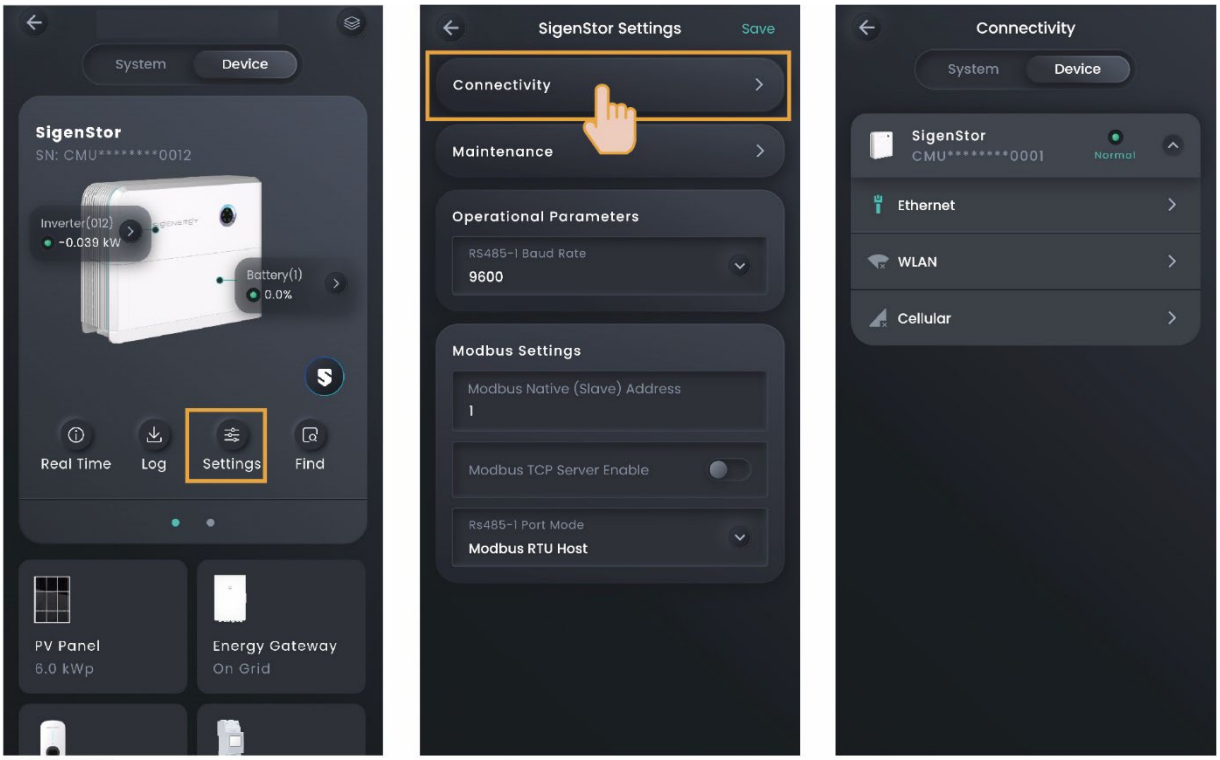
2.4.1.1 Internet connection

Click the "Connectivity" area to view the communication method of the device connecting to the network.



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No.	Parameter name	Description
1	Ethernet	● Displays the connection status of Fast Ethernet. ● For Fast Ethernet, network parameters are automatically obtained using a DHCP server. To edit parameters, do the following: 1. Configure a WLAN that can be normally connected to the Internet, or insert Sigen CommMod. 2. Wait until "WLAN" or "Cellular" is displayed as "Connected," and disconnect the network cable. 3. Set "Obtain IP address automatically" to  and edit parameters. 4. Re-connect the network cable to the device.

No.	Parameter name	Description
2	WLAN	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: ● 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 2.3.1.6 Internet connection. ● In non-parallel mode, configure the WLAN as described in 2.3.1.6 Internet connection.
3	Cellular	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: ● 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. ● In non-parallel mode, please make sure that Sigen CommMod is inserted. ● When 4G is used for communication, users can view the monthly traffic usage and set a traffic usage threshold for each month.

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.

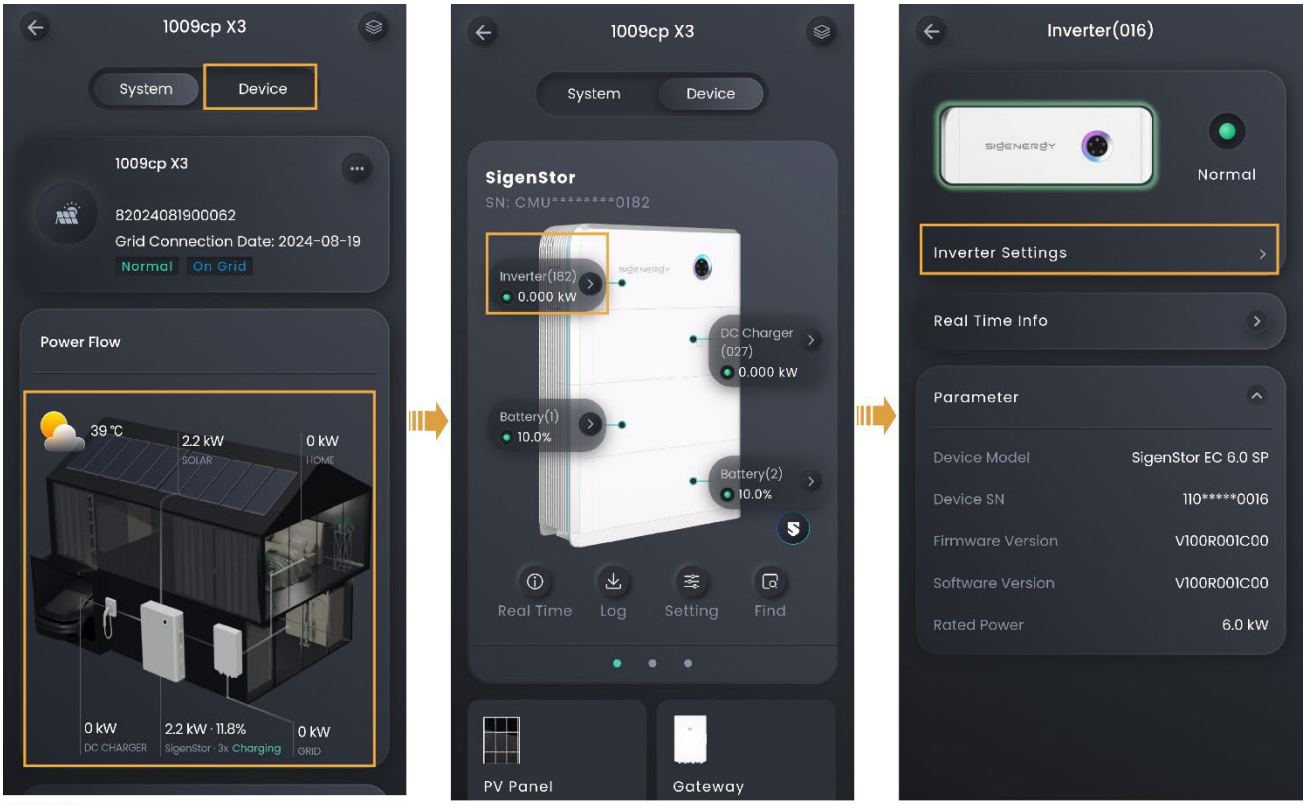
No.	Parameter name	Description
1	ModBus Server Address	Specifies the IP address of a third-party EMS server when the device functions as the Modbus TCP client.
2	ModBus Server Port	Specifies the port for the device to communicate with a third-party EMS when the device functions as the Modbus TCP client.
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.
2	Maximum Active Power Output	You can set this parameter to adjust the maximum output active power of the device.
3	Maximum Active Power Input	You can set this parameter to adjust the maximum input active 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-***N*** Overvoltage Protection Threshold	Specifies the level-***N*** 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-***N*** Overvoltage Protection Duration	Specifies the duration for level-***N*** overvoltage protection.
3	Level-***N*** Undervoltage Protection Threshold	Specifies the level-***N*** 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-***N*** Undervoltage Protection Duration	Specifies the duration for level-***N*** 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 Window Overvoltage	Specifies a 10-minute overvoltage protection duration.

No.	Parameter name	Description
	Protection Time	
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-***N*** Overfrequency Protection Threshold	Specifies the level-***N*** 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-***N*** Overfrequency Protection Duration	Specifies the duration for level-***N*** overfrequency protection.
3	Level-***N*** Underfrequency Protection Threshold	Specifies the level-***N*** 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-***N*** Underfrequency Protection Duration	Specifies the duration for level-***N*** 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.		

Power Response to overfrequency

No.	Parameter name	Description
1	Power Response to Overfrequency 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.
2	Trigger Frequency	Specifies the threshold for triggering derating upon overfrequency.
3	Power Droop Rate	The active power is recovered based on the

No.	Parameter name	Description
		gradient setting after the frequency is recovered.
4	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	Power Reference Mode	● Freeze active power on trigger: Specifies the real-time active power when derating upon overfrequency is triggered. ● Maximum active power: Specifies the maximum active power of the device. ● Rated power: Specifies the rated power of the device. Remaining charge power capacity of battery: Specifies the real-time power + energy storage charging power when 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 exit delay	If "Overfrequency derating exit frequency enable" is set to , you can use this parameter to set the time for the device to 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.
8	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.

Power Response to underfrequency

No.	Parameter name	Description
1	Power Response to Underfrequency Enable	The grid frequency is lower than the trigger value when it is set to , and the device outputs a higher active power.
2	Trigger Frequency	Specifies the threshold for triggering power rise upon underfrequency.
3	Power Droop Rate	The active power is recovered based on the gradient setting after the frequency is recovered.
4	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	The active power rises according to the set mode when power rise upon underfrequency is triggered. ● Freeze active power on trigger: Specifies the real-time active power when power rise upon underfrequency is triggered. ● Maximum active power: Specifies the maximum active power. ● Remaining active power capacity of PCS: Specifies the rated power of the device. Remaining discharge power capacity of battery: Specifies the real-time power + energy storage discharging power when power rise upon underfrequency is triggered.
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 parameter to set the time for the device to stop output active power rise when power rise

No.	Parameter name	Description
		upon underfrequency exits, provided that the grid frequency is greater than the "Under-Frequency Power Increase Exit Frequency" setting.
8	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.

P-U Curve

No.	Parameter name	Description
1	P-U Voltage 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/Pn between the active power and the rated power that the device regulates in real time based on the ratio U/Un(%) 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 Reconnection

No.	Parameter name	Description
1	Grid Fault Reconnect Enable	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.

No.	Parameter name	Description
2	Reconnection Upper Frequency	After the grid fault is restored, the device is not allowed to reconnect to the grid when the grid frequency is higher than the set value of "Reconnection Upper Frequency."
3	Reconnection Lower Frequency	After the grid fault is restored, the device is not allowed to reconnect to the grid when the grid frequency is lower than the set value of "Reconnection Lower Frequency."
4	Reconnection Upper Voltage	After the grid fault is restored, the device is not allowed to reconnect to the grid when the grid voltage is higher than the set value of "Reconnection Upper Voltage."
5	Reconnection Lower Voltage	After the grid fault is restored, the device is not allowed to reconnect to the grid when the grid voltage is lower than the set value of "Reconnection Lower Voltage."
6	Observation Time	Set the waiting time for the device to restart after the grid fault is restored.
7	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.
8	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. ⚠ Warning 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.

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.
12	Q-U curve Points	Specifies the ratio Q/S between reactive power

No.	Parameter name	Description
	included	output and apparent power that the device regulates in real time based on the ratio U/Un(%) between actual grid voltage and rated voltage.
13	Q-U curve trigger power	Specifies the P/Pmax 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/Pmax 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 adjustmen	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 Penetration Mode	Set low penetration mode. Low penetration mode includes Reactive power priority, Active power priority, Zero current, and Constant current.

No.	Parameter name	Description
2	LVRT 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.
3	Trigger Threshold	When the grid voltage is greater than the value set by this parameter, low voltage ride-through will be triggered.
4	Low Penetration Curve	LVRT curve. Sets the low voltage ride-through capability.
5	Zero Current Mode Trigger Threshold	Zero current mode trigger threshold.When the grid voltage is lower than this threshold, the zero current mode will be triggered.

High Voltage Ride Through

No.	Parameter name	Description
1	HVRT 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	Trigger Threshold	High voltage ride-through is triggered when the grid voltage is greater than this parameter setting.
3	High Penetration Curve	HVRT curve. Sets the high voltage ride-through capability.

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.

Startup Grid Connection

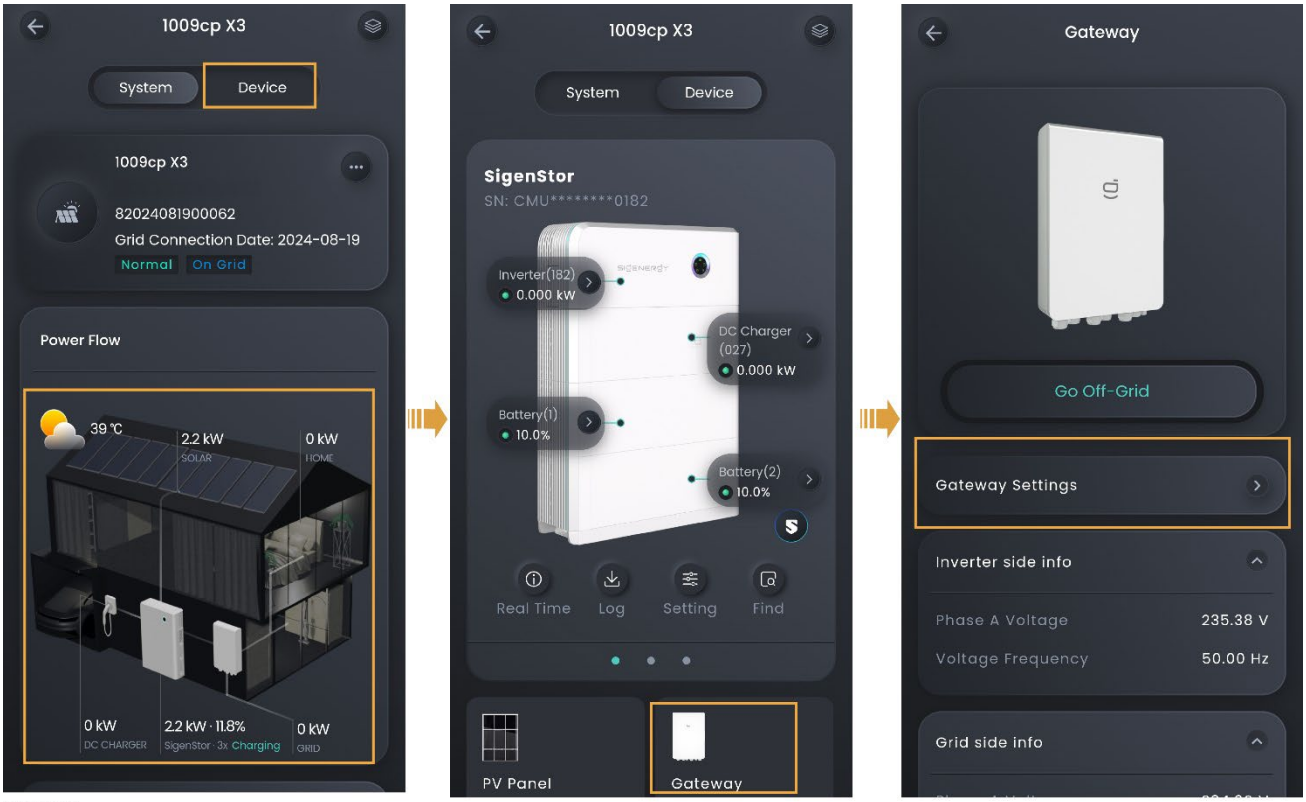
No.	Parameter name	Description
1	Startup Grid Connection Enable	When set to , the device is turned on and connected to the grid for the first time, and the

No.	Parameter name	Description
		grid voltage needs to meet the reconnection conditions before it is allowed to connect to the grid.
2	Observation Time	When the device is started for the first time, a waiting time is required, and the grid connection is allowed only after this time is met.
3	Connection Upper Frequency	The device is not allowed to connect to the grid when it is powered on for the first time, and the grid frequency is higher than the set value of "Reconnection Upper Frequency."
4	Connection Lower Frequency	The device is not allowed to connect to the grid when it is powered on for the first time, and the grid frequency is lower than the set value of "Reconnection Lower Frequency."
5	Connection Upper Voltage	The device is not allowed to connect to the grid when it is powered on for the first time, and the grid voltage is higher than the set value of "Reconnection Upper Voltage."
6	Connection Lower Voltage	The device is not allowed to connect to the grid when it is powered on for the first time, and the grid voltage is lower than the set value of "Reconnection Lower Voltage."
7	Startup Grid Connection Detection Power Gradient	The power gradient after the device is powered on for the first time and connected to the grid.

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.

2.4.3 Gateway



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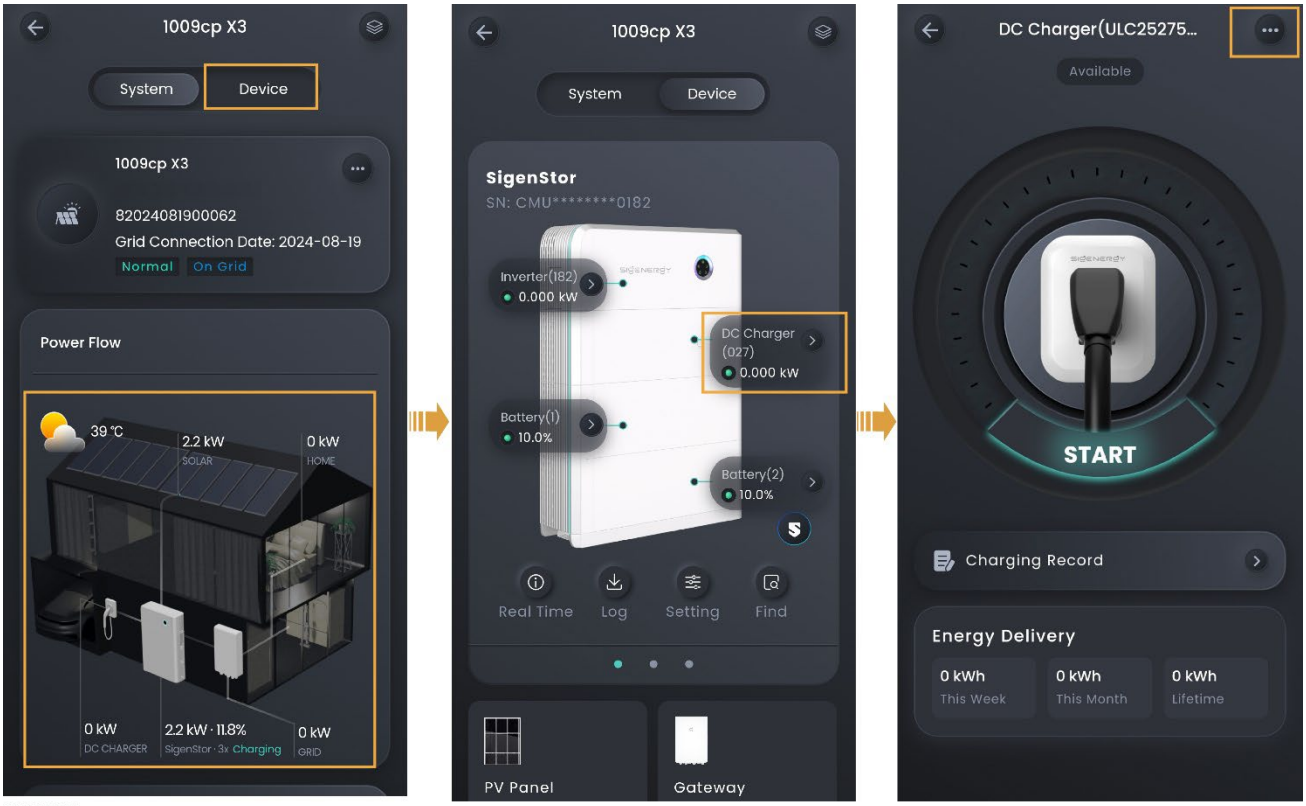
No.	Parameter name	Description
1	Grid recovery delay time	Specifies the delay time after which the device starts after the grid resumes normal operation.
2	Neutral Grounding	When it is set to , neutral grounding is enabled when the device operates in off-grid mode.
3	Off-Grid Enablement	When it is set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

2.4.4 Sigen EV DC Charging Module



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No.	Parameter name	Description
1	Charging Mode	• Fast Charging ➢ Battery Boost: When set to , it can charge using the home battery. ➢ Cut-OFF SOC: When Battery Boost is enabled, the battery will stop charging the Sigen EV DC charging module if the actual SOC is less than the set parameter. • PV Surplus Charging ➢ Battery Boost: When set to , it can charge using the home battery. ➢ Cut-OFF SOC: When Battery Boost is enabled, the battery will stop charging the Sigen EV DC charging module if the actual SOC is less than the set parameter. ➢ Surplus PV priority: Select the device and drag it up or down to modify the device's priority.
2		
3	Charging Setting	Setting the maximum charging power permitted for Sigen EV DC Charging Module.
4	OCPP Settings	When it is set to , the Sigen EV DC Charging

No.	Parameter name	Description
		Module can connect to the OCPP server, and users can select the OCPP platform from the URL drop-down menu.
5	Authorization	Set the charging authentication. When it is set to , unauthenticated charging is allowed.
6	Card Management	Bind a Sigen RFID card.

Tips

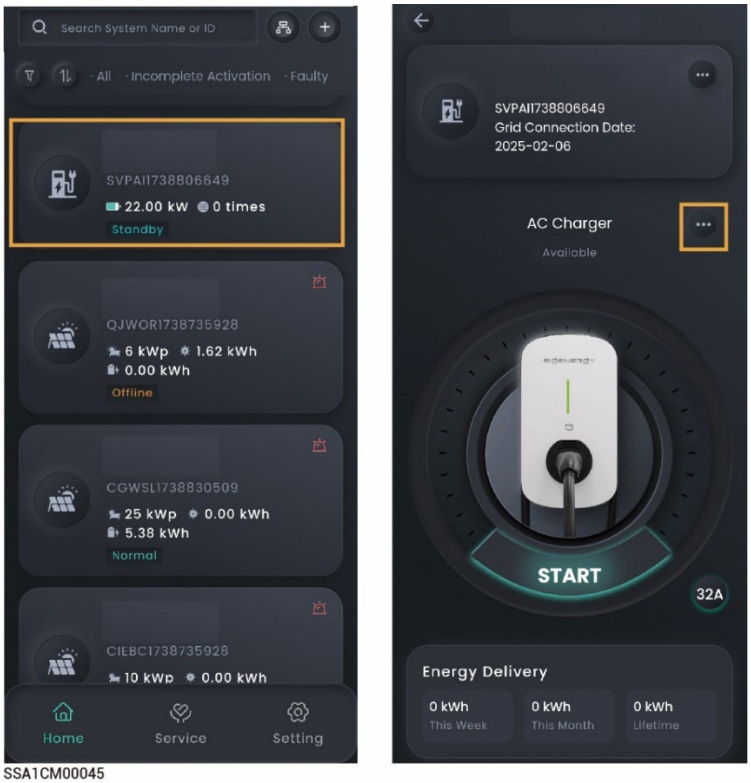
For use and precautions of the Sigen EV DC Charging Module, refer to the Sigen EV DC Charging Module User Manual.

2.4.5 Sigen EV AC Charger

Tips

In pure charging scenarios, only one Sigen EV AC Charger can be connected. In PV charging or PV storage scenarios, one SigenStor can connect up to two Sigen EV AC Chargers.

Pure charging application



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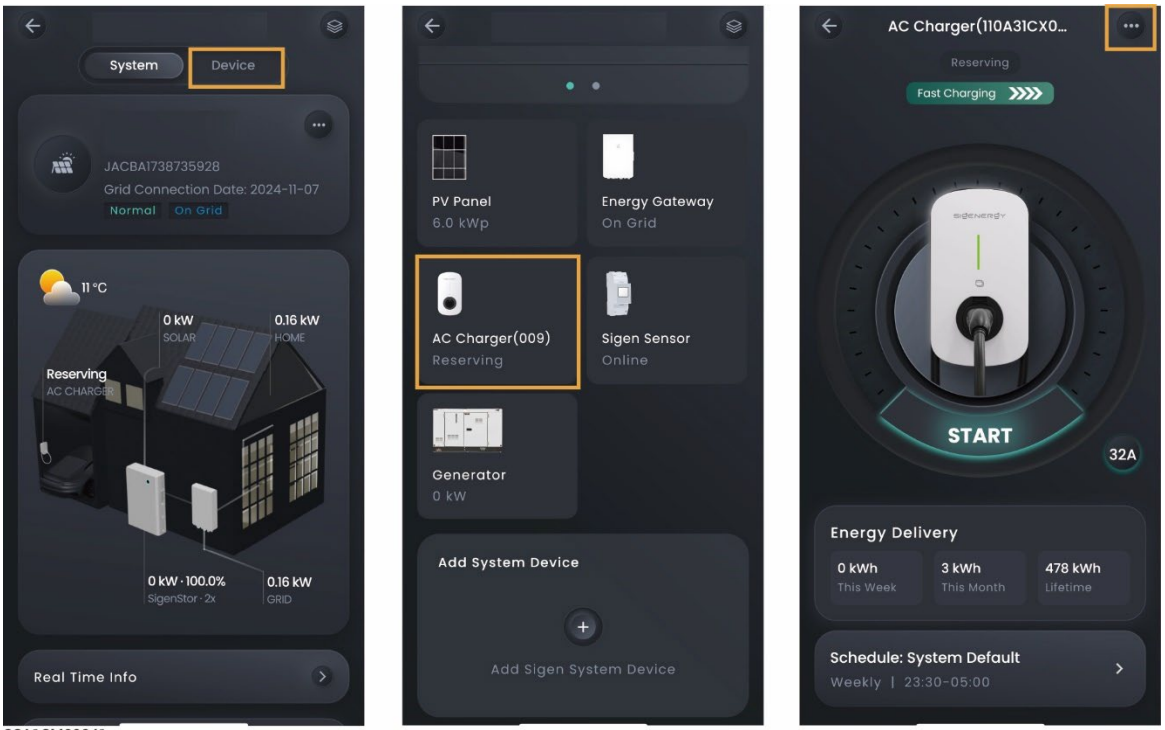
PV charging or PV storage & charging application

Tips

- To connect a Sigen EV AC Charger, you need to connect the FE network cable to SigenStor.
- To connect two Sigen EV AC Chargers, you need to connect them to the same WLAN network as SigenStor. For the steps to add them, refer to 2.3.7 After-sales service.



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No.	Parameter name	Description
1	Charging Record	You can view the charging records.
2	Charging Mode	● Fast Charging ➢ Battery Boost: When set to , it allows charging from the home battery. ➢ Cut-OFF SOC: When Battery Boost is enabled, the battery will stop charging the Sigen EV AC charger if the actual SOC is less than the set parameter. ● PV Surplus Charging ➢ Battery Boost: When set to , it allows charging from the home battery. ➢ Cut-OFF SOC: When Battery Boost is enabled, the battery will stop charging the Sigen EV AC charger if the actual SOC is less than the set parameter. ➢ Grid Charging: When set to , it allows setting the rated power of the connected device. ➢ Surplus PV priority: Select the device and drag it up or down to modify the device's priority.
3	OCPP Setting	When it is set to , Sigen EV AC Charger can be connected to the OCPP server, and users can select the OCPP platform from the URL drop-down list.
4	Authorization	Set the charging authentication. When it is set to , unauthenticated charging is allowed.

No.	Parameter name		Description
5	Card Management		Bind a Sigen RFID card.
6	Advanced Mode	Output Mode	Select single-phase or three-phase output as needed.
7		Dynamic load management	When Power Sensor is installed in the networking and is not in off-grid state, and 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.
8		Home air circuit breaker rated current	The current specification of the household circuit breaker controls the charging power of the AC pile so that the household current is less than the set value.
9		Allow charging when off-grid	When it is set to , charging is allowed during off-grid operation.
10	Connectivity	Ethernet	● Displays the connection status of Fast Ethernet. ● For Fast Ethernet, network parameters are automatically obtained using a DHCP server. To edit parameters, do the following: **1.** Configure a WLAN that can access the internet or insert a 4G SIM card. **2.** Wait until "WLAN" or "Cellular" is displayed as "Connected," and disconnect the network cable. **3.** Set "Obtain IP address automatically" to  and edit parameters. Re-connect the network cable to the device.
11		WLAN	Displays the connection status of WLAN. If the

No.	Parameter name		Description
			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. Notes: ● Non-encrypted WLAN is not recommended as it may lead to Internet access failure. ● When WLAN is the only connection path for the devices to access the internet, switching WLAN to any other wireless router will be prohibited.
12		Cellular	● 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. ● When 4G is used for communication, users can view the monthly traffic usage and set a traffic usage threshold for each month.
13	Charging Setting	Grid Code	Specifies a grid code based on the country/region when devices are used.
14		Ground mode	Specifies the grounding type according to local grid type.
15		Home air circuit breaker rated current	Specifies the rated current according to the home main incoming circuit breaker within the distribution panel.
16		Input circuit breaker rated current	Specifies the rated current according to circuit breakers connected to devices in the distribution panel.
17		Charging pile type	You can choose the charging pile type.
18		Phase Type	Specifies the phase type according to actual wiring.
19		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 the installer company account number wants to grant permissions to other installers to view and set up your power station, or if you want to view and set up the power stations of other installers, click on "Setting" → "Company Management" to configure the settings.

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	● Sets the unit of temperature. ● The unit of temperature commonly used in the local area is set by default. You can change this setting when needed.

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.

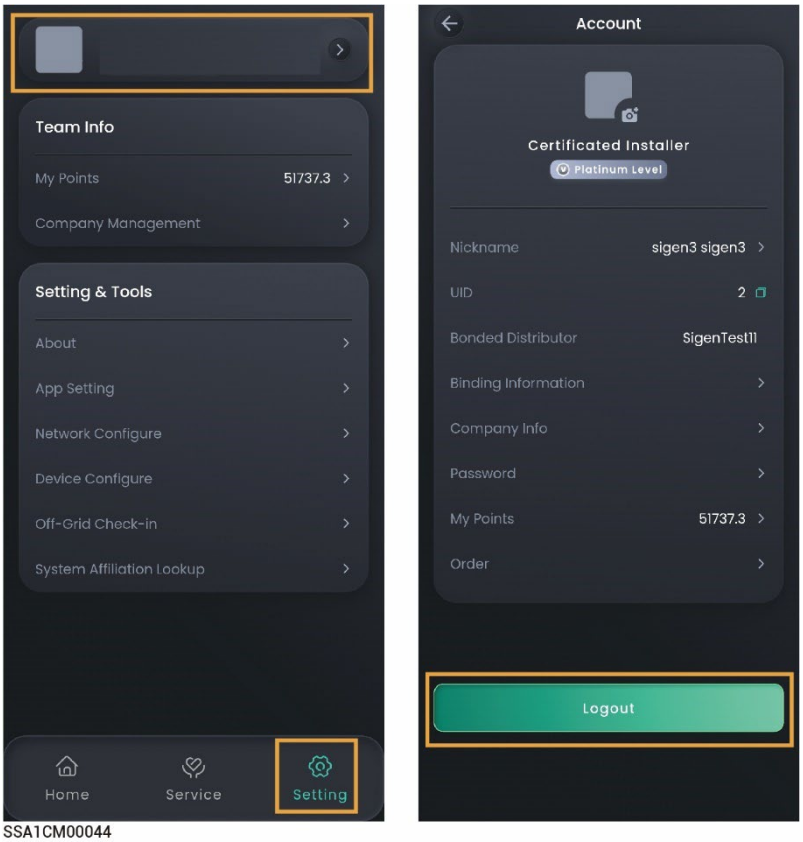
3.1.9 Owner consultation and request management

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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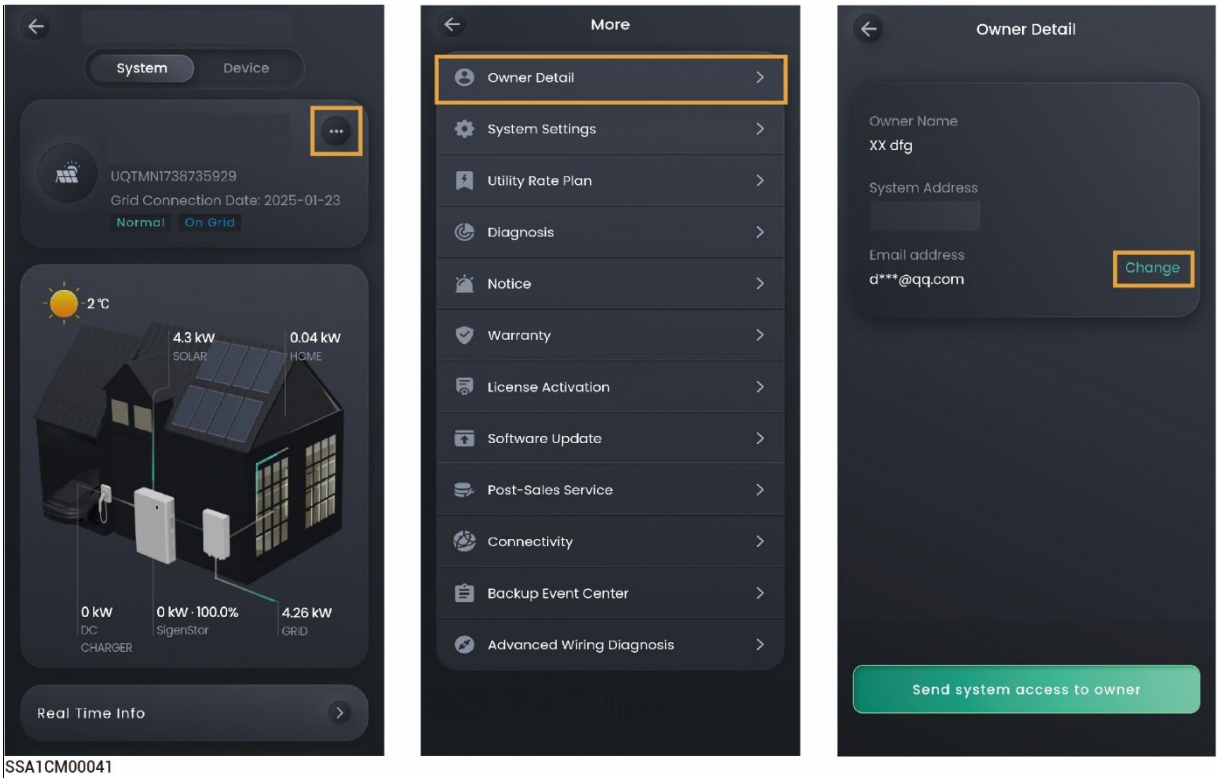
Chapter 5 FAQs

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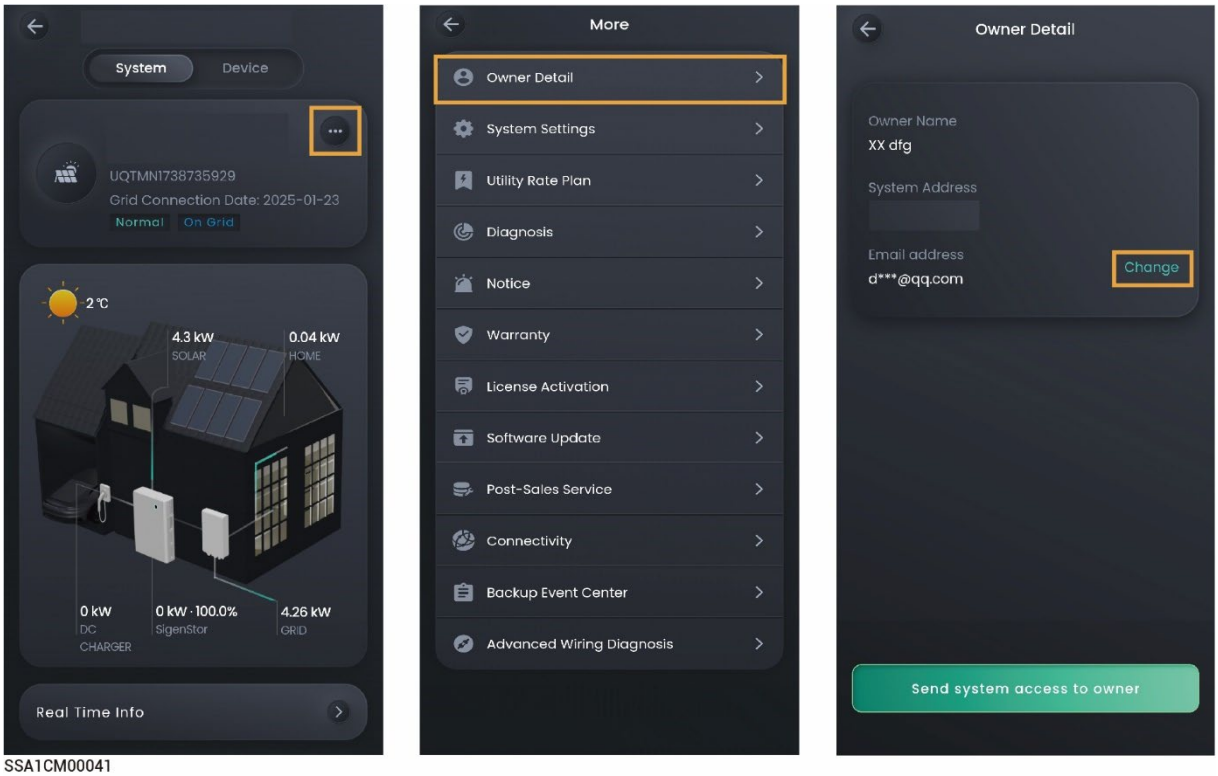
5.2 What should you do if the owner account activation times out and cannot be operated?

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?

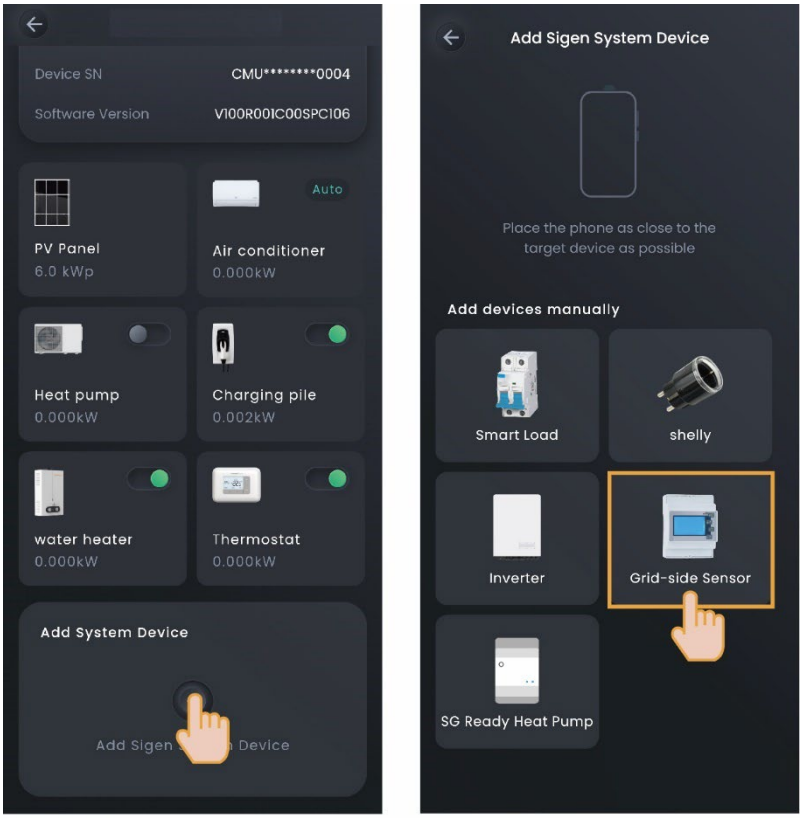
1. Insert the network cable into the device.
2. On the "Home" screen, click the station name you want to set.
3. Click  next to the station name and click "System Settings" → "Connectivity."
4. Wait until "Ethernet" is connected, click "WLAN," and then select any WLAN and enter an invalid password.

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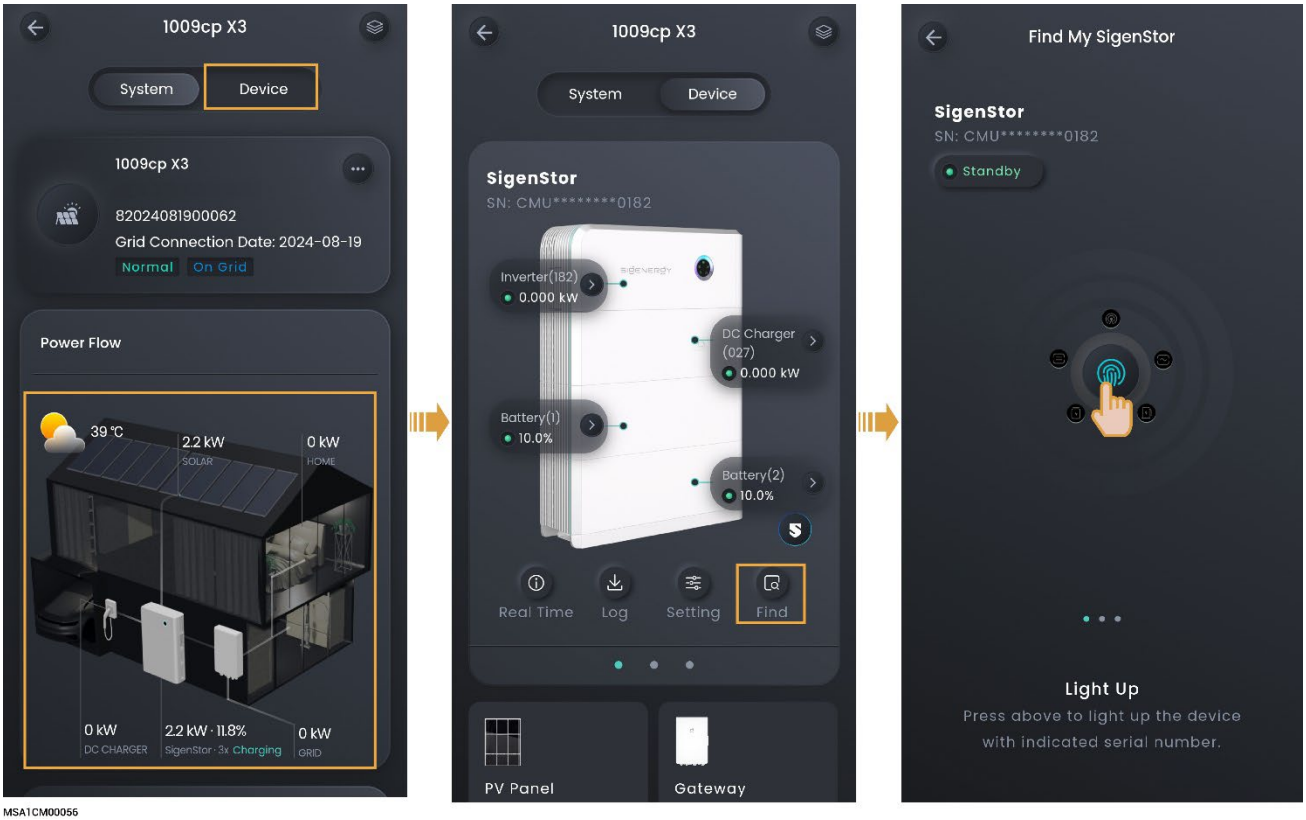
5.7 In grid connection scenarios, how can I quickly identify where SigenStor is installed?

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."

Tips

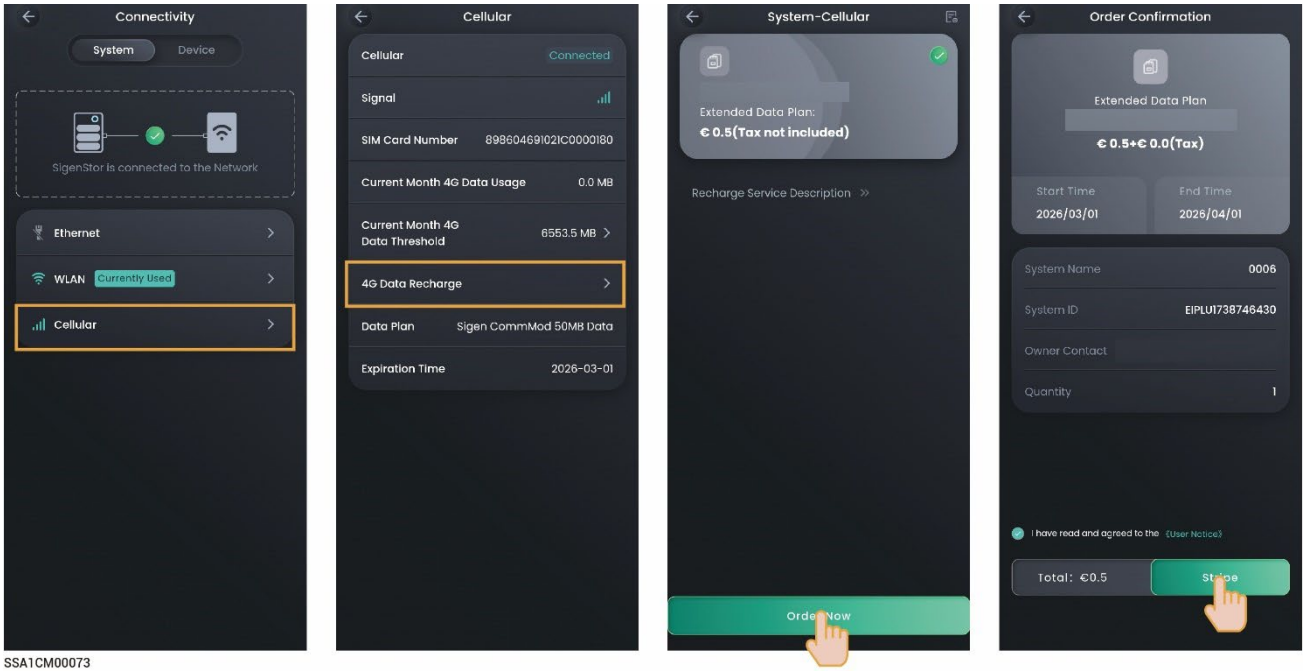
If you still cannot connect to the device hotspot, disconnect the AC circuit breaker and DC switch of the device, wait for the device indicator to go out, then turn on the AC circuit breaker and DC switch again, wait for 30 seconds, and then rescan the device QR code and configure the network according to the above steps.

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

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

5.10 How to recharge the Sigen CommMod data when it is used up?

You can recharge the desired data plan by going to ""→ "Connectivity" on the power station homepage.



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