GOODWE

SolarGo User Manual

SolarGo Mobile App

V2.2-2025-04-11

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NOTICE

The information in this user manual is subject to change due to product updates or other reasons. This guide cannot replace the notices and warnings of the app unless otherwise specified. All descriptions in the manual are for guidance only.

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1 About This Manual

- This manual introduces commonly used operations in SolarGo app.
- Before setting any parameters, read through this document and the equipment user manual to learn the product functions and features. When the parameters are set improperly, the equipment may fail to work properly.
- This manual is subject to update without notice. For more product details and latest documents, visit www.goodwe.com.

1.1 Target Audience

This manual applies to trained and knowledgeable technical professionals. The technical personnel has to be familiar with the product, local standards, and electric systems.

1.2 Symbol Definition

Different levels of warning messages in this manual are defined as follows:

DANGER
Indicates a high-level hazard that, if not avoided, will result in death or serious injury.
WARNING
Indicates a medium-level hazard that, if not avoided, could result in death or serious injury.
CAUTION
Indicates a low-level hazard that, if not avoided, could result in minor or moderate injury.
NOTICE
Highlights key information and supplements the texts. Or some skills and methods to solve product-related problems to save time.

2 Product Introduction

SolarGo app is a mobile application that communicates with the inverter via Bluetooth, WIFi, 4G, or GPRS. Commonly used functions are as follows:

1. Check the operating data, software version, alarms, etc.
2. Set safety country, grid parameters, power limit, communication parameters, etc.
3. Set charging mode of the charger.
4. Equipment maintenance.

2.1 Applicable Product Model

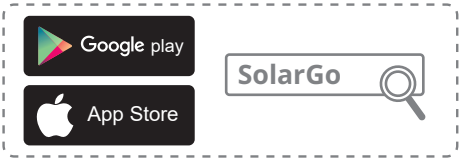
SolarGo app applies to GoodWe inverters and chargers.

2.2 Downloading and Installing the App

Make sure that the mobile phone meets the following requirements:

- Mobile phone operating system: Android 4.3 or later, iOS 9.0 or later.
- The mobile phone can access the Internet.
- The mobile phone supports WLAN or Bluetooth.

Method 1: Search SolarGo in Google Play (Android) or App Store (iOS) to download and install the app.



SolarGo App

Method 2: Scan the QR code below to download and install the app.

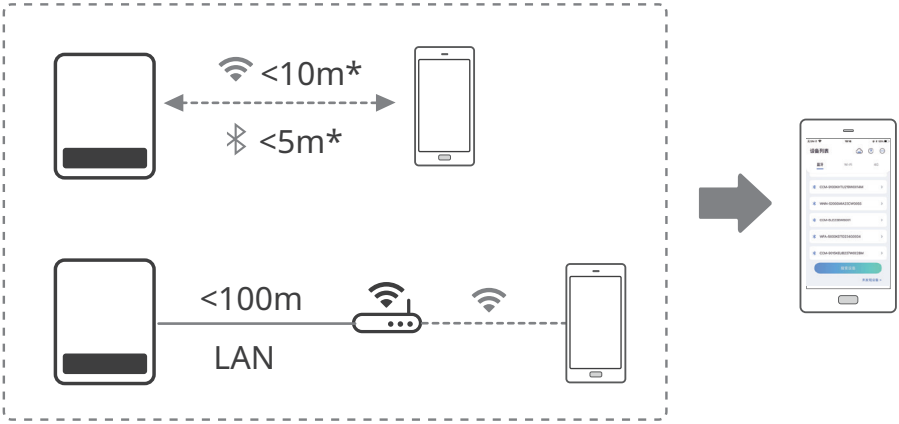
SolarGo App

NOTICE
After installing the app, it can automatically prompt users to update the app version.

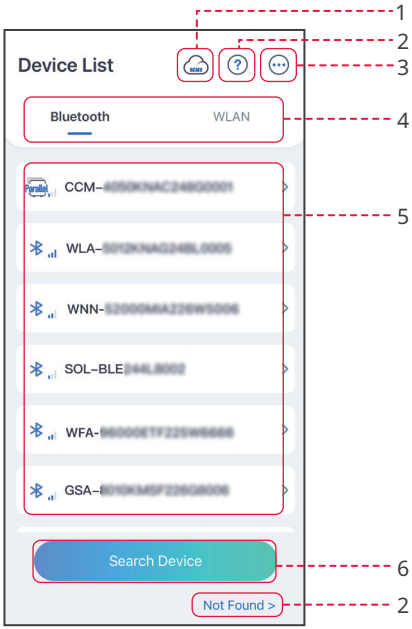
2.3 App Connection

Connect as the following shows after powering on the equipment.

NOTICE
The connection distance varies depending on communication module. Refer to the actual used communication module.



2.4 GUI Introductions to Login Page



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No.	Name/Icon	Description
1	SEMS	Tap the icon to download the SEMS Portal app.
2	? Not found	Tap to read the connection guide.
3	•••	• Check information such as app version, local contacts, etc. • Settings like data update , language, temperature unit, etc.
4	Bluetooth/WiFi	Select based on actual communication method. If you have any problems, tap ? or **NOT Found** to read the connection guide.

5	Device List	• The list of all devices. The last digits of the device name are normally the serial number of the device.
		• Select the device by finding the serial number of the master inverter when multi inverters are parallel connected.
		• The device name varies depending on the inverter model or communication module:
		  • Wi-Fi/LAN Kit, Wi-Fi Kit, Wi-Fi Box: Solar-WiFi***
		  • External or integrated bluetooth mudule:SOL-BLE***
		  • WiFi/LAN Kit-20: WLA-***
		  • WiFi Kit-20: WFA-***
		  • Ezlink3000: CCM-BLE***/CCM-***/***
		  • 4G Kit-CN-G20/4G Kit-CN-G21: GSA-***; GSB-***
		  • Micro inverter: WNN***
		  • AC Charger: ***

6	Search Device	Tap **Search Device** if the device is not found.

3 App Operations for Grid-Tied PV Inverters

NOTICE

- All the user interface (UI) screenshots or words in this document are based on **SolarGo app V6.0.0**. The UI may be different due to the version upgrade. The screenshots, words or data are for reference only.
- The method to set parameters is the same for all inverters. But the parameters displayed varies based on the equipment model and safety code. Refer to the actual interface display for specific parameters.
- Before setting any parameters, read through user manual of the app and the inverter or charger to learn the product functions and features. When the inverter parameters are set improperly, the inverter may fail to connect to the utility grid or fail to connect to the utility grid in compliance with related requirements and damage the battery, which will affect the inverter's power generation.

3.1 Log In as Grid-Tied PV Inverter

NOTICE

- Log in using the initial password for the first time and change the password as soon as possible. To ensure account security, you are advised to change the password periodically and keep the new password in mind.
- The screenshots in this chapter are based on WiFi or Bluetooth login.

Step 1 Ensure that the inverter is power on, both the inverter and the communication module are working properly.

Step 2 Tap **Bluetooth** or **WiFi** tab on the homepage of SolarGo app based on the communication method.

Step 3 (optional): If you choose to connect the device via WiFi, open the WiFi settings of your phone first and connect to the inverter's WiFi signal (Solar-WiFi***). Default password: 12345678.

Step 4 Pull down or tap **Search Device** to refresh the device list. Find the device by the the inverter serial number. Tap the device name to log in. Select the device by checking the serial number of the master inverter when multi inverters are parallel connected.

Step 5(optional) For first connection with the device via Bluetooth, there will be a Bluetooth pairing prompt, tap **Pair** to continue the connection.

Step 6 Log in as an Owner or an Installer. Initial password: 1234.

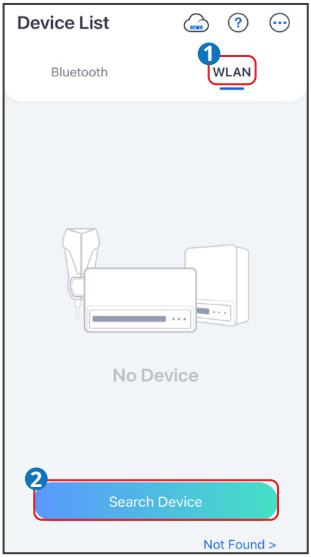
Step 7 If connecting via Solar-WiFi***, modify the initial WiFi password following the prompts. If connecting via WLA-*** or WFA-***, modify the initial login password following the prompts.

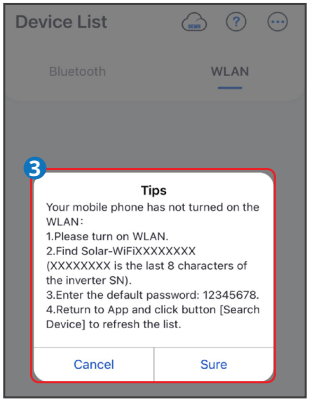
Step 8 (Optional) If connecting via WLA-*** or WFA-***, enable **Bluetooth Stays On** following the prompts as entering the device details page. Otherwise, the bluetooth signal of the device will be off after disconnection.

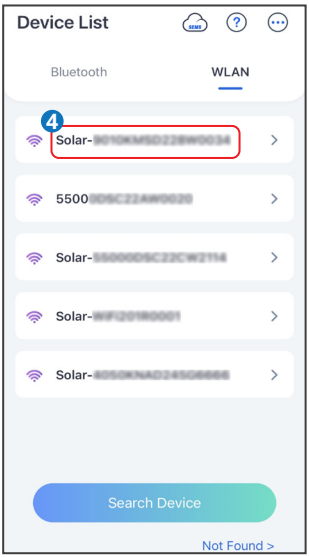
Connecting the inverter via WLAN

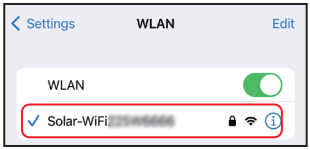
NOTICE

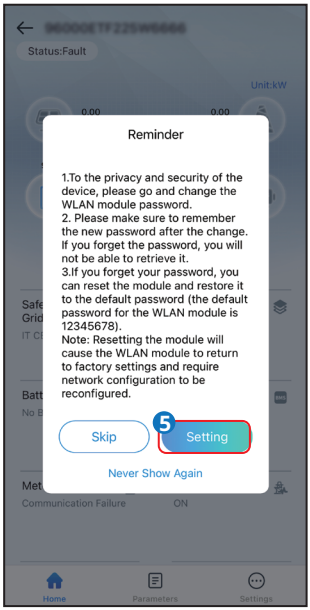
- If the SolarGo app version is upgraded to V5.6.2 or later, a **Reminder** will pop up every time you connect to the inverter via WLAN to prompt you to change the password. If you want to permanently close the pop-up window, tap **Never Show Again**.
- If you forget the new password, reset the password by the smart dongle or the LCD of the inverter. Restore the dongle to reset the password will loss network configurations before.

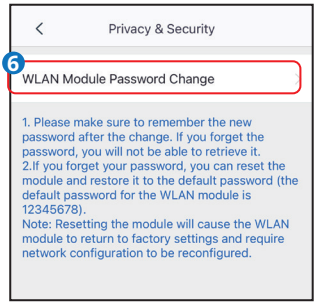


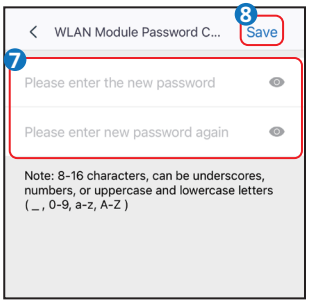


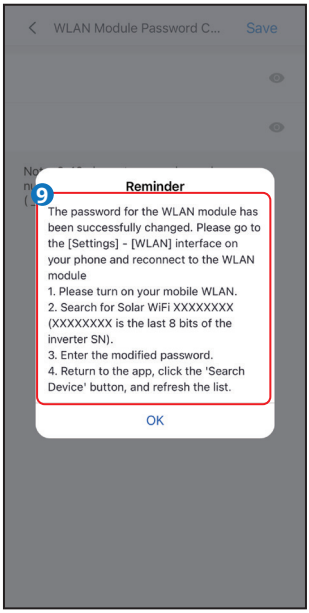




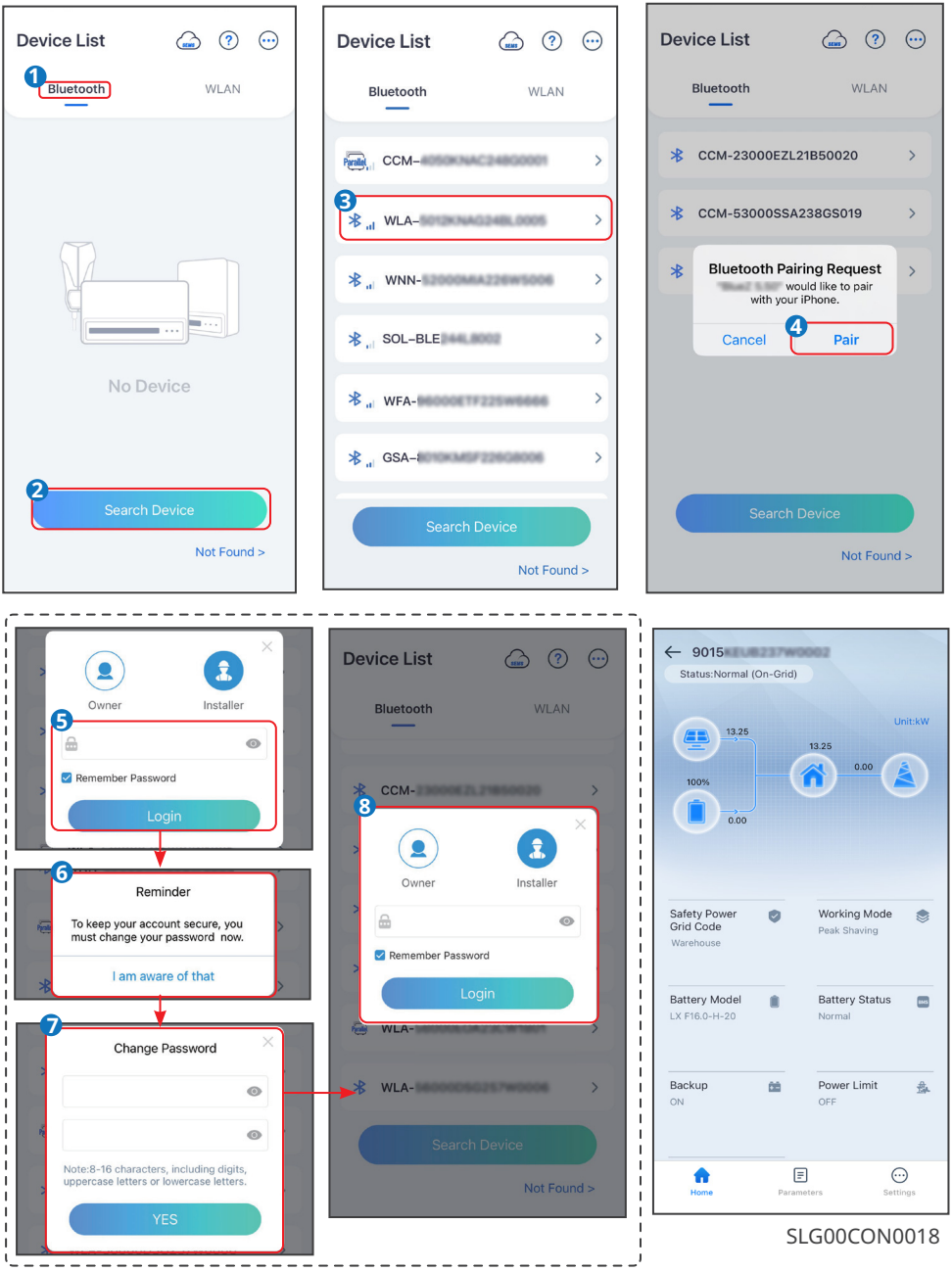








Connecting the inverter via Bluetooth



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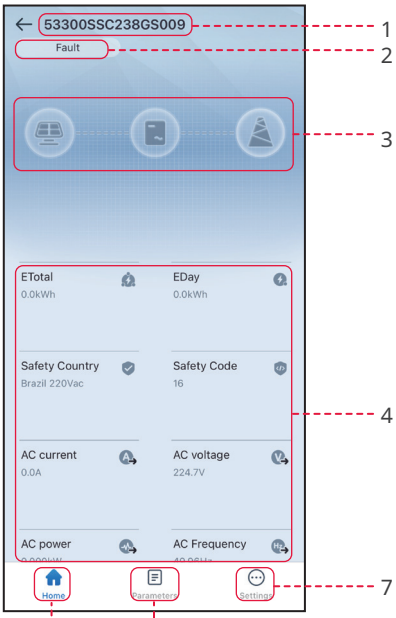
3.2 GUI Introductions to Grid-Tied PV Inverters

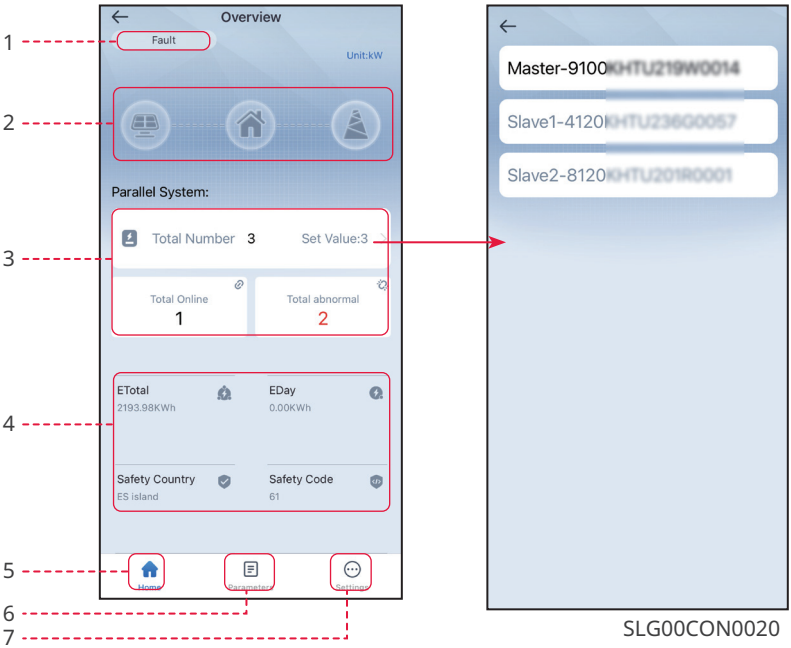
Single Inverter



SLG00CON0019

No.	Name/Icon	Description
1	Serial Number	Serial number of the connected inverter.
2	Device Status	Indicates the status of the inverter, such as **Working**, **Fault**, etc.
3	Energy Flow Chart	Indicates the energy flow chart of the PV system. The actual page prevails.
4	System Status	Indicates the working status of the PV system, such as **Etotal**, **Safety Country**, **AC Current**, **AC Voltage**, etc.
5		Home. Tap **Home** to check **Serial Number**, **Device Status**, **Energy Flow Chart**, **System Status**, etc.
6		Parameters. Tap **Parameters** to check the inverter **Data**, like **Device Model, FW Version, PV, AC Current, AC Voltage**, etc.. Or check **Alarm** like **Utility Loss, Undervoltage**, etc.. The alarm will be occurred when there is earth fault detected.
7		Settings. Tap **Settings** to set parameters like **Safety Code**, **Communication Settings**, **Power Limit**, **Firmware Update**, **AFCI Detection**, **Equipment Power Supply**, etc..

Parallel Connected Inverters



SLG00CON0020

No.	Name/Icon	Description
1	System Status	Indicates the status of the parallel system, such as **Working**, **Fault**, etc..
2	Energy Flow Chart	Indicates the energy flow chart of the PV system. The actual page prevails.
3	Parallel System	• **Total Number**: total number of inverters in the parallel system. • **Total Online**: online inverters in the parallel system. • **Total abnormal**: offline inverters in the parallel system. • Tap **Total Number** to check serial numbers of all the inverters. Tap the serial number to enter the setting page of the single inverter.
4	System Status	Indicates the working status of the PV system, such as **Etotal** of the system, and **Safety Country**, **AC Current**, **AC Voltage** and others of the master inverter.
5		Home. Tap **Home** to check **Serial Number**, **Device Status**, **Energy Flow Chart**, **System Status**, etc.
6		Parameters. Tap Parameters to check the **model** or **status** of both master and slave inverters in the system, or check **FW Version, AC Current, AC Frequency**, etc. of the master inverter. Or check Alarm like **Utility Loss, Undervoltage**, etc..
7		• Settings. Tap to set **Quantity**, **Safety Code**, **Equipment Power Supply**, **DRED**, etc.. • The settings are effect to all the inverters in the parallel system.

3.3 Configuring Communication Parameters

NOTICE

The communication configuration page varies depending on the communication method.

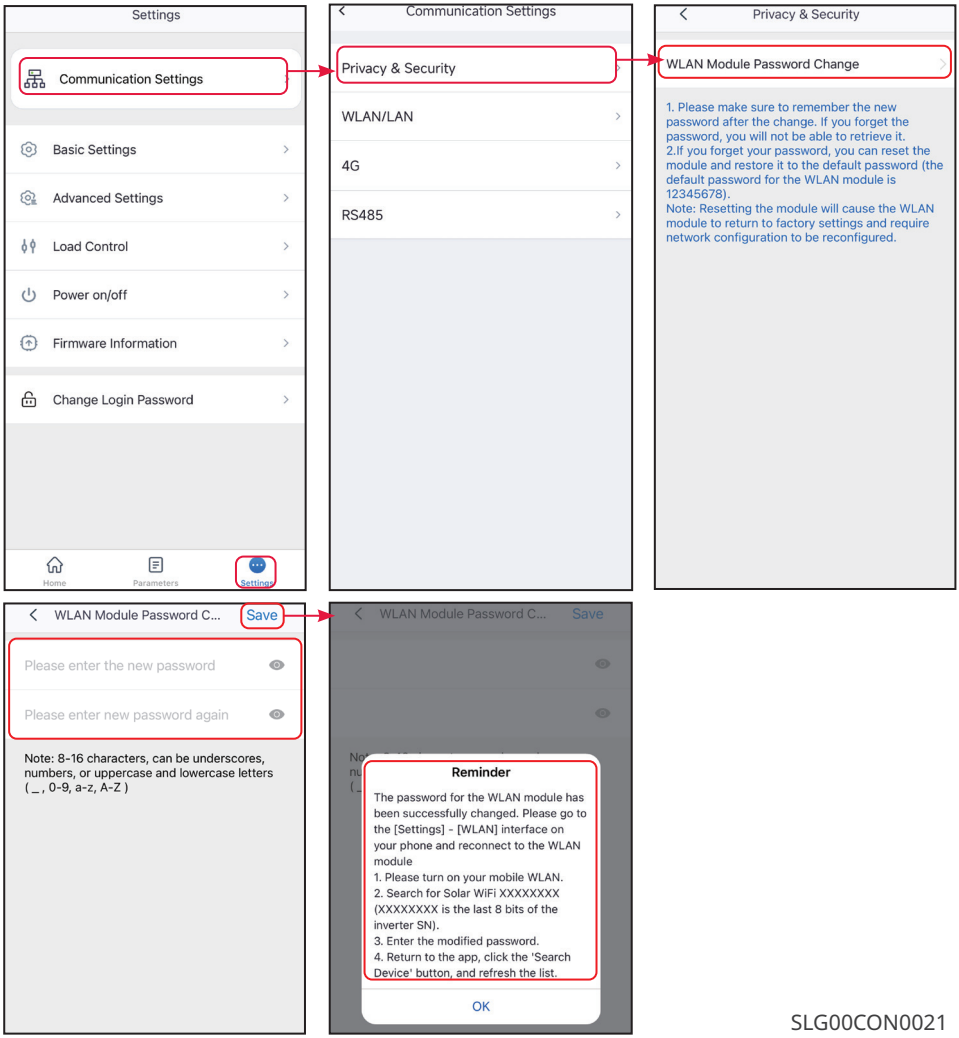
3.3.1 Setting Privacy and Security

Type I

Step 1 Tap **Home** > **Settings** > **Communication Setting** > **Privacy & Security** to set the parameters.

Step 2 Set the new password for the WiFi hotspot of the communication module, and tap **Save**.

Step 3 Open the WiFi settings of your phone and connect to the inverter's WiFi signal (Solar-WiFi***) with the new password.

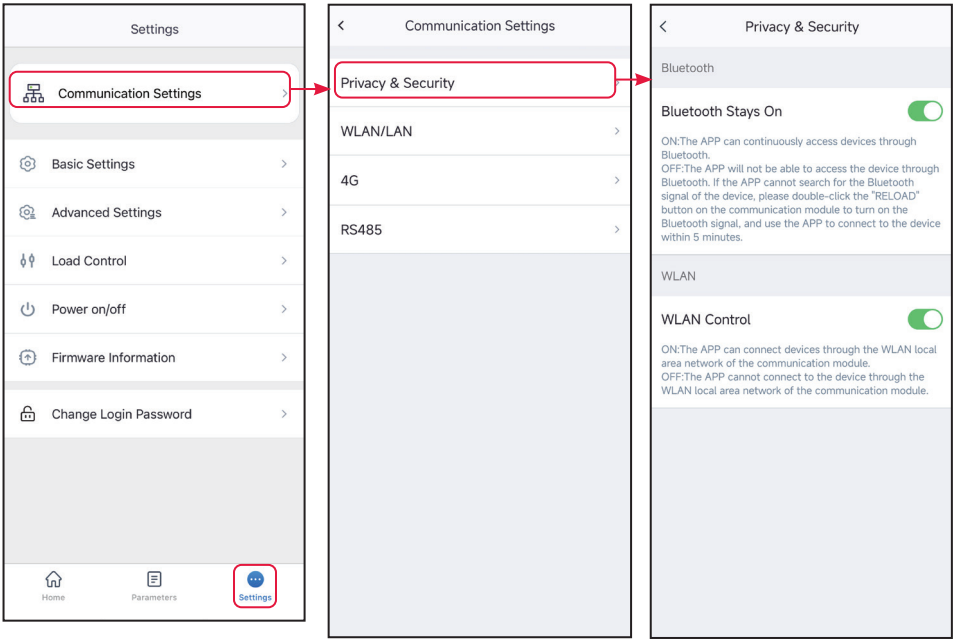


SLG00CON0021

Type II

Step 1 Tap **Home** > **Settings** > **Communication Setting** > **Privacy & Security** to set the parameters.

Step 2 Enable **Bluetooth Stays On** or **WLAN Control** based on actual needs.



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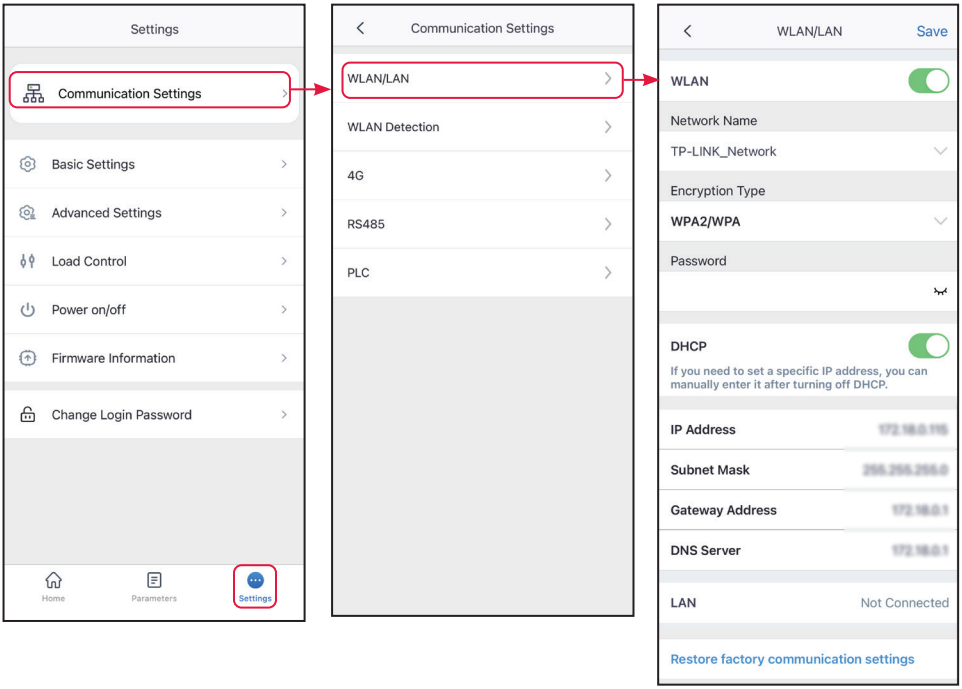
No.	Parameters	Description
1	Bluetooth Stays On	Disabled by default. Enable the function, the bluetooth of the device will be contentious on to keep connected to SolarGo. Otherwise, the bluetooth will be off in 5 minutes, and the device will be disconnected from SolarGo.
2	WLAN Control	Disabled by default. Enable the function, the device and the SolarGo can be connected through the WLAN when they are on the same LAN. Otherwise, they cannot be connected even if they are on the same LAN.

3.3.2 Configuring Network

Step 1 Tap **Home > Settings > Communication Setting > WLAN/LAN** to set the parameters.

Step 2 Configure the **WLAN** or **LAN** parameters based on actual needs.



SLG00CON0023

No.	Parameters	Description
1	Network Name	Only for WLAN. Select WiFi based on the actual connecting.
2	Password	Only for WLAN. WiFi password for the actual connected network.
3	DHCP	• Enable DHCP when the router is in dynamic IP mode. • Disable DHCP when a switch is used or the router is in static IP mode.
4	IP Address	• Do not configure the parameters when DHCP is enabled. • Configure the parameters according to the router or switch information when DHCP is disabled.
5	Subnet Mask	
6	Gateway Address	
7	DNS Server	

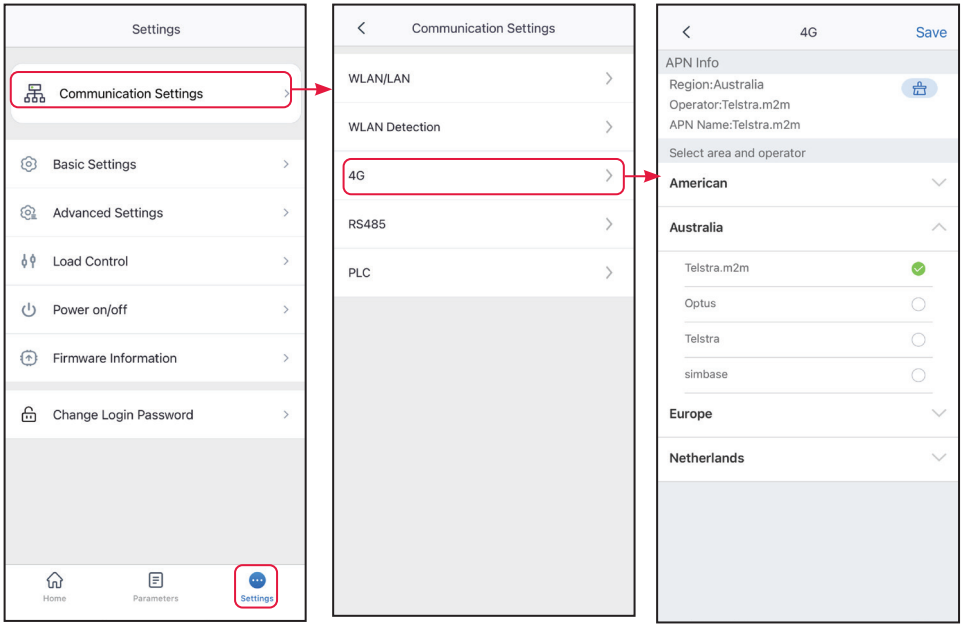
3.3.3 Configuring 4G Parameters

NOTICE

- APN Settings can only be used to configure the SIM card information of 4G communication device.
- Configure the APN settings through a bluetooth module or a WiFi module before installing a 4G module.

Step 1 Tap **Home > Settings > Communication Setting > 4G** to set the parameters.

Step 2 Configure the **4G** parameters based on actual needs.



SLG00CON0024

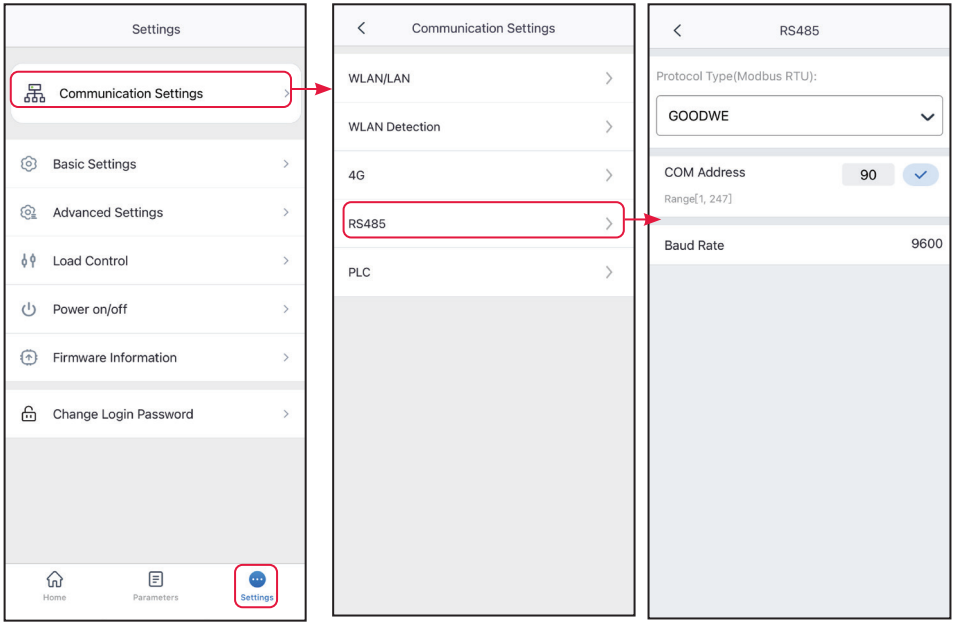
3.3.4 Configuring RS485 Parameters

NOTICE

Set the communication address of the inverter. For a single inverter, the address is set based on actual needs. For multi connected inverters, the address of each inverter should be different while cannot be 247.

Step 1 Tap **Home > Settings > Communication Setting > RS485**, to set the RS485 parameters.

Step 2 Set **Protocol Type**, **COM Address** and **Baud Rate** based on actual needs.



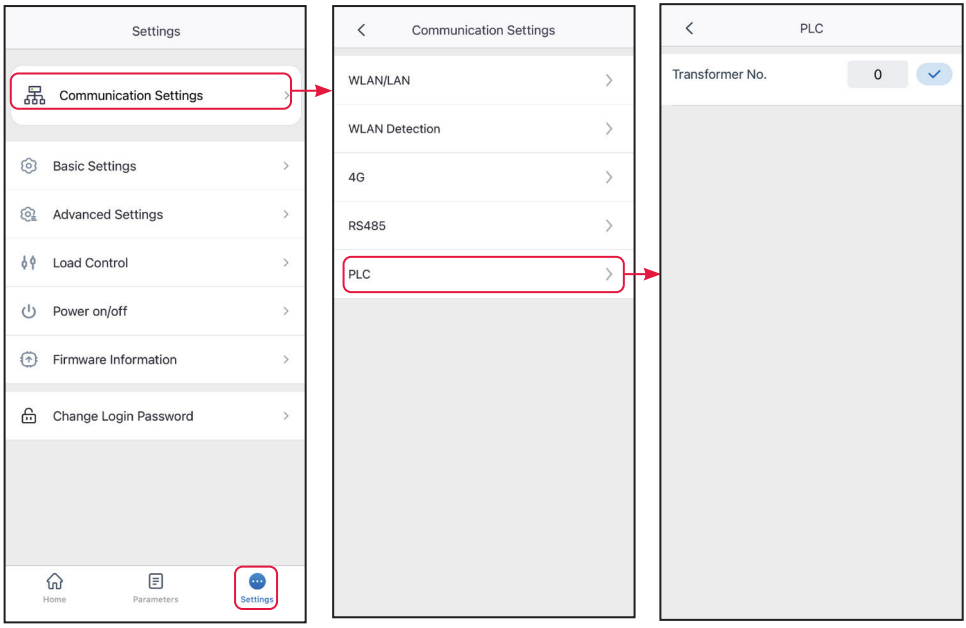
SLG00CON0025

3.3.5 Configuring PLC Parameters

Only for PLC communication. Set parameters based on actual connected

Step 1 Tap **Home** > **Settings** > **Communication Settings** > **PLC Setting** to set the parameters.

Step 2 Set the **Transformer No.** based on actual needs.

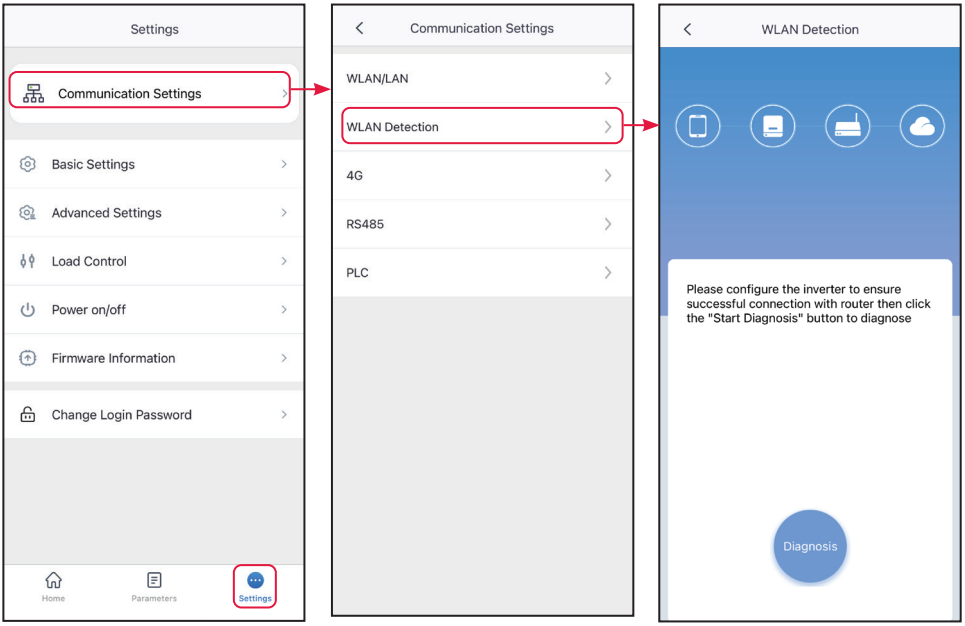


SLG00CON0026

3.3.6 WLAN Detection

Step 1 Tap **Home** > **Settings** > **Communication Settings** > **WLAN Detection**.

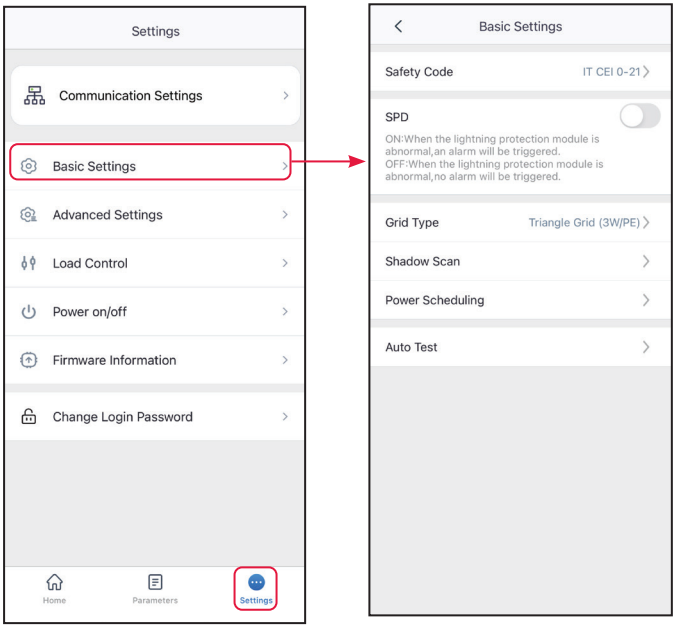
Step 2 Tap **Diagnosis** to check the network connection status.



SLG00CON0027

3.4 Setting Basic Information (Owner/Installer)

Step 1 Tap **Home** > **Settings** > **Basic Settings**, to set the basic parameters according to the inverter location and actual application scenarios.



SLG00CON0028

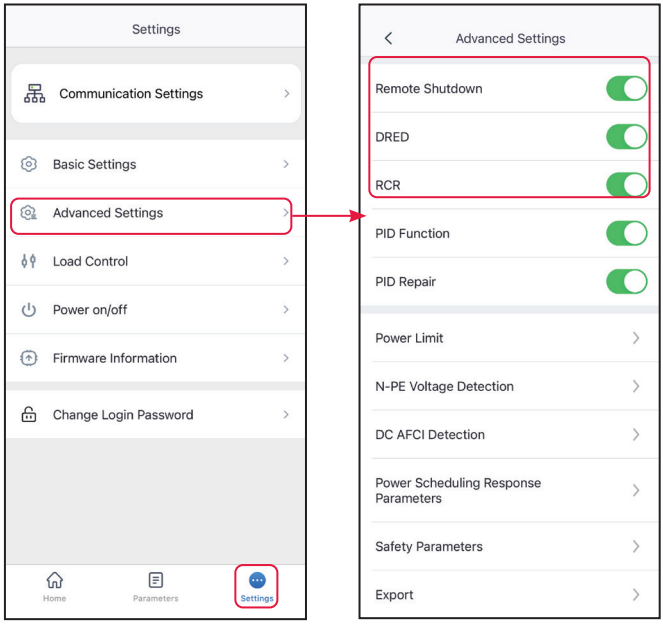
No.	Parameters	Description
1	Safety Code	• Set the safety country in compliance with local grid standards and application scenario of the inverter. The default parameters varies depending on different safety code. The safety parameters can be changed in **Safety Parameters**. • Tap **Safety Code** > **Export** to export the default value of some parameters.
2	SPD	After enabling this function, when the SPD module is abnormal, there will be SPD module exception alarm prompt.
3	Grid Type	Set the grid type according to the actual grid type. Supported grid type: star grid and triangle grid.
4	Shadow Scan	Enable the shadow scan function if the PV panels are shadowed. Set the Shadow Scan interval and MPPT shadow scan if the inverter supports.
5	DC Tripping	Enable the DC tripping function to disconnect the DC switch automatically when the inverter fails.
6	Power scheduling	Set the output value of the inverter.
7	Auto Test	Enable **Auto Test** to set auto test for grid tying in compliance with local grid standards and requirements.

3.5 Setting Remote Shutdown/DRED/RCR

Enable Remote Shutdown/DRED/RCR before connecting the third party DRED, remote shutdown, or RCR device to comply with local laws and regulations.

Step 1 Tap **Home** > **Settings** > **Advanced Settings** to set the parameters.

Step 2 Enable **Remote Shutdown**, **DRED** or **RCR** based on actual needs.



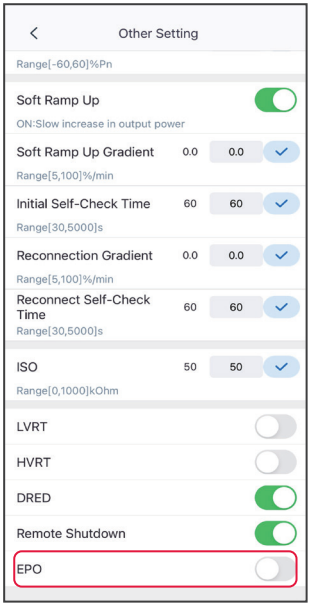
SLG00CON0029

3.6 Setting EPO Function

The EPO Function only applies to some inverter models in the Indian market. After activation of the emergency switch shutdown signal, the inverter's AC side automatically disconnects and stops grid connection.

Step 1 Tap **Home** > **Settings** > **Advanced Settings** > **Other Setting** to set the parameters.

Step 2 Enable **EPO Function** based on actual needs.



SLG00CON0030

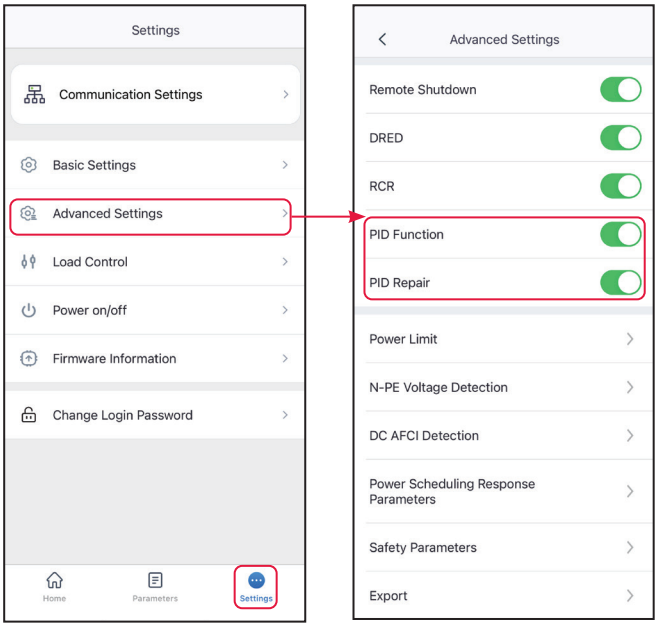
3.7 Setting PID Function

NOTICE
The **PID Function** and **PID Repair** are only available on some inverters.

When a photovoltaic panel is working, the potential difference between the output electrode and the grounded frame of the panel can cause a long-term reduction in the power generation efficiency of the panel, which is the Potential Induced Degradation (PID) effect.
The PID function of this product is to increase the voltage difference between the photovoltaic panels and the frame until the voltage difference is positive, so that the PID effect can be suppressed. The function is suitable for P-type panels and N-type panels that need to increase the positive voltage to suppress the PID effect. It is recommended to disable the function for N-type panels which require the negative voltage to be reduced to suppress the PID effect. When using N-type panels, contact the panel supplier to confirm whether it is necessary to suppress the PID effect by increasing the positive voltage.

Step 1 Tap **Home** > **Settings** > **Advanced Settings** to set the parameters.

Step 2 Enable **PID Function** or **PID Repair** based on actual needs



SLG00CON0031

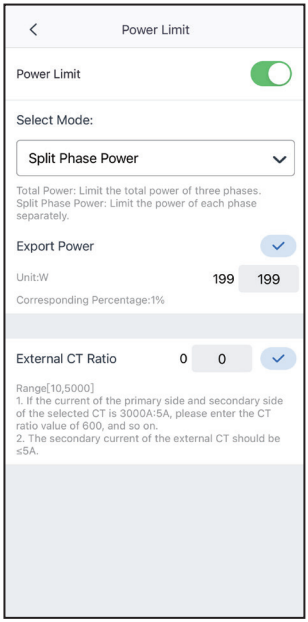
3.8 Setting the Power Limit Parameters (Installer)

Enable Power Limit when power limiting is required by local grid standards and requirements.

Step 1 Tap **Home** > **Settings** > **Advanced Settings** > **Power Limit** to set the parameters.

Step 2 Enable **Power Limit**, set **Export Power** and **External CT Ratio** based on actual needs and tap √. The parameters are set successfully.

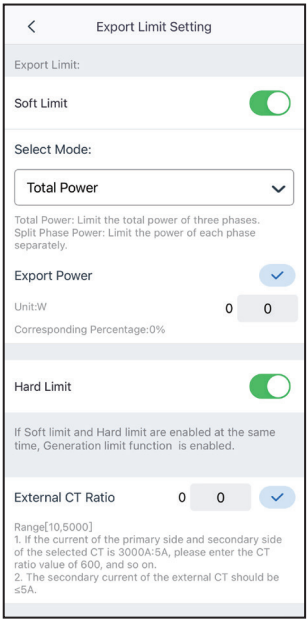
3.8.1 Power Limit Setting (For countries and regions except Australia/Britain)



SLG00CON0032

No.	Parameters	Description
1	Power Limit	Enable **Power Limit** when power limiting is required by local grid standards and requirements.
2	Select Mode	• Select power limit mode for some inverters. Supports: Split-Phase Power and Total Power. • Limit the power per phase when Split-Phase Power is selected, and limit total power of the three phases when Total Power is selected.
3	Export Power	Set the value based on the actual maximum power feed into the utility grid.
4	External CT Ratio	Set the ratio of the primary current to the secondary current of the external CT.

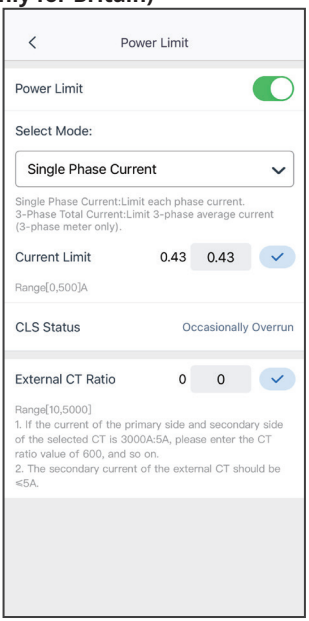
3.8.2 Power Limit Setting (Only for Australia)



SLG00CON0133

No.	Parameters	Description
1	Soft Limit	Enable Soft Limit when power limiting is required by local grid standards and requirements.
2	Select Mode	• Select power limit mode for some inverters. Supports: Split-Phase Power and Total Power. • Limit the power per phase when Split-Phase Power is selected, and limit total power of the three phases when Total Power is selected.
3	Export Power	Set the value based on the actual maximum power feed into the utility grid.
4	External CT Ratio	Set the ratio of the primary current to the secondary current of the external CT.
5	Hard Limit	After enabling this function, the inverter and the utility grid will automatically disconnect when the power feeds into the grid exceeds the required limit.

3.8.3 Power Limit Setting (Only for Britain)



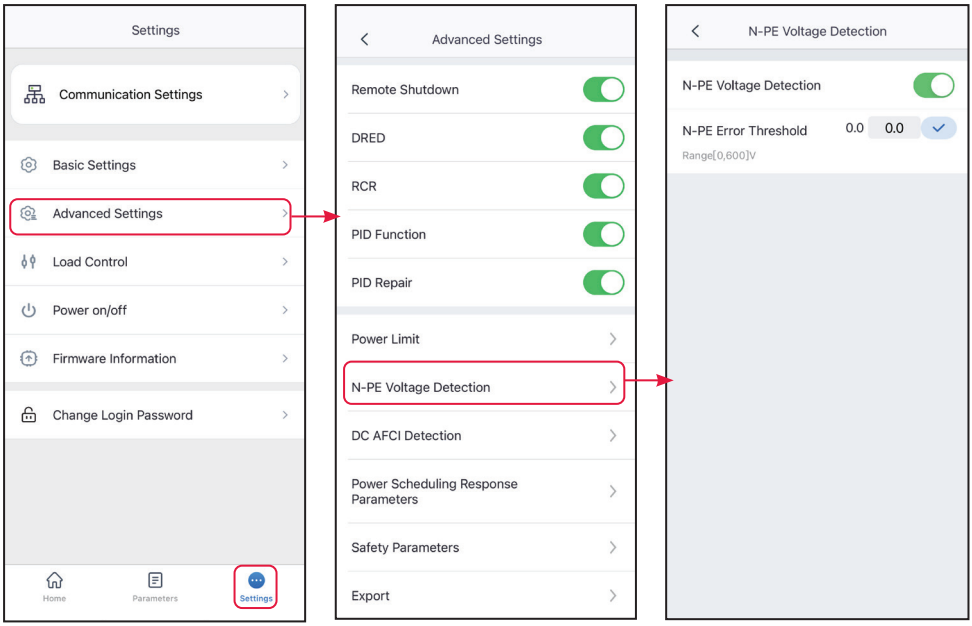
SLG00CON0134

No.	Parameters	Description
1	Power Limit	Enable **Power Limit** when power limiting is required by local grid standards and requirements.
2	Select Mode	• Select current limit mode for some inverters. Supports: Split-Phase Current and Total Current . • Limit the current per phase when Split-Phase Current is selected, and limit total current of the three phases when Total Current is selected.
3	Current Limit	Set the value based on the actual current limit.
4	External CT Ratio	Set the ratio of the primary current to the secondary current of the external CT.

3.9 Setting the N-PE Voltage Detection

Step 1 Tap **Home** > **Settings** > **Advanced Settings** > **N-PE Voltage Detection** to set the parameters.

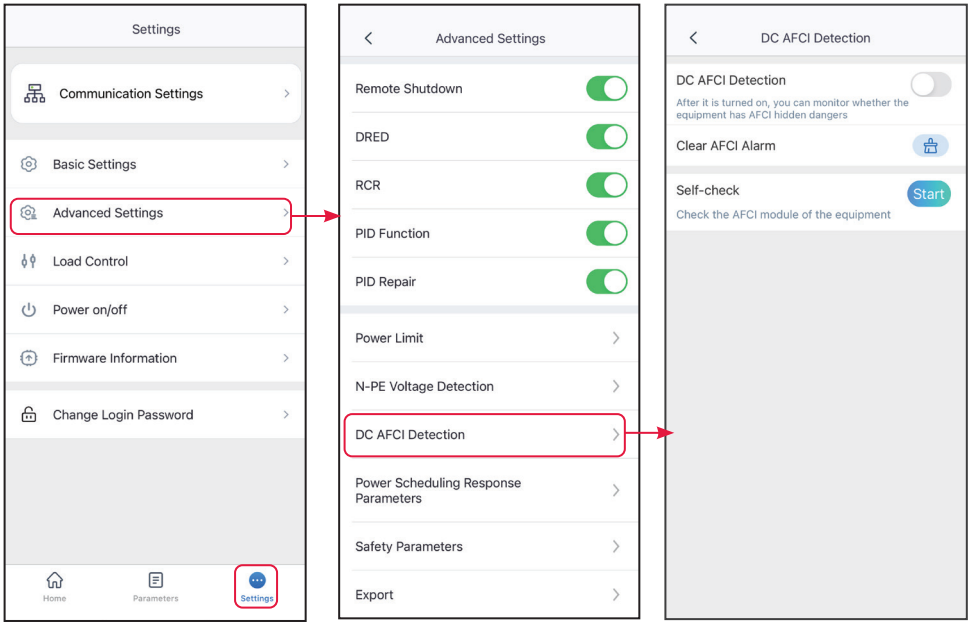
Step 2 Enable **N-PE Voltage Detection**, set **N-PE Error Threshold** based on actual needs and tap √. The parameters are set successfully.



SLG00CON0033

3.10 Set the DC AFCI Detection Parameters (Installer)

Step 1 Tap **Home** > **Settings** > **Advanced Settings** > **AFCI Test** to set the parameters.



SLG00CON0034

No.	Parameters	Description
1	AFCI Test	The inverter ARC function is optional and off by default. Enable or disable AFCI accordingly.
2	Clear AFCI alarm	Clear ARC Faulty alarm records.
3	Self-check	Tap Start to check whether the AFCI function works normally.

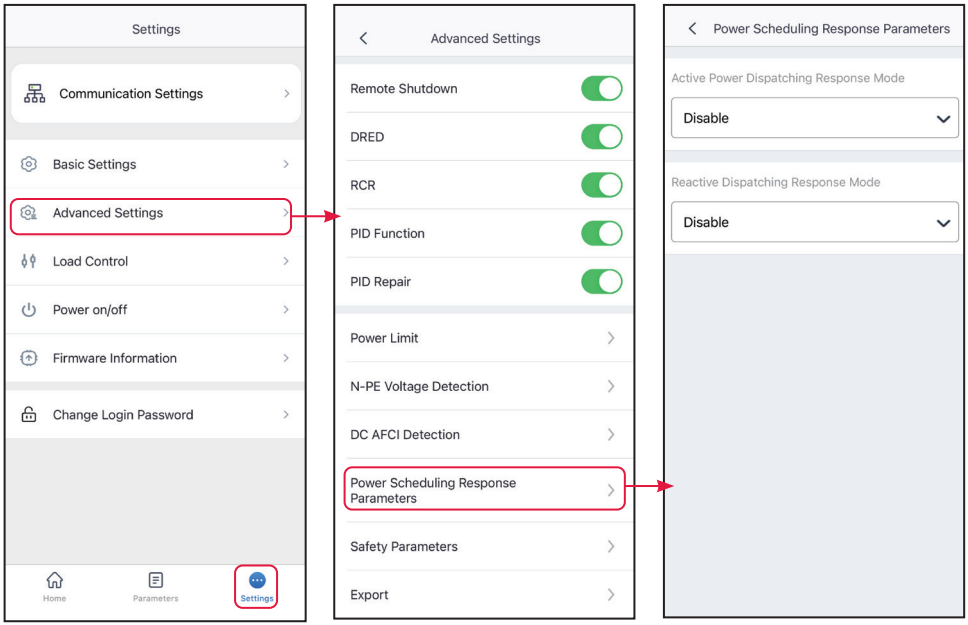
3.11 Setting the Power Scheduling Response Parameters

Step 1 Tap **Home > Settings** > **Advanced Settings > Power Scheduling Response Parameters** to set the parameters.

Step 2 Select **Disable**, **Gradient Control,** or **PT-1 Behavior** from the **Active Power Dispatching Response Mode** drop down list based on actual needs. If **Gradient Control** is selected, enter **Power Gradient** value. If **PT-1 Behavior** is selected, enter **PT-1 Behavior Tau** based on actual needs.

Step 3 Select **Disable**, **Gradient Control,** or **PT-1 Behavior** from the **Reactive Dispatching Response Mode** drop down list based on actual needs. If **Gradient Control** is selected, enter **Power Gradient** value. If **PT-1 Behavior** is selected, enter **PT-1 Behavior Tau** based on actual needs.

Step 4 Tap ✓ to save the settings.



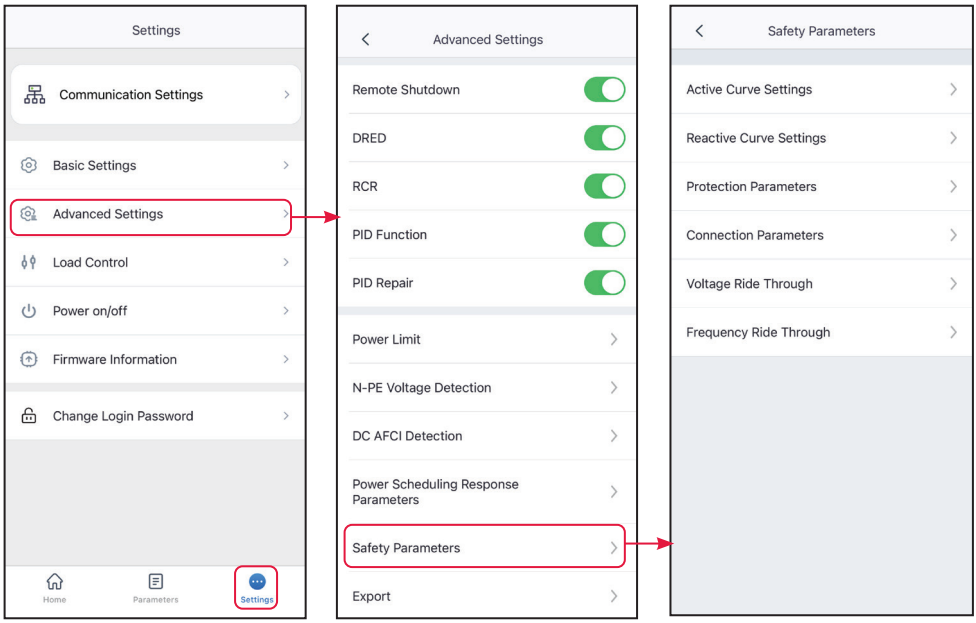
SLG00CON0035

No.	Parameters	Description
Active Power Dispatching Response Mode		
1	PT-1 Behavior	Realize active scheduling based on the first-order LPF curve within the response time constant.
2	PT-1 Behavior Tau	Set the time constant within which the active power changes based on the first order LPF curve.
3	Gradient Control	Realize active scheduling based on the power change slope.
4	Power Gradient	Set the active power change slope.
Reactive Dispatching Response Mode		
5	PT-1 Behavior	Realize reactive scheduling based on the first-order LPF curve within the response time constant.
6	PT-1 Behavior Tau	Set the time constant within which the reactive power changes based on the first order LPF curve.
7	Gradient Control	Realize reactive scheduling based on the power change slope.
8	Power Gradient	Set the reactive power change slope.

3.12 Setting Safety Parameters (Installer)

NOTICE

The parameters vary depending on the safety country or region.



SLG00CON0036

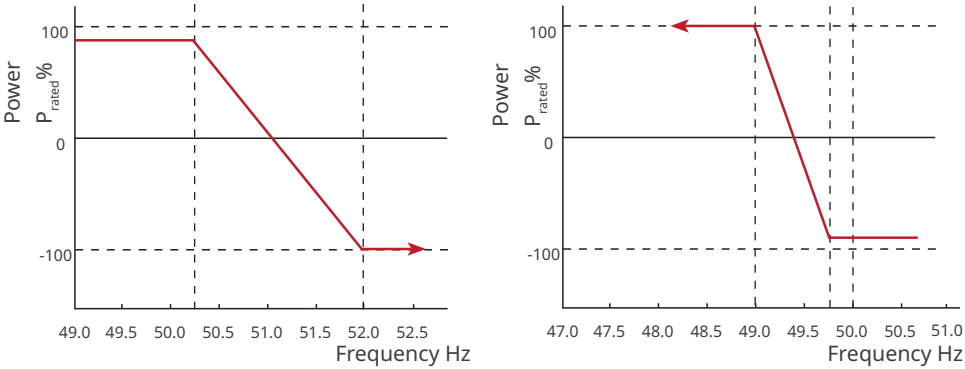
3.12.1 Setting the Active Curve

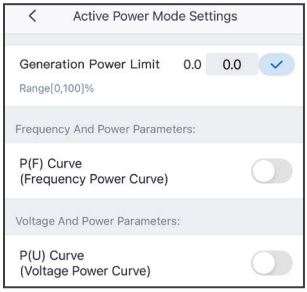
3.12.1.1 Setting the P(F) Curve

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Active Curve Settings** to set the parameters.

Step 2 Enable **P(F) Curve (Frequency Power Curve)**.

Step 3 Set the parameters based on actual needs. Tap ✓ to complete the settings.





No.	Parameters	Description
1	Generation Power Limit	Set the output power of the inverter.
2	P(F) Curve	Enable P(F) Curve when it is required by local grid standards and requirements.
3	Overfrequency Threshold	The inverter output active power will decrease when the utility grid frequency is too high. The inverter output power will decrease when the utility grid frequency is higher than **Overfrequency Threshold**.
4	Overfrequency Endpoint	The inverter output active power will decrease when the utility grid frequency is too high. The inverter output power will stop decreasing when the utility grid frequency is higher than **Overfrequency Endpoint**.
5	Overfrequency Unloading	The inverter output active power will decrease when the utility grid frequency is too high.
6	Underfrequency Threshold	The inverter output active power will increase when the utility grid frequency is too low. The inverter output power will increase when the utility grid frequency is lower than **Underfrequency Threshold**.
7	Underfrequency Endpoint	The inverter output active power will increase when the utility grid frequency is too low. The inverter output power will stop increasing when the utility grid frequency is lower than **Underfrequency Endpoint**.
8	Power Response to Underfrequency Gradient	The inverter output active power will increase when the utility grid frequency is too low. Indicates the slope when the inverter output power increases.
9	Observation Time	Indicates the time the output power of the inverter needs for recovering after the power grid recovers.
10	Upper Frequency	The inverter output active power will decrease when the utility grid frequency is too high. The inverter output power will increase when the utility grid frequency is lower than **Underfrequency Threshold**.
11	Lower Frequency	The inverter output active power will increase when the utility grid frequency is too low. The inverter output power will decrease when the utility grid frequency is higher than **Overfrequency Threshold**.
12	Reconnection Gradient	Indicates the variation slope when the power recovers.
13	Recovery Power Slope	Indicates the variation slope when the power recovers.

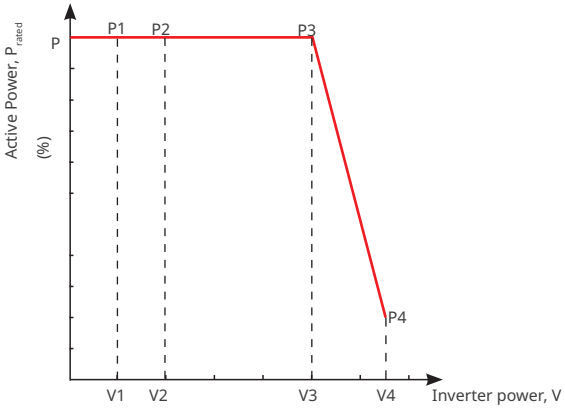
3.12.1.2 Setting the P(U) Curve

When the grid voltage is too high, decrease the inverter output power to decrease the grid-tied power.

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Active Curve Settings** to set the parameters.

Step 2 Enable **P(U) Curve (Voltage Power Curve)**.

Step 3 Set the parameters based on actual needs. Tap ✓ to complete the settings. The inverter will adjust the active output power to the apparent power ratio in real time according to the actual grid voltage to the rated voltage ratio.



No.	Parameters	Description
1	P(U) Curve	Enable P(U) Curve when it is required by local grid standards and requirements.
2	Vn Voltage	The percentage of actual voltage to the rated voltage at Vn point, n=1, 2, 3, 4. For example, setting **Vn Voltage** to 90 means V/V_{rated}%=90%.
3	Vn Active Power	The percentage of the output active power to the apparent power at Vn point, (n=1, 2, 3, 4). For example, setting **Vn Active Power** to 48.5 means P/P_{rated}% =48.5%
4	Output Response Mode	Set the active power output response mode. Supports: • **Disable** • **PT-1 Behavior**, realize active scheduling based on the first-order LPF curve within the response time constant. • **Gradient Control**, realize active scheduling based on the power change slope.
5	PT-1 Behavior Tau	Set the time constant within which the active power changes based on the first order LPF curve when the **Output Response Mode** is set to be **PT-1 Behavior**.
6	Power Gradient	Set the active power change slope when the **Output Response Mode** is set to be **Gradient Control**.

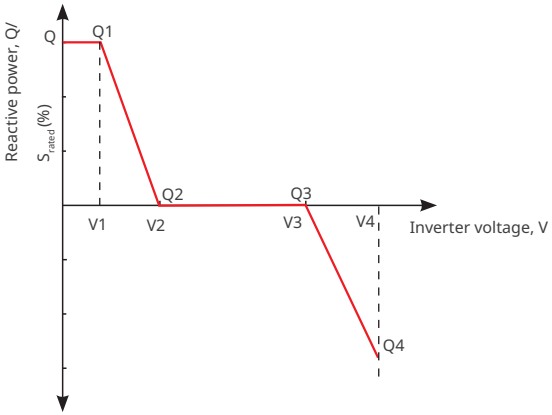
3.12.2 Setting the Reactive Curve

3.12.2.1 Setting the Q(U) Curve

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Reactive Curve Settings** to set the parameters.

Step 2 Select **Q(U) Curve**.

Step 3 Set the parameters based on actual needs. Tap ✓ to complete the settings. The inverter will adjust the reactive output power to the apparent power ratio in real time according to the actual grid voltage to the rated voltage ratio.



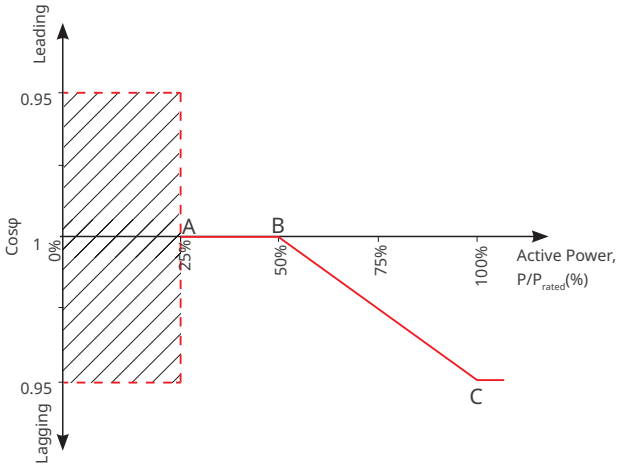
No.	Parameters	Description
1	Q(U) Curve	Enable Q(U) Curve when it is required by local grid standards and requirements.
2	Vn Voltage	The percentage of actual voltage to the rated voltage at Vn point, n=1, 2, 3, 4. For example, setting **Vn Voltage** to 90 means V/V_{rated}%=90%.
3	Vn Reactive Power	The percentage of the reactive output power to the apparent power at Vn point, n=1, 2, 3, 4. For example, setting **Vn Reactive Power** to 48.5 means Q/S_{rated}%=48.5%
4	Time Constant	The power is required to reach 95% in the first order LPF curve within three time constant.
5	Lock-In Power	When the inverter output reactive power to the rated power ratio is between the Lock-in power and Lock-out power, the ratio meets Q(U) curve requirements.
6	Lock-out Power	

3.12.2.2 Setting the Cosφ(P) Curve

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Reactive Curve Settings** to set the parameters.

Step 2 Select **Cosφ(P) Curve**.

Step 3 Set the parameters based on actual needs. Tap ✓ to complete the settings. The inverter will adjust the active output power to the apparent power ratio in real time according to the actual grid voltage to the rated voltage ratio.



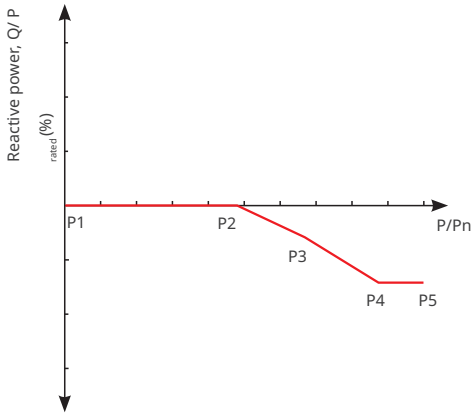
No.	Parameters	Description
1	Cosφ(P) Curve	Enable Cosφ Curve when it is required by local grid standards and requirements.
2	Point A/B/C/D Power	The percentage of the inverter output active power to the rated power at point A/B/C.
3	Point A/B/C/D Cosφ	The power factor at point A/B/C.
4	Time Constant	The power is required to reach 95% in the first order LPF curve within three time constant.
5	Lock-in Voltage	When the grid voltage is between Lock-in Voltage and Lock-out Voltage, the voltage meets Cosφ curve requirements.
6	Lock-out Voltage	

3.12.2.3 Setting the Q(P) Curve

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Reactive CurveSettings** to set the parameters.

Step 2 Select **Q(P) Curve**.

Step 3 Set the parameters based on actual needs. Tap ✓ to complete the settings. The inverter will adjust the reactive output power to the apparent power ratio in real time according to the actual grid voltage to the rated voltage ratio.



No.	Parameters	Description
1	Q(P) Curve	Enable Q(P) Curve when it is required by local grid standards and requirements.
2	Pn Reactive Power	The percentage of the output reactive power to the rated power at Pn point, n=1, 2, 3, 4, 5, 6. For example, setting **Pn Active Power** to 90 means Q/P_{rated}%=90%.
3	Pn Power	The percentage of the output active power to the rated power at Pn point, n=1, 2, 3, 4, 5, 6. For example, setting **Pn Power** to 90 means P/P_{rated}%=90%.
4	Time Constant	The power is required to reach 95% in the first order LPF curve within three time constant.

3.12.3 Setting Protection Parameters

NOTICE
Set the safety parameters in compliance with local requirements. Do not change the parameters without the prior consent of the grid company.

3.12.3.1 Setting Voltage Protection Parameters

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Protection Parameters** to set the parameters.

Step 2 Set the parameters based on actual needs. Tap ✓ to complete the settings.

No.	Parameters	Description
1	OV Stage n Trip Value	Set the grid overvoltage protection threshold value.
2	OV Stage n Trip Time	Set the grid overvoltage protection tripping time.
3	UV Stage n Trip Value	Set the grid undervoltage protection threshold value.
4	UV Stage n Trip Time	Set the grid undervoltage protection tripping time.
5	10Min Overvoltage Trip Threshold	Set the 10min overvoltage protection threshold value.
6	10Min Overvoltage Trip Time	Set the 10min overvoltage protection tripping time.

3.12.3.2 Setting Frequency Protection Parameters

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Protection Parameters** to set the parameters.

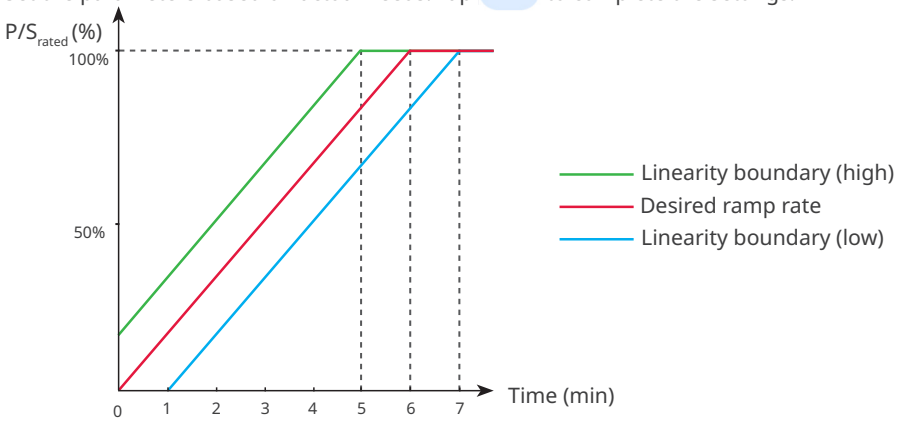
Step 2 Set the parameters based on actual needs. Tap ✓ to complete the settings.

No.	Parameters	Description
1	OF Stage n Trip Value	Set the grid overfrequency protection threshold value.
2	OF Stage n Trip Time	Set the grid overfrequency protection tripping time.
3	UF Stage n Trip Value	Set the grid underfrequency protection threshold value.
4	UF Stage n Trip Time	Set the grid underfrequency protection tripping time.

3.12.4 Setting Connection Parameters

Step 1 Tap **Home** > **Settings** > **Advanced Settings** > **Safety Parameters** > **Connection Parameters** to set the parameters.

Step 2 Set the parameters based on actual needs. Tap ✓ to complete the settings.



No.	Parameters	Description
Ramp Up		
1	Upper Voltage	The inverter cannot connect to the grid if it is powered on for the first connection and the grid voltage is higher than the **Upper Voltage**.
2	Lower Voltage	The inverter cannot connect to the grid if it is powered on for the first connection and the grid voltage is lower than the **Lower Voltage**.
3	Upper Frequency	The inverter cannot connect to the grid if it is powered on for the first connection and the grid frequency is higher than the **Upper Frequency**.
4	Lower Frequency	The inverter cannot connect to the grid if it is powered on for the first connection and the grid frequency is lower than the **Lower Frequency**.
5	Observation Time	The waiting time for connecting the inverter to the grid when meeting the following requirements. 1. The inverter is powered on for the first connection. 2. The utility grid voltage and frequency meet certain requirements.
6	Soft Ramp Up Gradient	Indicates the percentage of incremental output power per minute based on the local requirements when the inverter is powered on for the first time. For example, setting **Soft Ramp Up Gradient** to 10 means the start-up slope is 10%P_{rated}/min.
Reconnection		
7	Upper Voltage	The inverter cannot connect to the grid if it is reconnecting due to a fault and the grid voltage is higher than the **Upper Voltage**.

No.	Parameters	Description
8	Lower Voltage	The inverter cannot connect to the grid if it is reconnecting due to a fault and the grid voltage is lower than the **Lower Voltage**.
9	Upper Frequency	The inverter cannot connect to the grid if it is reconnecting due to a fault and the grid frequency is higher than the **Upper Frequency**.
10	Lower Frequency	The inverter cannot connect to the grid if it is reconnecting due to a fault and the grid frequency is lower than the **Lower Frequency**.
11	Observation Time	The waiting time for connecting the inverter to the grid when meeting the following requirements. 1. The inverter is reconnecting to the grid due to a fault. 2. The utility grid voltage and frequency meet certain requirements.
12	Reconnection Gradient	Indicates the duration for the output power increases to the rated power when the inverter reconnects to the utility grid due to a fault.

3.12.5 Setting Voltage Ride Through Parameters

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Voltage Ride Through** to set the parameters.

Step 2 Enable **LVRT** or **HVRT** and set the parameters based on actual needs. Tap ✓ to complete the settings.

No.	Parameters	Description
LVRT		
1	UVn Voltage	The ratio of the ride through voltage to the rated voltage at UVn point during LVRT.
2	UVn Time	The ride through time at UVn point during LVRT.
3	Enter Into LVRT Threshold	The inverter will not be disconnected from the utility grid immediately when the grid voltage is between **Enter Into LVRT Threshold** and **Exit LVRT Endpoint.**
4	Exit LVRT Endpoint	
5	Gradient K1	K-factor for reactive power during LVRT.
6	Zero Current Mode	The system outputs zero current during LVRT.
7	Entry Threshold	Set the entry threshold of zero current mode.
HVRT		
6	OVn Voltage	The ratio of the ride through voltage to the rated voltage at OVn point during HVRT.

No.	Parameters	Description
7	OVn Time	The ride through time at OVn point during HVRT.
8	Enter High Crossing Threshold	The inverter will not be disconnected from the utility grid immediately when the grid voltage is between **Enter High Crossing Threshold** and **Exit High Crossing Threshold.**
9	Exit High Crossing Threshold	
10	Slope K2	K-factor for reactive power during HVRT.
11	Zero Current Mode	The system outputs zero current during HVRT.
12	Entry Threshold	Set the entry threshold of zero current mode.
13	Current Distribution Mode	Set the current distribution mode. Supports: Constant Current Mode, Reactive Current Priority Mode, and Active Current Priority Mode.
14	Active Power Recovery Mode After Crossing	Set the active power recover mode after LVRT or HVRT. Supports: Disable, Gradient Control, or PT-1 Behavior.
15	Power Gradient	Realize active power recovery based on the power change slope.
16	PT-1 Behavior Tau	Set the time constant within which the active power changes based on the first order LPF curve.
17	Traversing The End Of Reactive Power Recovery Mode	Set the active power recover mode after LVRT or HVRT. Supports: Disable, Gradient Control, or PT-1 Behavior.
18	Power Gradient	Realize active power recovery based on the power change slope.
19	PT-1 Behavior Tau	Set the time constant within which the reactive power changes based on the first order LPF curve.

3.12.6 Setting Frequency Ride Through Parameters

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Frequency Ride Through** to set the parameters.

Step 2 Enable **Frequency Ride Through** and set the parameters based on actual needs. Tap ✓ to complete the settings.

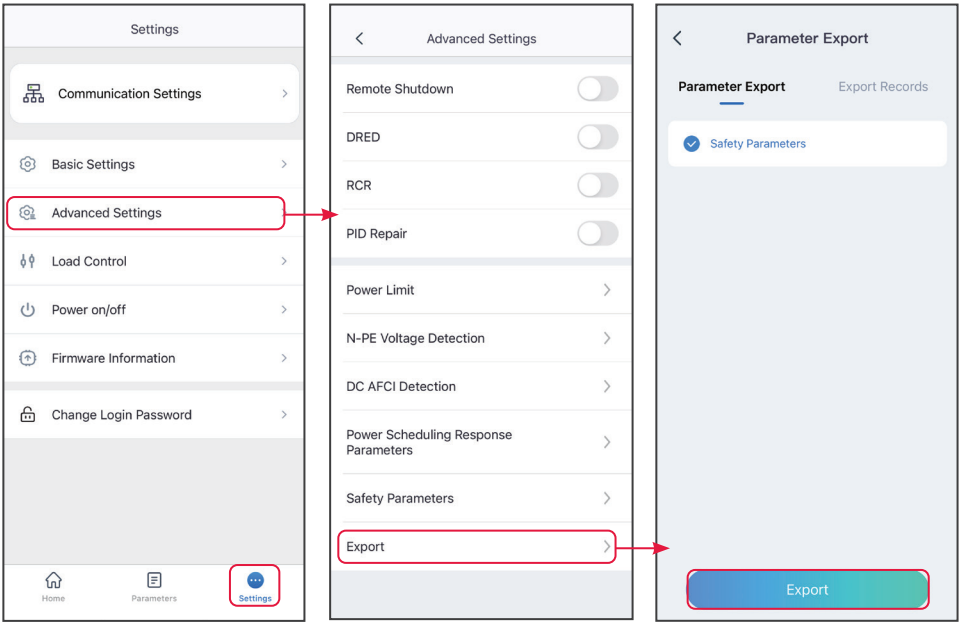
No.	Parameters	Description
1	UFn Frequency	The frequency at the UFn point during frequency ride through.
2	UFn Time	The ride through duration at the UFn point during frequency ride through.
3	OFn Frequency	The frequency at the OFn point during frequency ride through.
4	OFn Time	The ride through duration at the OFn point during frequency ride through.

3.13 Exporting Safety Parameters

Only for some inverter models in specific regions or countries.

Step 1 Tap **Home** > **Settings** > **Advanced Settings** > **Export.**

Step 2 Tap **Start**, **Restart** or **Stop** to control the inverter.

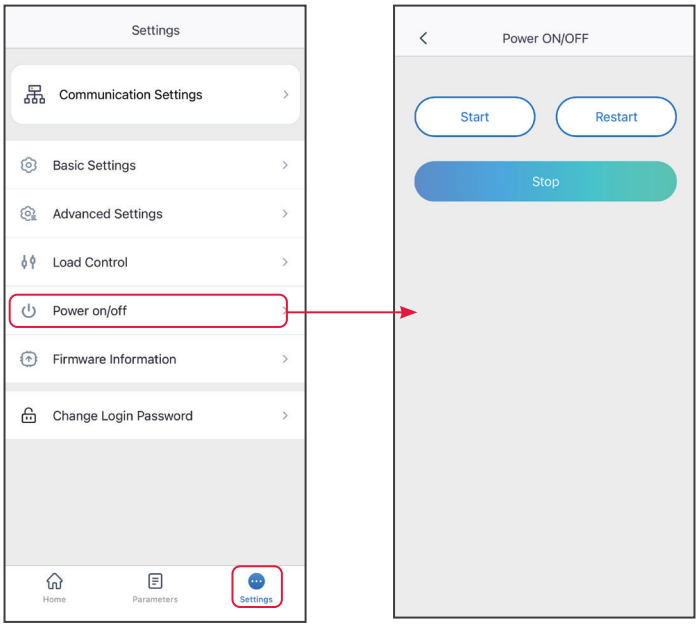


SLG00CON0037

3.14 Powering ON/OFF the Inverter

Step 1 Tap **Home** > **Settings** > **Advanced Settings** > **Power on/off.**

Step 2 Tap **Start**, **Restart** or **Stop** to control the inverter.



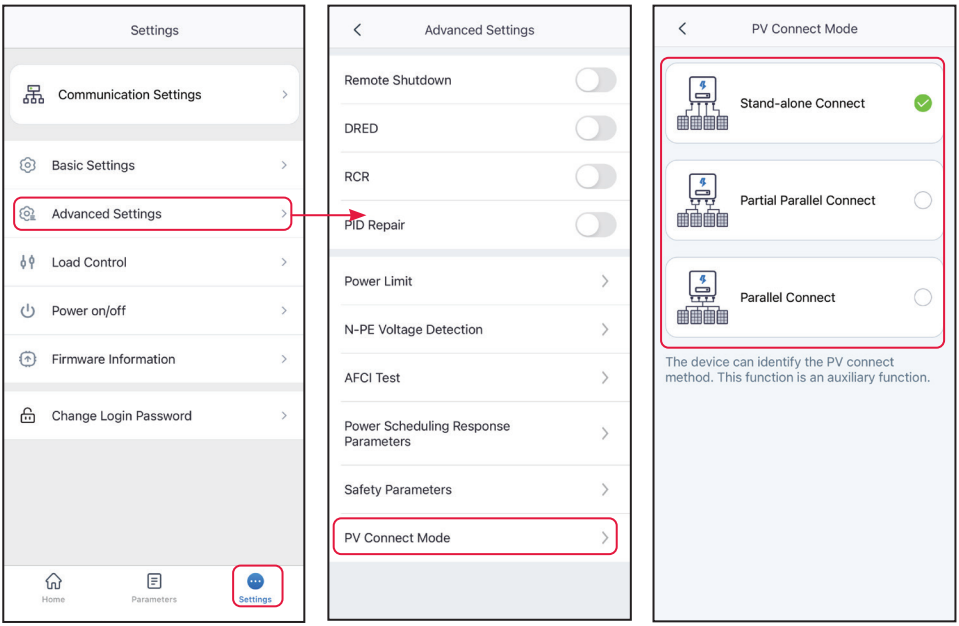
SLG00CON0038

3.15 Setting PV Access Mode

Select the PV access mode based on the actual connections between the PV strings and MPPT ports of the inverter.

Step 1 Tap **Home > Settings > Advanced Settings > PV Access Mode** to set the parameters.

Step 2 Set the access mode to **Stand-alone Connect**, **Partial Parallel Connect** or **Parallel Connection** based on actual connections. Tap **Save** to complete the settings.



SLG00CON0039

No.	Parameters	Description
1	Stand-alone Connect	The PV strings are connected to the MPPT terminals one by one.
2	Partial Parallel Connect	The PV strings are connected to the inverter in both stand-alone and parallel connection. For example, one PV string connect to MPPT1 ad MPPT2, another PV string connect to MPPT3.
3	Parallel Connect	The external PV string is connected to multi MPPT terminals of the inverter.

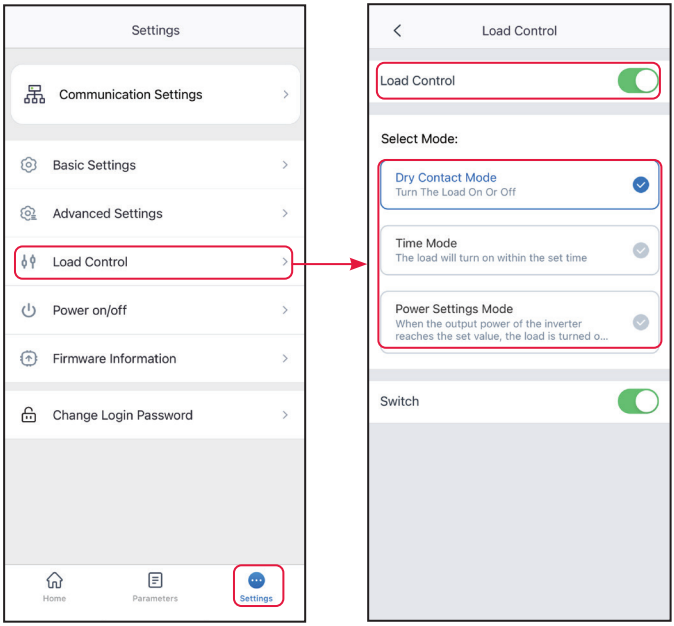
3.16 Settting the Load Control

Loads can be controlled by SolarGo app when the inverter supports load control function.

Step 1 Tap **Home > Settings > Load Control** to set the parameters.

Step 2 Enable **Load Control**.

Step 3 Set the control mode based on actual needs. Supports: **Dry Contact Mode**, **Time Mode**, **Power Settings Mode**.



SLG00CON0040

- **Dry Contact Mode**: when the switch is ON, the loads will be powered; when the switch isOFF, the power will be cut off. Turn on or off the switch based on actual needs.
- **Time Mode**: set the time to enable the load, and the load will be powered automatically within the setting time period.

No.	Parameters	Description
1	Start Time	The time mode will be on between the start time and end time.
2	End Time	
3	Repeat	The repeat days.

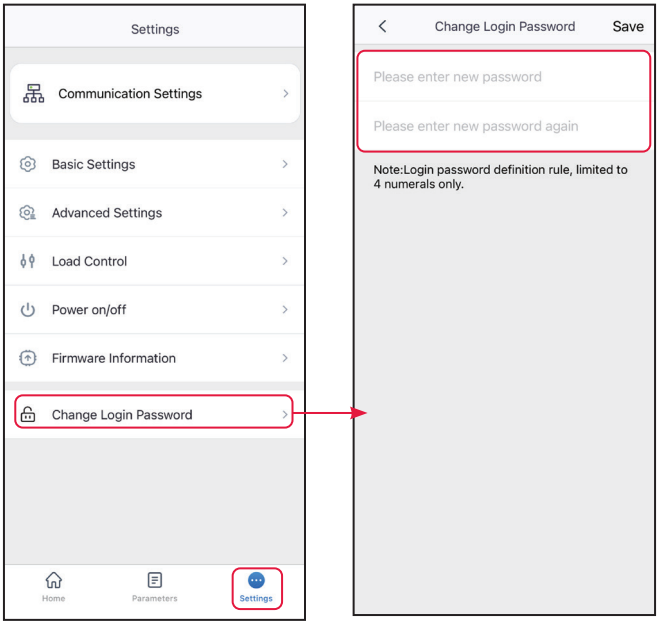
- **Power Settings Mode**: Set **Inverter Output Power**, the inverter will power the loads when the actual output power of the inverter excess the **Inverter Output Power**.

3.17 Change the Login Password

NOTICE
The login password can be changed. Keep the changed password in mind after changing it. Contact the after-sales service if you forget the password.

Step 1 Tap **Home** > **Settings** > **Change Login Password**, to change the password.

Step 2 Change the password based on actual needs.

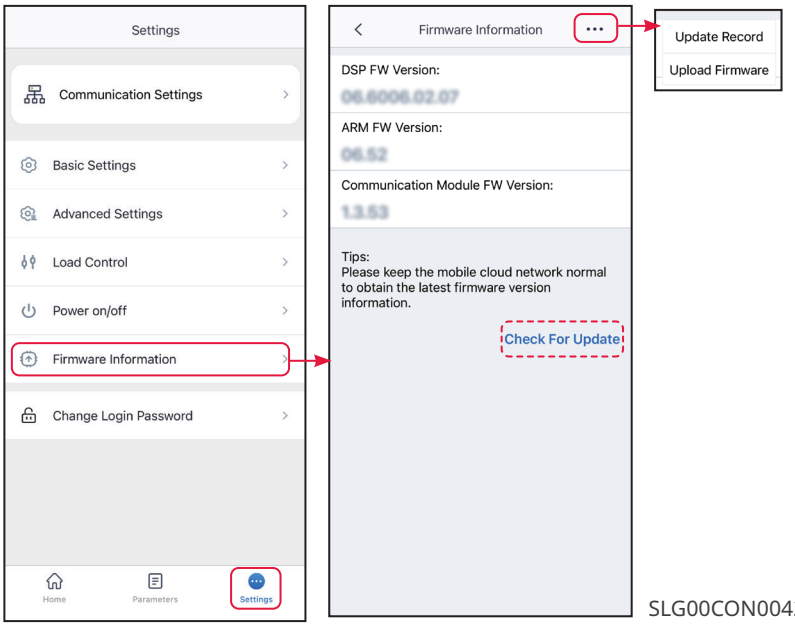


SLG00CON0041

3.18 Upgrading the Firmware

NOTICE

- Upgrade the DSP version, ARM version of the inverter , or firmware version of the communication module. Some devices do not support upgrading the firmware version through SolarGo app.
- If the Firmware Upgrade dialog box pops up once logging into the app, click **Firmware Upgrade** to directly go to the firmware information page.



SLG00CON0042

Type I

Local Upgrade Requirements:

- The upgrade patch has been obtained from the dealer or the after sales service.
- Duplicate the upgrade patch to the smart phone.

Step 1 Tap **Home** > **Settings** > **Firmware Upgrade** to check the firmware version.

Step 2 Tap ••• > **Upload Firmware** to import local upgrade patch. Tap **Upgrade** and follow the prompts to complete the upgrading.

Step 3 (Optional) Tap ••• > **Update Record** to check firmware upgrade records.

Type II

NOTICE

- When prompted by a red dot on the right of the **Firmware Information**, click to get the firmware update information.
- During the upgrade process, ensure that the network is stable and the device remains connected to SolarGo, otherwise the upgrade may fail.

Step 1 Tap **Home** > **Settings** > **Firmware Upgrade** to check the firmware version.

Step 2 (Optional) Tap Check For Update to check whether there is a latest version to be updated.

Step 3 Tap **Firmware Upgrade** as prompted to enter the firmware upgrade page.

Step 4 (Optional) Tap Learn More to check the firmware related information, such as **Current Version**, **New Version**, **Update Record**, etc.

Step 5 Tap **Upgrade** and follow the prompts to complete the upgrading.

Type III

NOTICE

- The automatic upgrade function is allowed only when a WiFi/LAN Kit-20 or WiFi Kit-20 module is applied, and the module firmware version is V2.0.1 and above.
- After enabling the auto-upgrade function, if there is any update and the device is connected to the network, the corresponding firmware version can be automatically upgraded.

Step 1 Tap **Home** > **Settings** > **Firmware Upgrade** to check the firmware version.

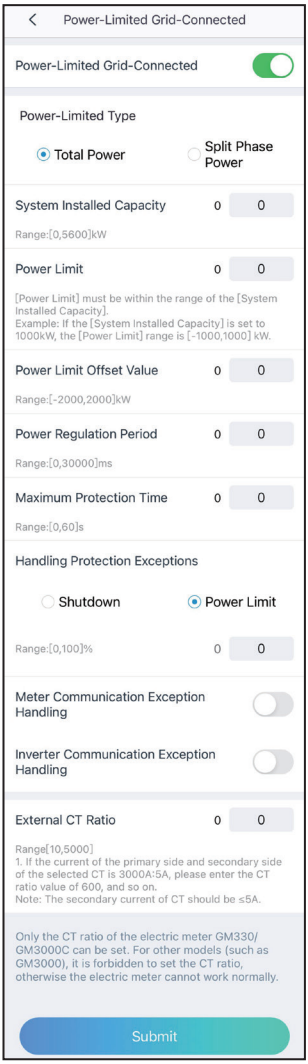
Step 2 Tap or to enable or disable the **Automatic Upgrade.**

3.19 Setting the Power-Limited Parameters(Parallel Connected Inverters)

- If the power generated by the PV system cannot be consumed by loads, the remaining power will be fed into the utility grid. Control the power fed into the grid by setting the **Power-Limited Grid-Connected** parameters.
- Only applicable to parallel system with multiple inverters.

Step 1 Connect the master inverter in the parallel system. Tap **Home** > **Settings** > **Power-Limited Grid-Connected** to set the parameters.

Step 2 Enable **Power-Limited Grid-Connected**, enter parameters based on actual needs. Tap **Submit** to complete settings.



SLG00CON0043

No.	Parameters	Description
1	Power-Limited Type	Select the output power control mode based on actual situation. • Total power: controls the total power at the grid-connection point to limit the power fed to the power grid. • Split-phase power: controls the power of each phase at the grid-connection point to limit the power fed to the power grid.
2	System Installed Capacity	Set the total capacity of all inverters in the system.
3	Power Limit	Set the maximum power that is allowed feed into the utility grid based on local grid standards and requirements.
4	Power Limit Offset Value	Set the adjustable range of the maximum power that is allowed feed into the utility grid.
5	Power Regulation Period	Set the minimum interval for adjusting the inverter power.
6	Maximum Protection Time	• According to the standards and requirements of some countries or regions, the power feed into the utility grid is allowed to exceed the limit value within a specified duration. • Set the maximum duration from the time when detecting excessive output power to the time when output power reaches the limit value.
7	Handling Protection Exceptions	The following measures can be taken when protection exception, communication exception or meter communication exception occurs: • Shutdown: stop the equipment. • Power Limitation: the equipment continues to work at the percentage of the rated power.
8	Meter Communication Exception Handling	
9	Inverter Communication Exception Handling	
10	Inverter Communication Timeout Setting	The protective measures will be taken when the communication exception time exceeds the set time.
11	External CT Ratio	Set the ratio of the primary current to the secondary current of the external CT.

4 App Operations for Hybrid Inverters

NOTICE

- All the user interface (UI) screenshots or words in this document are based on **SolarGo app V6.0.0**. The UI may be different due to the version upgrade. The screenshots, words or data are for reference only.
- The method to set parameters is the same for all inverters. But the parameters displayed varies based on the equipment model and safety code. Refer to the actual interface display for specific parameters.
- Before setting any parameters, read through user manual of the app and the inverter or charger to learn the product functions and features. When the inverter parameters are set improperly, the inverter may fail to connect to the utility grid or fail to connect to the utility grid in compliance with related requirements and damage the battery, which will affect the inverter's power generation.

4.1 Log In as Hybrid Inverter

Step 1 Ensure that the inverter is power on, both the inverter and the communication module are working properly.

Step 2 Tap **Bluetooth** or **WLAN** tab on the homepage of SolarGo app based on the communication method.

Step 3 (optional): If you choose to connect the device via WiFi, open the WiFi settings of your phone first and connect to the inverter's WiFi signal (Solar-WiFi***). Default password: 12345678.

Step 4 Pull down or tap **Search Device** to refresh the device list. Find the device by the the inverter serial number. Tap the device name to log in. Select the device by checking the serial number of the master inverter when multi inverters are parallel connected.

Step 5 (optional) For first connection with the device via Bluetooth, there will be a Bluetooth pairing prompt, tap **Pair** to continue the connection.

Step 6 Log in as an Owner or an Installer. Initial password: 1234.

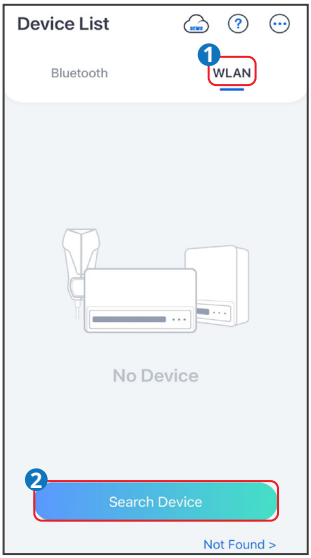
Step 7 If connecting via Solar-WiFi***, modify the initial WiFi password following the prompts. If connecting via WLA-*** or WFA-***, modify the initial login password following the prompts.

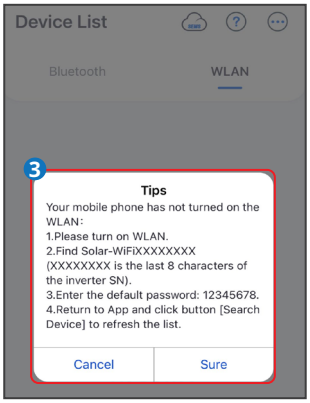
Step 8 (Optional) If connecting via WLA-*** or WFA-***, enable **Bluetooth Stays On** following the prompts as entering the device details page. Otherwise, the bluetooth signal of the device will be off after disconnection.

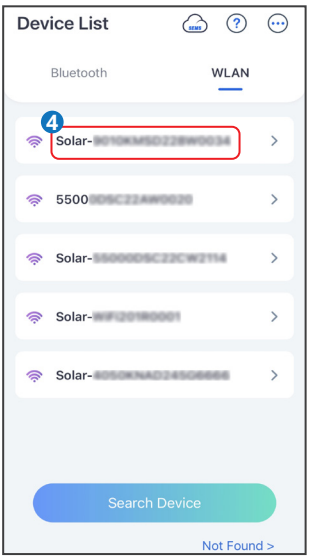
Connecting the inverter via WLAN

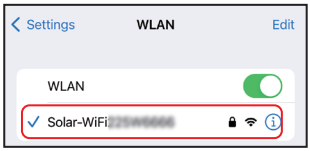
NOTICE

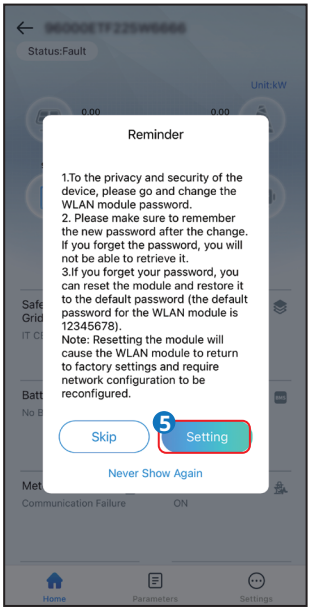
- If the SolarGo app version is upgraded to V5.6.2 or later, a **Reminder** will pop up every time you connect to the inverter via WLAN to prompt you to change the password. If you want to permanently close the pop-up window, tap **Never Show Again**.
- If you forget the new password, reset the password by the smart dongle or the LCD of the inverter. Restore the dongle to reset the password will loss network configurations before.

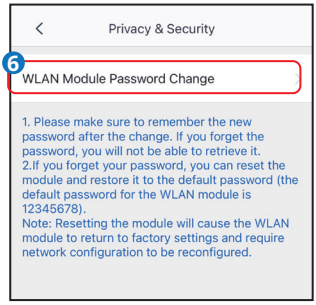


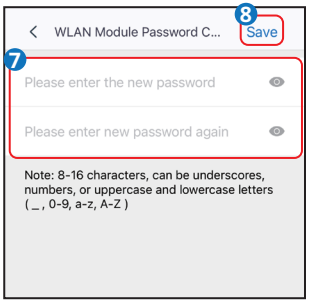


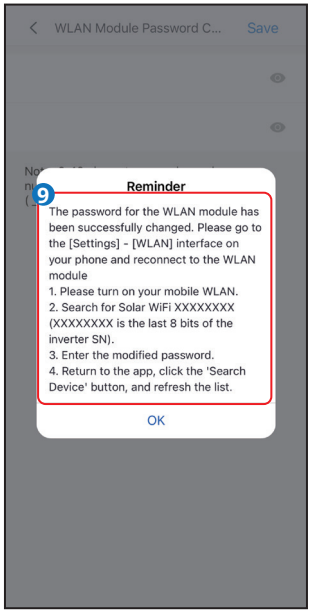




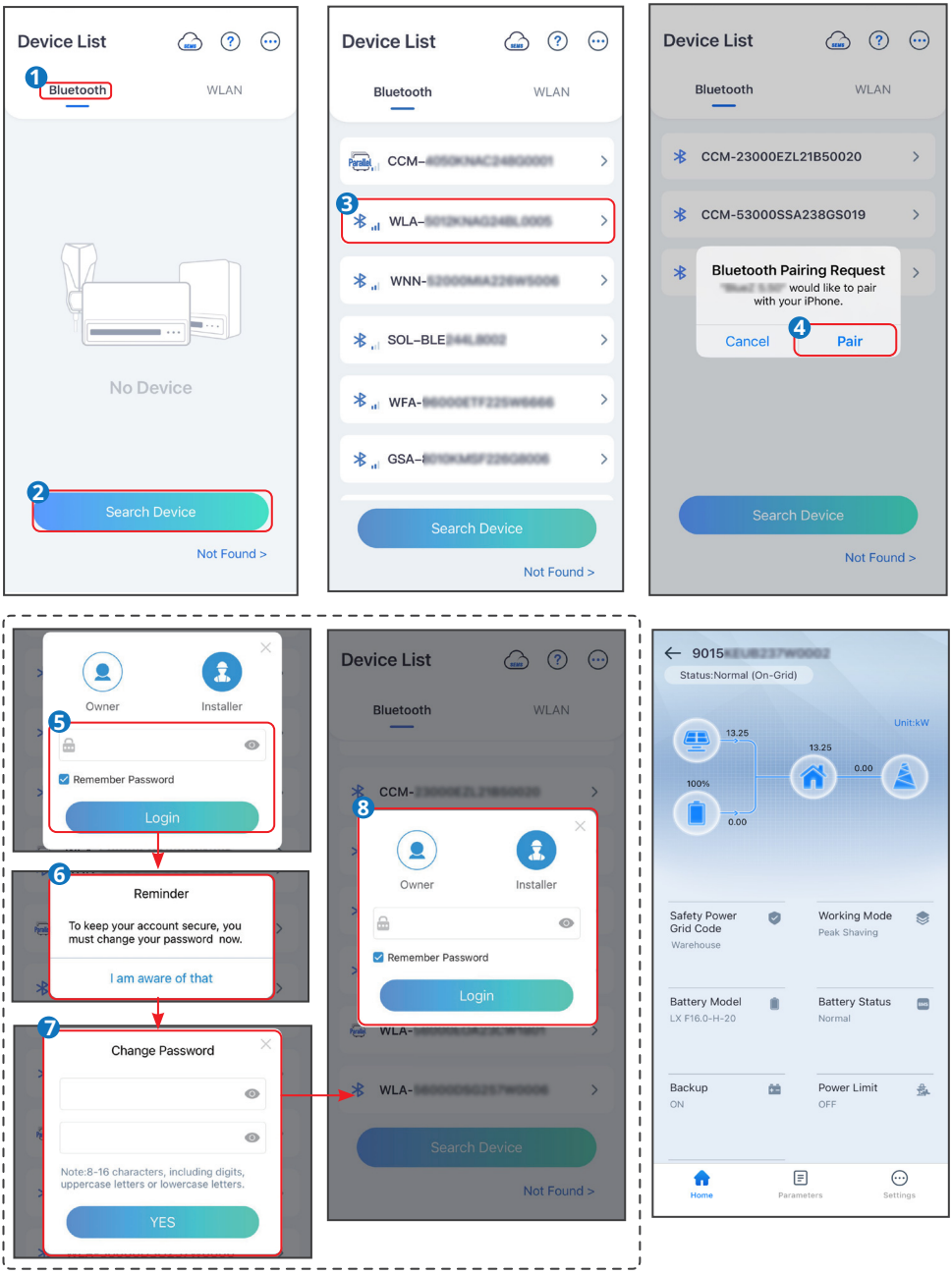




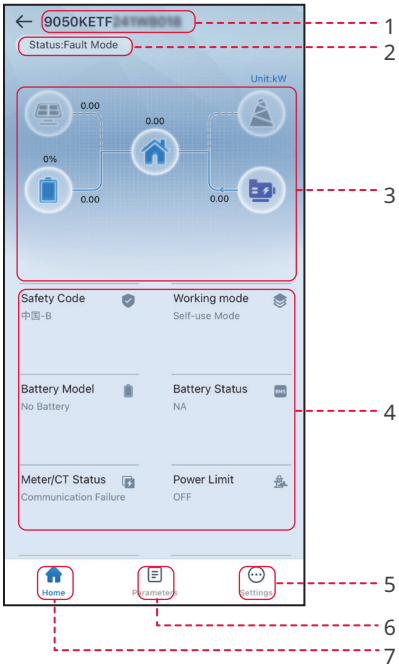




Connecting the inverter via Bluetooth



4.2 GUI Introductions to Hybrid Inverters



No.	Name/Icon	Description
1	Serial Number	Serial number of the connected inverter.
2	Device Status	Indicates the status of the inverter, such as **Working**,**Fault**, etc.
3	Energy Flow Chart	Indicates the energy flow chart of the PV system. The actual page prevails.
4	System Status	Indicates the system status, such as **Safety Code**, **Working Mode**, **Battery Model**, **Battery Status**, **Power Limit**, **Three-Phase Unbalanced Output**, etc..
5		Home Tap Home to check**Serial Number**, **Device Status**, **Energy Flow Chart**, **System Status**, etc.
6		Parameters Tap Parameters to check the inverter Data, like SN, FW Version, Output(On-Grid), Import Power, Import Total Power, Battery Mode, Battery Capacity, Battery Status, Charge/Discharge Current Limit, etc.. Or check Alarm like Utility Loss, Undervoltage, etc..
7		Settings Tap Settings to set the**Working Mode**, **Safety Code**, **Pv Connect Mode, Battery Connect Mode**, **SPD**, **Power Limit, AFCI Detect**, **DRED/Remote Shutdown/RCR**, **Three-Phase Unbalance**, **Battery Function Settings**, **Load Control**, **Communication Settings**, **Shadow Scan**,**Upgrade Firmware**, etc..

4.3 Configuring Communication Parameters

NOTICE

The communication configuration page varies depending on the communication method.

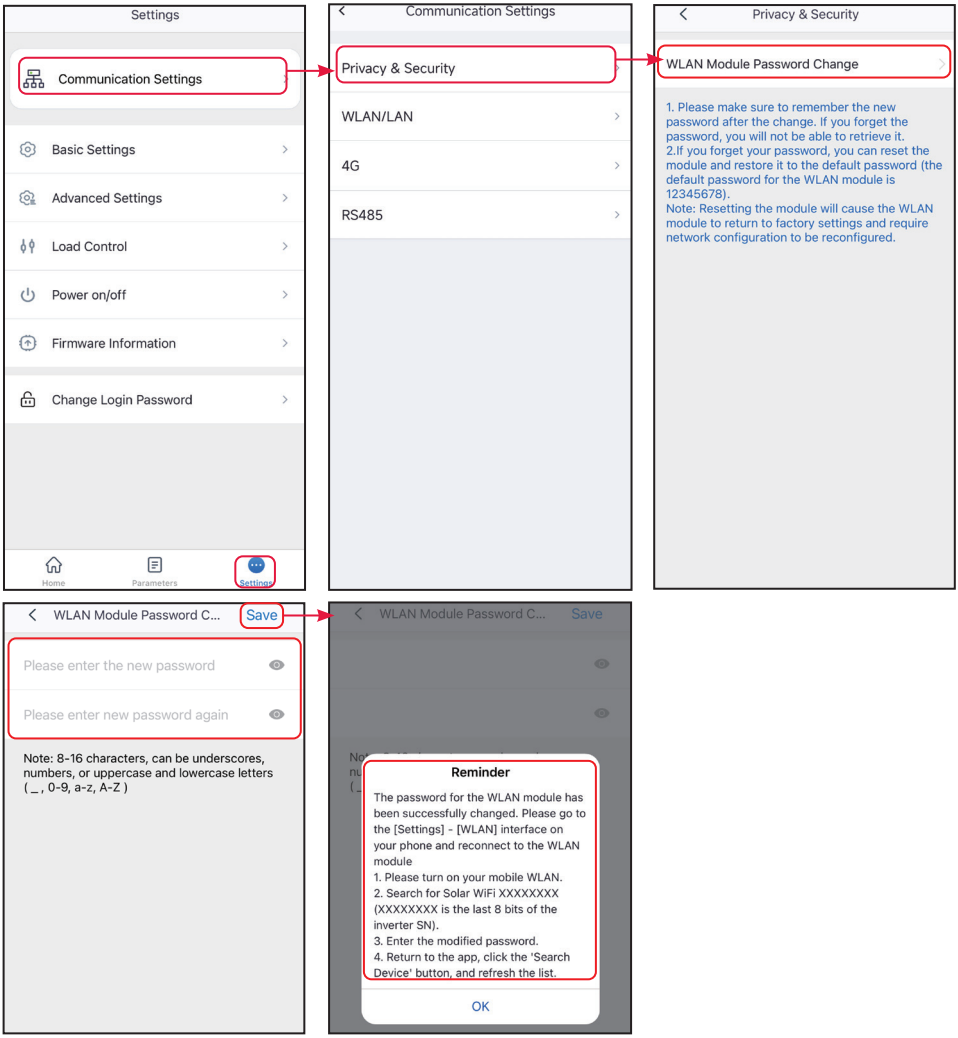
4.3.1 Setting Privacy and Security

Type I

Step 1 Tap **Home** > **Settings** > **Communication Setting** > **Privacy & Security** to set the parameters.

Step 2 Set the new password for the WiFi hotspot of the communication module, and tap **Save**.

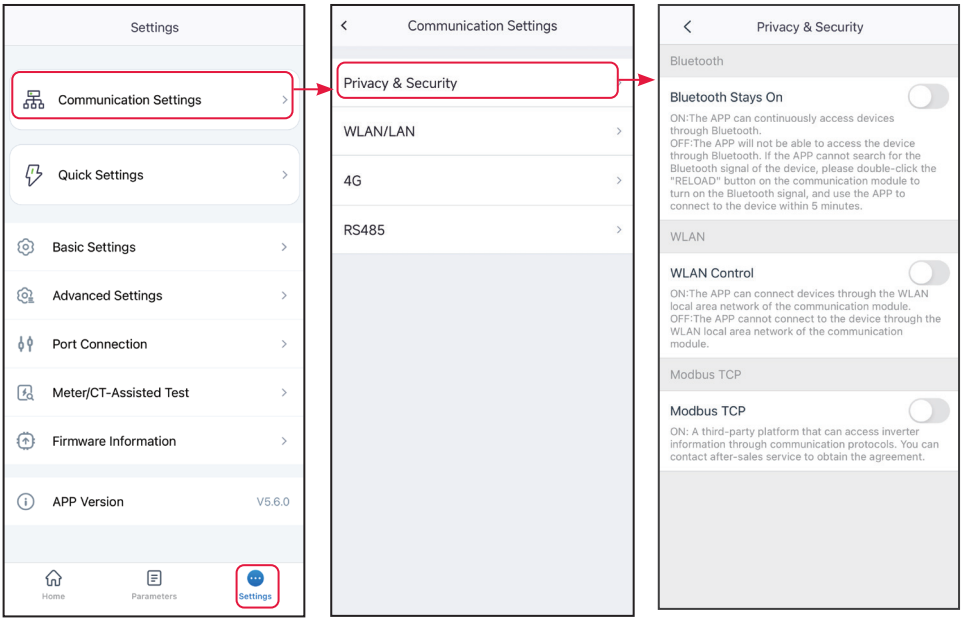
Step 3 Open the WiFi settings of your phone and connect to the inverter's WiFi signal (Solar-WiFi***) with the new password.



Type II

Step 1 Tap **Home** > **Settings** > **Communication Setting** > **Privacy & Security** to set the parameters.

Step 2 Enable **Bluetooth Stays On** or **WLAN Control** based on actual needs.

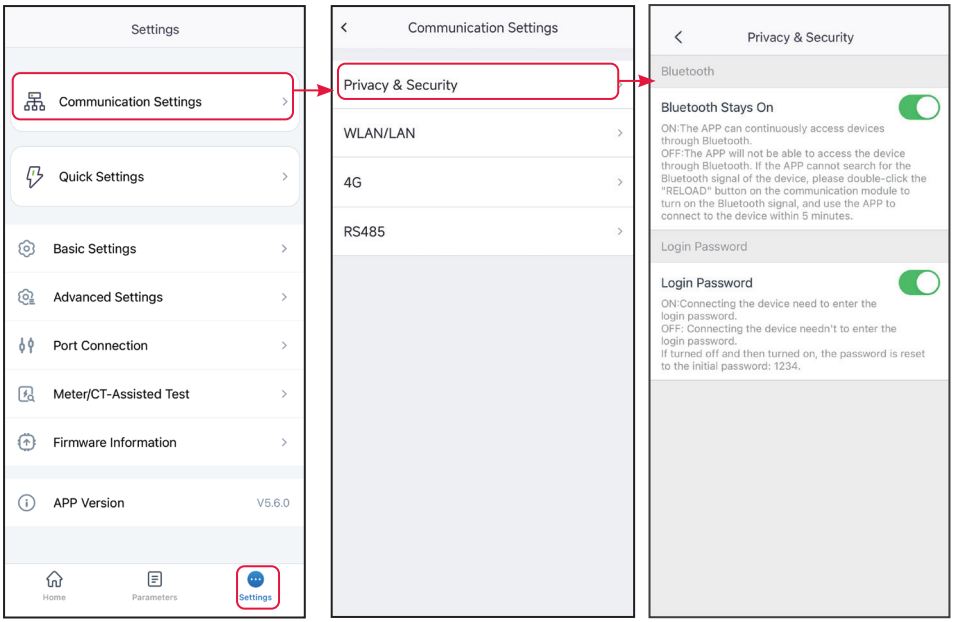


No.	Parameters	Description
1	Bluetooth Stays On	Disabled by default. Enable the function, the bluetooth of the device will be contentious on to keep connected to SolarGo. Otherwise, the bluetooth will be off in 5 minutes, and the device will be disconnected from SolarGo.
2	WLAN Control	Disabled by default. Enable the function, the device and the SolarGo can be connected through the WLAN when they are on the same LAN. Otherwise, they cannot be connected even if they are on the same LAN.
3	Modbus-TCP	Enable the function, the third party monitoring platform can access inverter through Modbus-TCP communication protocol.

Type III

Step 1 Tap **Home** > **Settings** > **Communication Setting** > **Privacy & Security** to set the parameters.

Step 2 Enable **Bluetooth Stays On** or **Login Password** based on actual needs.



No.	Parameters	Description
1	Bluetooth Stays On	Disabled by default. Enable the function, the bluetooth of the device will be contentious on to keep connected to SolarGo. Otherwise, the bluetooth will be off in 5 minutes, and the device will be disconnected from SolarGo.
2	Login Password	Disabled by default. Enable the function, you will be prompted to enter the login password when connecting the device to SolarGo. Use the initial password and change it at the first login prompt.

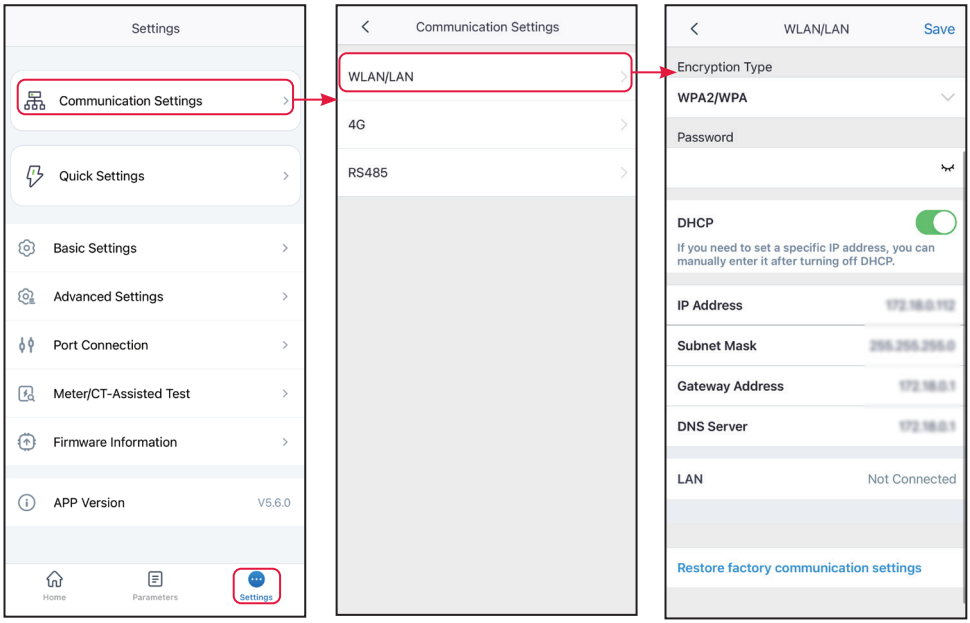
4.3.2 Configuring Network

The communication configuration page varies depending on the communication method.

Step 1 Tap **Home** > **Settings** > **Communication Settings** > **Network Settings** to set the parameters.

Step 2 Set the **WLAN** or **LAN** parameters based on actual situation.

No.	Parameters	Description
1	Network Name	Only for WLAN. Select WiFi based on the actual connecting.
2	Password	Only for WLAN. WiFi password for the actual connected network.
3	DHCP	• Enable DHCP when the router is in dynamic IP mode. • Disable DHCP when a switch is used or the router is in static IP mode.
4	IP Address	• Do not configure the parameters when DHCP is enabled. • Configure the parameters according to the router or switch information when DHCP is disabled.
5	Subnet Mask	
6	Gateway Address	
7	DNS Server	

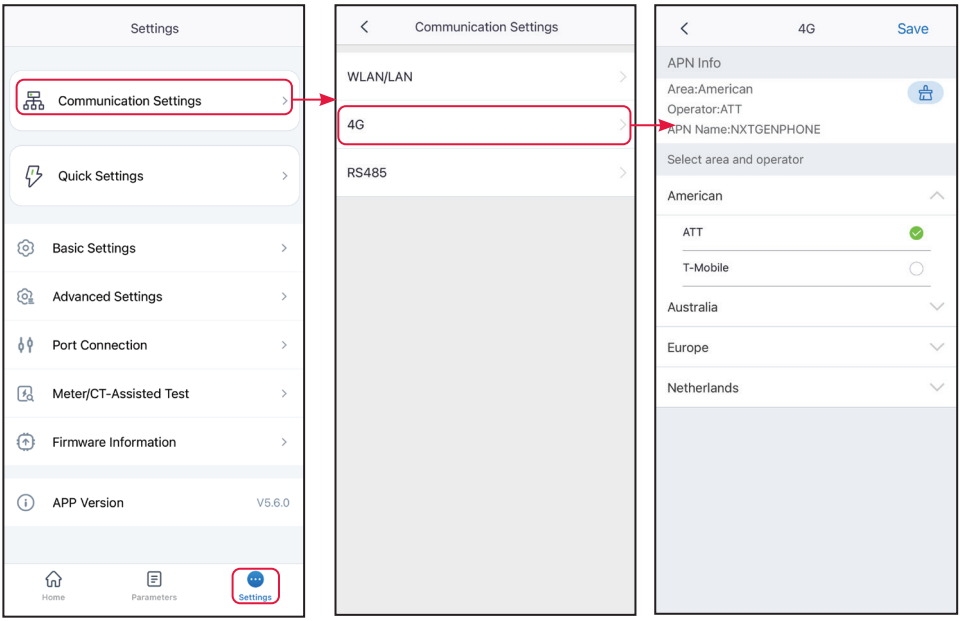


4.3.3 Configuring APN Parameters

Configure the SIM card information of 4G communication device.

Step 1 Tap **Home** > **Settings** > **Communication Settings** > **4G**, to set the parameters.

Step 2 Set the region and operator based on actual needs.



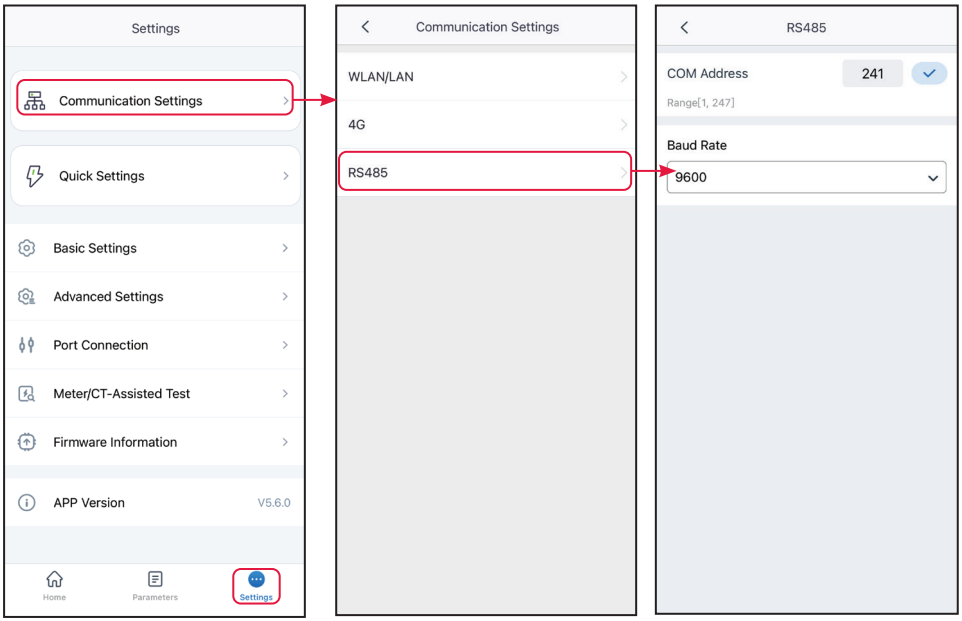
4.3.4 Configuring RS485 Parameters

NOTICE

Set the communication address of the inverter. For a single inverter, the address is set based on actual needs. For multi connected inverters, the address of each inverter should be different while cannot be 247.

Step 1 Tap **Home** > **Settings** > **Communication Settings** > **RS485** to set the parameters.

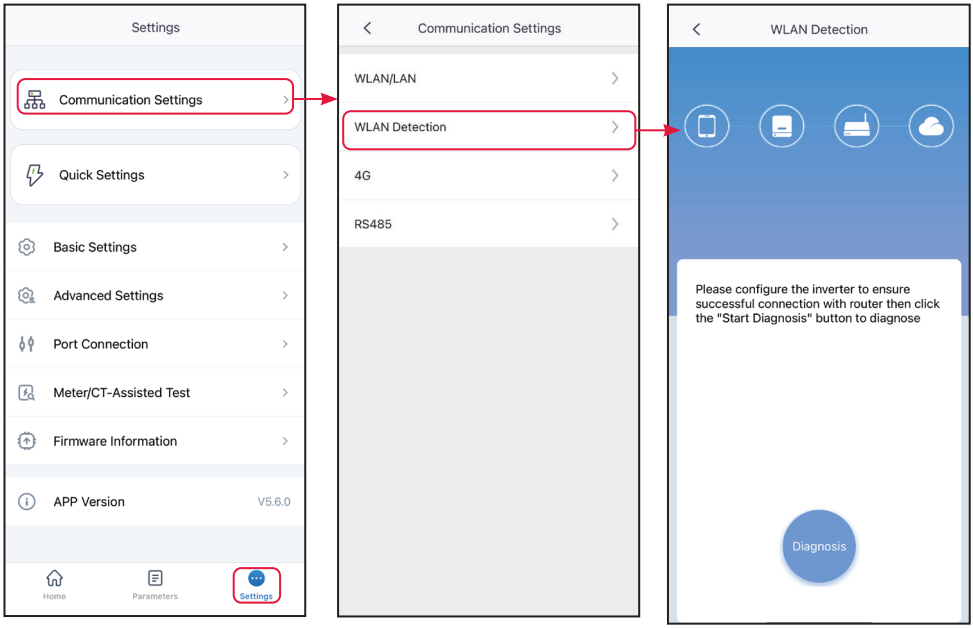
Step 2 Set the **Modbus Address** And **Baud Rate** base on actual situation.



4.3.5 WLAN Detection

Step 1 Tap **Home** > **Settings** > **Communication Settings** > **WLAN Detection**.

Step 2 Tap **Diagnosis** to check the network connection status.



4.4 Setting the Wiring Method

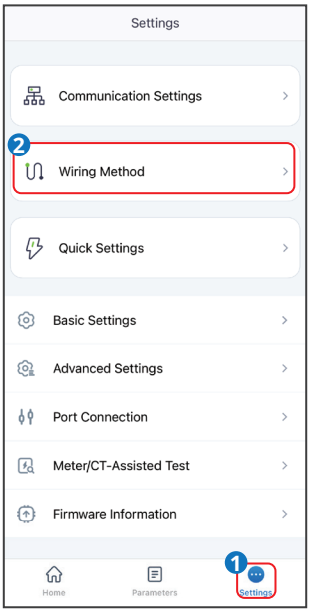
NOTICE

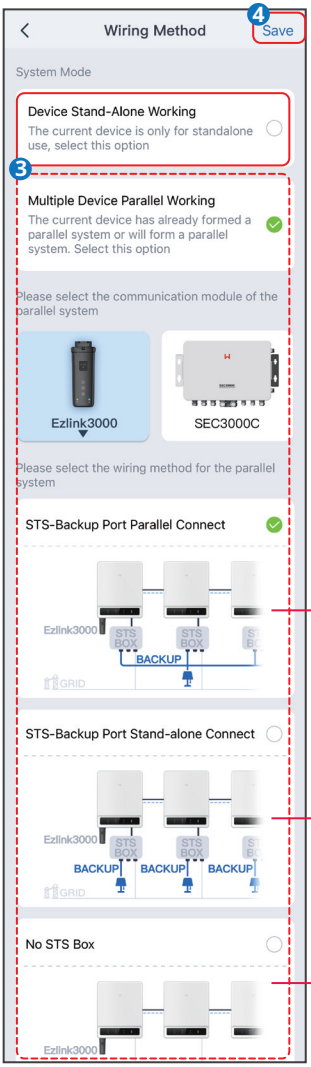
- Only for ET40-50kW series inverters.
- Do not set the Wiring Method if the inverter is installed for the first time and only one inverter is applied.

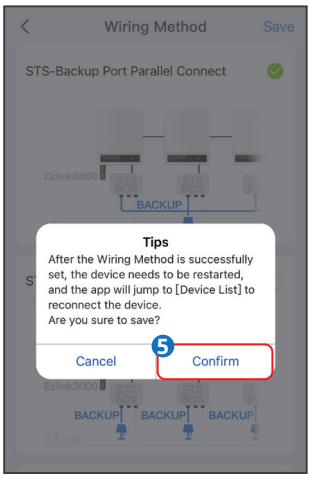
Step 1 Tap **Home** > **Settings** > **Wiring Method**.

Step 2 If the system is a single inverter system, select **Device Stand-Alone Workking**. If the system is a parallel system with multiple inverters, select **Multiple Device Parallel Working**.

Step 3 Tap **Save** to complete the settings, and tap **Confirm** to restart the device.







Select **STS-BACKUP Port Parallel Connect** if the inverters are connected in parallel both on-grid and off-grid.

Select **STS-BACKUP Port Stand-alone Connect** if the inverters are connected in parallel on-grid, but cannot be connected in parallel off-grid.

Select **No STS Box** if no STS is connected.

4.5 Quick Setting the Basic Information

NOTICE

The setting page varies depending on inverter model.

Type I

NOTICE

- The parameters will be configured automatically after selecting the safety country/region, including overvoltage protection, undervoltage protection, overfrequency protection, underfrequency protection, voltage/frequency connection protection, cosφ curve, Q(U) curve, P(U) curve, FP curve, HVRT, LVRT, etc. Tap Home **> Settings > Advanced Settings > Safety Parameters** to check the parameters after selecting the safety country.
- The power generation efficiency is different in different working modes. Set the working mode according to the local requirements and situation.
- Back-up mode, Economic mode, and Smart charging mode can be enabled at the same time.
  - **Self-use mode:**
    - **Back-up mode:** The back-up mode is mainly applied to the scenario where the grid is unstable. When the grid is disconnected, the inverter turns to off-grid mode and the battery will supply power to the load; when the grid is restored, the inverter switches to grid-tied mode.
    - **Economic mode:** It is recommended to use economic mode in scenarios when the peak-valley electricity price varies a lot. Select Economic mode only when it meets the local laws and regulations. Set the battery to charge mode during Vally period to charge battery with grid power. And set the battery to discharge mode during Peak period to power the load with the battery.
    - **Smart charging:** In some countries/regions, the PV power feed into the utility grid is limited. Select Smart Charging to charge the battery using the surplus power to minimize PV power waste.
  - **Peak shaving mode:** Peak shaving mode is mainly applicable to peak power limited scenarios. When the total power consumption of the load exceeds the power consumption quota in a short period of time, battery discharge can be used to reduce the power exceeding the quota.

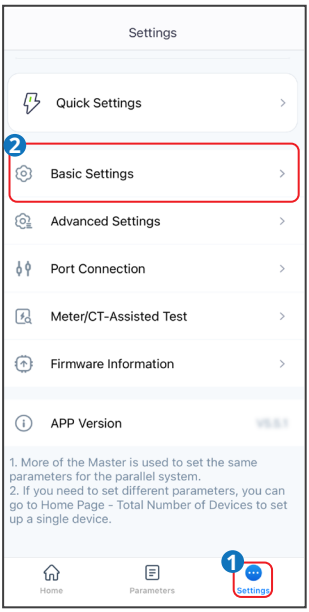
Step 1 Tap **Home > Settings > Quick Settings** to set the parameters.

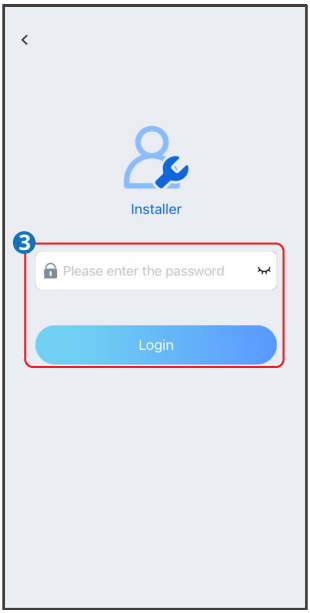
Step 2 Enter the password for quick settings. Contact the supplier or after sales service for password. Password for professional technicians only.

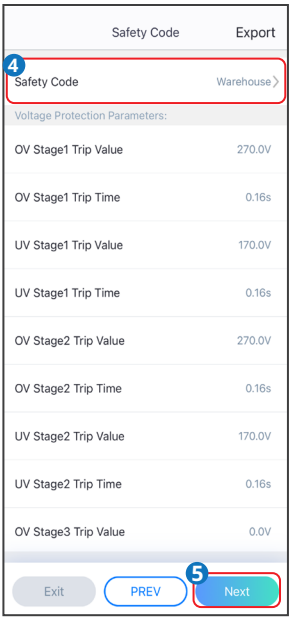
Step 3 Select safety country accordingly. Tap **Next** to set the Battery Connect Mode.

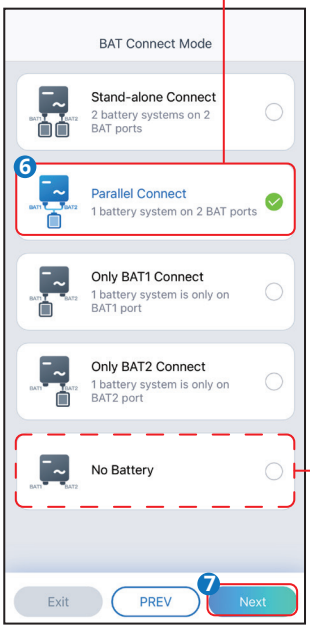
Step 4 Select the actual mode in which the battery is connected to the inverter. The basic settings are completed if there is no battery connected in the system. Tap **Next** to set the Battery Model if there is any battery connected in the system.

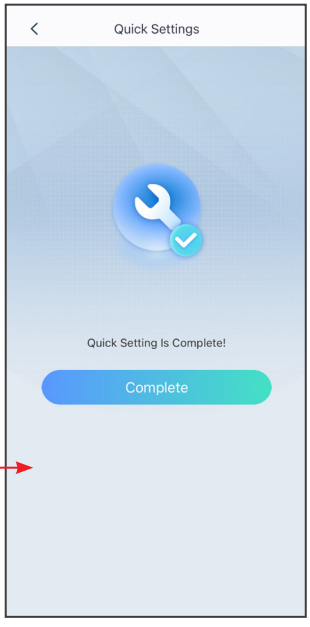
Step 5 Select the actual battery model. Tap **Next** to set the Working Mode.

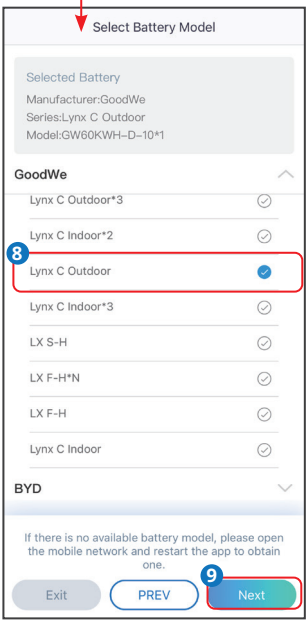

Settings
Quick Settings
2
Basic Settings
Advanced Settings
Port Connection
Meter/CT-Assisted Test
Firmware Information
APP Version
1. More of the Master is used to set the same parameters for the parallel system.
2. If you need to set different parameters, you can go to Home Page - Total Number of Devices to set up a single device.
Home
Parameters
1
Settings


Installer
3
Please enter the password
Login


Safety Code
Export
4
Safety Code
Warehouse
Voltage Protection Parameters:
OV Stage1 Trip Value 270.0V
OV Stage1 Trip Time 0.16s
UV Stage1 Trip Value 170.0V
UV Stage1 Trip Time 0.16s
OV Stage2 Trip Value 270.0V
OV Stage2 Trip Time 0.16s
UV Stage2 Trip Value 170.0V
UV Stage2 Trip Time 0.16s
OV Stage3 Trip Value 0.0V
Exit
PREV
5
Next

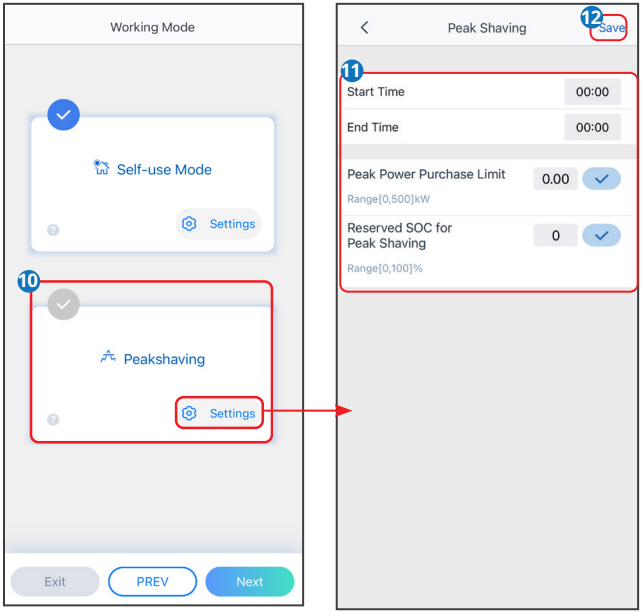

BAT Connect Mode
Stand-alone Connect
2 battery systems on 2 BAT ports
6
Parallel Connect
1 battery system on 2 BAT ports
Only BAT1 Connect
1 battery system is only on BAT1 port
Only BAT2 Connect
1 battery system is only on BAT2 port
No Battery
Exit
PREV
7
Next


Quick Settings
Quick Setting Is Complete!
Complete


Select Battery Model
Selected Battery
Manufacturer:GoodWe
Series:Lynx C Outdoor
Model:GW60KWH-D-10*1
GoodWe
Lynx C Outdoor*3
Lynx C Indoor*2
8
Lynx C Outdoor
Lynx C Indoor*3
LX S-H
LX F-H*N
LX F-H
Lynx C Indoor
BYD
If there is no available battery model, please open the mobile network and restart the app to obtain one.
Exit
PREV
9
Next

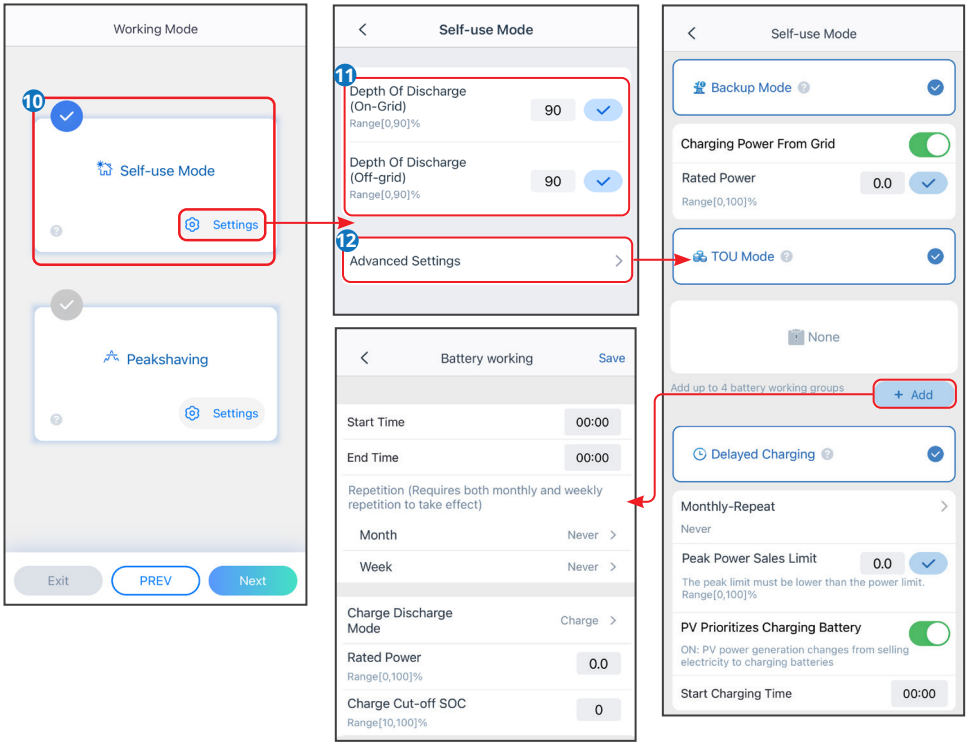
Step 6 Set the working mode based on actual needs. Tap **Next** to conduct **System Self-Test**.

- If **Peakshaving** mode is selected, tap **Settings** to set the parameters.



No.	Parameters	Description
Peakshaving		
1	Start Time	The utility grid will charge the battery between Start Time and End Time if the load power consumption do not exceed the power quota. Otherwise, only PV power can be used to charge the battery.
2	End Time	
3	Peak Power Purchase Limit	Set the maximum power limit allowed to purchase from the grid. When the loads consume power exceed the sum of the power generated in the PV system and Peak Power Purchase Limit, the excess power will be made up by the battery.
4	Reserved SOC For Peakshaving	In Peak Shaving mode, the battery SOC should be lower than **Reserved SOC For Peakshaving**. Once the battery SOC is higher than **Reserved SOC For Peakshaving**, the peak shaving mode fails.

- When **Self-Use Mode** is selected, tap Settings to set the **Depth Of Discharge(On-Grid)** and **Depth Of Discharge(Off-Grid).** And tap **Advanced Settings** to set **Back-Up Mode**, **Economic Mode** or **Smart Charging** based on actual needs. If **Economic Mode** is selected, tap **Add** to set the working time and working mode of the battery group.



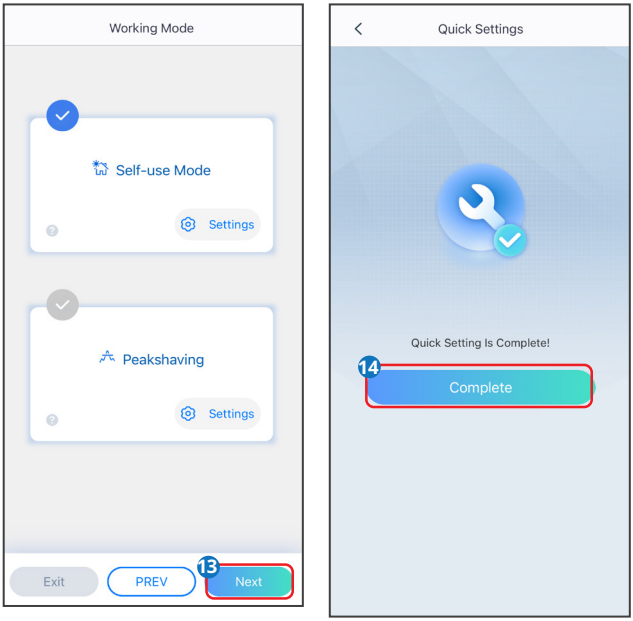
No.	Parameters	Description
Self-use mode		
1	Depth Of Discharge(On-Grid)	The maximum depth of discharge of the battery when the system is working on-grid.
2	Depth Of Discharge(Off-Grid)	The maximum depth of discharge of the battery when the system is working off-grid.
Back-up mode		
3	Charging Power From Grid	Enable Charging Power From Grid to allow power purchasing from the utility grid.
4	Rated Power	The percentage of the purchasing power to the rated power of the inverter.
TOU mode		
5	Start Time	Within the Start Time and End Time, the battery is charged or discharged according to the set Battery Mode as well as the Rated Power.
6	End Time	
7	Charge Discharge Mode	Set the Battery Mode to Charging or Discharging accordingly.

No.	Parameters	Description
8	Rated Power	The percentage of the charging/discharging power to the ratedpower of the inverter.
9	Charge Cut-off SOC	The battery stop charging/discharging once the battery SOC reaches Charge Cut-off SOC.
Delayed charging		
10	Monthly-Repeat	Set the smart charging months. More than one month can be set.
11	Peak Power Sales Limit	Set the Peak Power Sales Limit in compliance with local laws and regulations. The Peak Limiting Power shall be lower then the output power limit specified by local requirements.
12	PV Prioritizes Charing Battery	During charging time, the PV power will first charge the battery.
13	Start Charging Time	

Step 6 Execute device self-check or skip it based on actual needs.

Step 7 Tap **Recheck** or **Next** to complete the test based on your actual needs. Tap **Export** to export the test reports if needed.

Step 8 Tap **Complete** to complete the quick settings.



Type II

NOTICE

- The parameters will be configured automatically after selecting the safety country/region, including overvoltage protection, undervoltage protection, overfrequency protection, underfrequency protection, voltage/frequency connection protection, cosφ curve, Q(U) curve, P(U) curve, FP curve, HVRT, LVRT, etc. Tap Home **> Settings > Advanced Settings > Safety Parameters** to check the parameters after selecting the safety country.
- The power generation efficiency is different in different working modes. Set the working mode according to the local requirements and situation.
  - **Self-use mode:** Self-use mode is the basic working mode of the system. When the power generated in the PV system is sufficient, it will supply the loads in priority. The excess power will charge the batteries first, then the remaining power will be sold to the utility grid. When the power generated in the PV system is insufficient, the battery will supply the loads in priority. If the battery power is insufficient, the load will be powered by the utility grid.
  - **Back-up mode:** The back-up mode is mainly applied to the scenario where the grid is unstable. When the grid is disconnected, the inverter turns to off-grid mode and the battery will supply power to the load; when the grid is restored, the inverter switches to grid-tied mode.
  - **Economic mode:** It is recommended to use economic mode in scenarios when the peak-valley electricity price varies a lot. Select Economic mode only when it meets the local laws and regulations. Set the battery to charge mode during Vally period to charge battery with grid power. And set the battery to discharge mode during Peak period to power the load with the battery.
  - **Smart charging:** In some countries/regions, the PV power feed into the utility grid is limited. Select Smart Charging to charge the battery using the surplus power to minimize PV power waste.
  - **Peak shaving mode:** Peak shaving mode is mainly applicable to peak power limited scenarios. When the total power consumption of the load exceeds the power consumption quota in a short period of time, battery discharge can be used to reduce the power exceeding the quota.

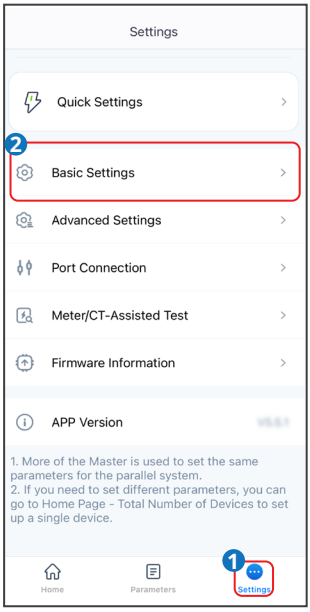
Step 1 Tap **Home > Settings > Quick Settings** to set the parameters.

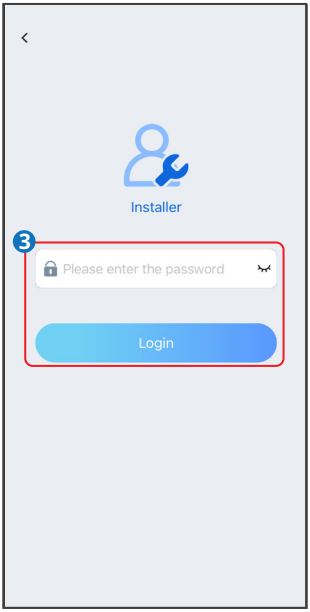
Step 2 Enter the password for quick settings. Contact the supplier or after sales service for password. Password for professional technicians only.

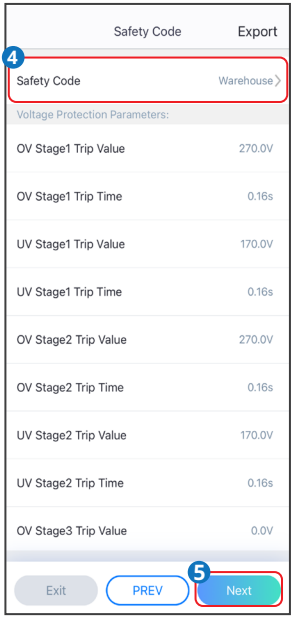
Step 3 Select safety country accordingly. Tap **Next** to set the Battery Connect Mode.

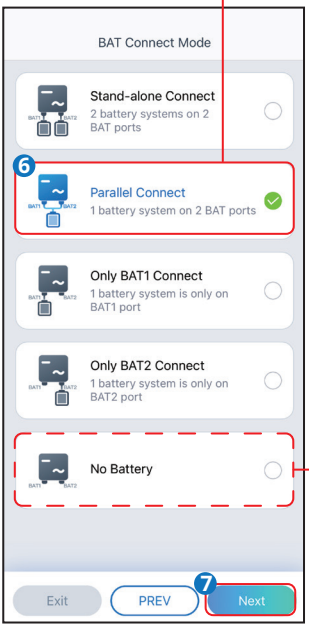
Step 4 Select the actual mode in which the battery is connected to the inverter. The basic settings are completed if there is no battery connected in the system. Tap **Next** to set the Battery Model if there is any battery connected in the system.

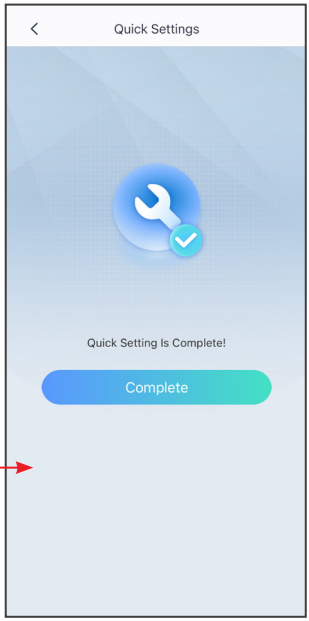
Step 5 Select the actual battery model. Tap **Next** to set the Working Mode.

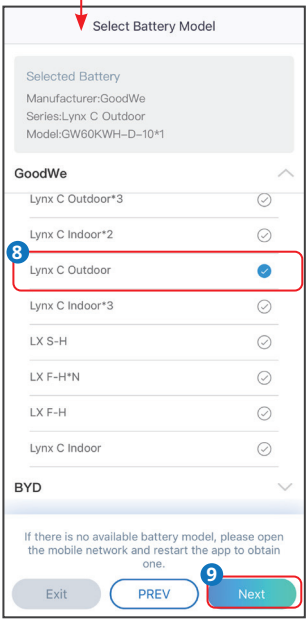

Settings
Quick Settings
2
Basic Settings
Advanced Settings
Port Connection
Meter/CT-Assisted Test
Firmware Information
APP Version
1. More of the Master is used to set the same parameters for the parallel system.
2. If you need to set different parameters, you can go to Home Page - Total Number of Devices to set up a single device.
Home
Parameters
1
Settings

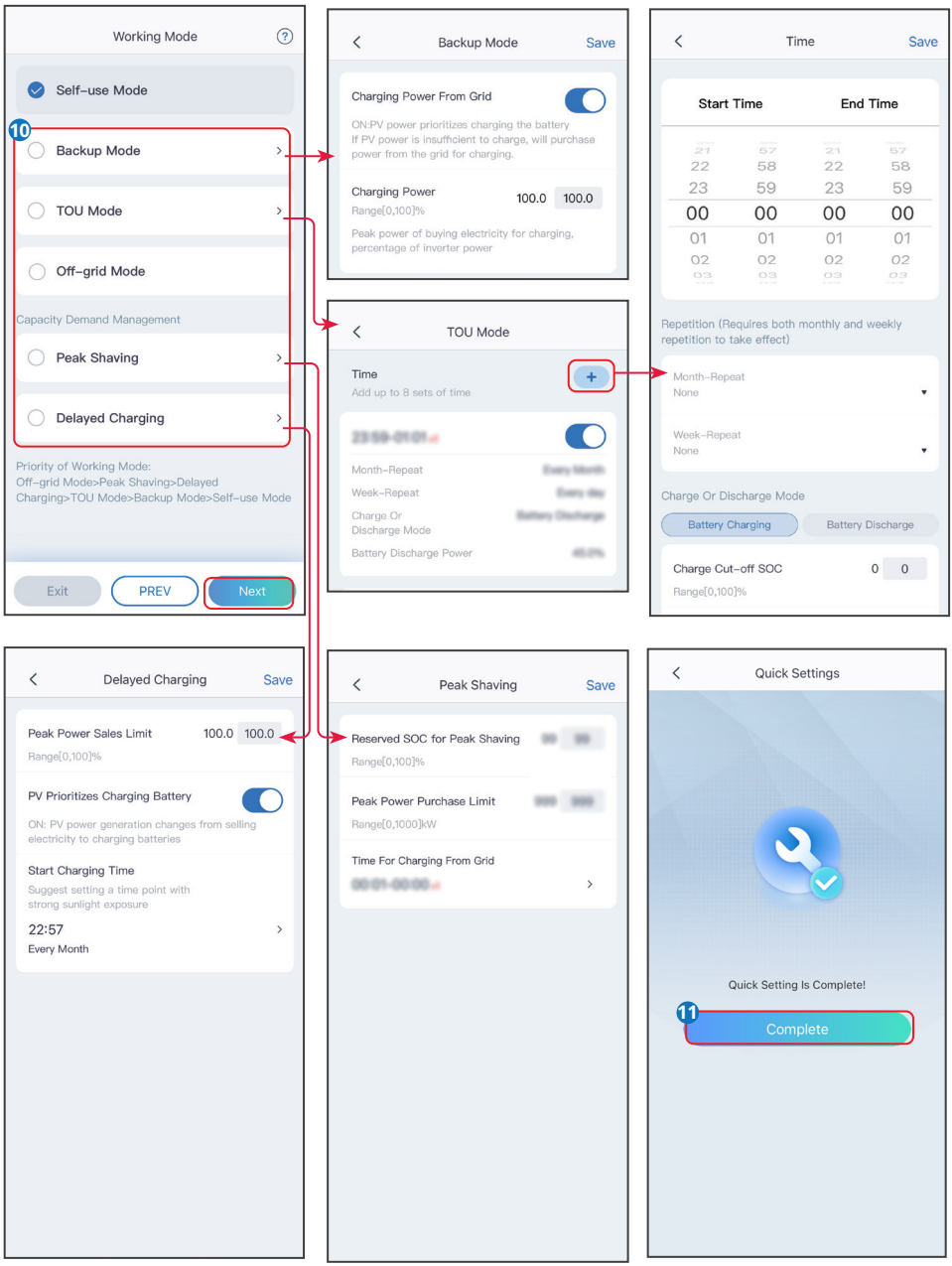

Installer
3
Please enter the password
Login


Safety Code
Export
4
Safety Code
Warehouse
Voltage Protection Parameters:
OV Stage1 Trip Value 270.0V
OV Stage1 Trip Time 0.16s
UV Stage1 Trip Value 170.0V
UV Stage1 Trip Time 0.16s
OV Stage2 Trip Value 270.0V
OV Stage2 Trip Time 0.16s
UV Stage2 Trip Value 170.0V
UV Stage2 Trip Time 0.16s
OV Stage3 Trip Value 0.0V
Exit
PREV
5
Next


BAT Connect Mode
Stand-alone Connect
2 battery systems on 2 BAT ports
6
Parallel Connect
1 battery system on 2 BAT ports
Only BAT1 Connect
1 battery system is only on BAT1 port
Only BAT2 Connect
1 battery system is only on BAT2 port
No Battery
Exit
PREV
7
Next


Quick Settings
Quick Setting Is Complete!
Complete


Select Battery Model
Selected Battery
Manufacturer:GoodWe
Series:Lynx C Outdoor
Model:GW60KWH-D-10*1
GoodWe
Lynx C Outdoor*3
Lynx C Indoor*2
8
Lynx C Outdoor
Lynx C Indoor*3
LX S-H
LX F-H*N
LX F-H
Lynx C Indoor
BYD
If there is no available battery model, please open the mobile network and restart the app to obtain one.
Exit
PREV
9
Next


Working Mode
Self-use Mode
10
Backup Mode
TOU Mode
Off-grid Mode
Capacity Demand Management
Peak Shaving
Delayed Charging
Priority of Working Mode:
Off-grid Mode>Peak Shaving>Delayed Charging>TOU Mode>Backup Mode>Self-use Mode
Exit
PREV
Next
Backup Mode
Save
Charging Power From Grid
ON:PV power prioritizes charging the battery If PV power is insufficient to charge, will purchase power from the grid for charging.
Charging Power
Range[0,100]%
100.0
100.0
Peak power of buying electricity for charging, percentage of inverter power
TOU Mode
Time
Add up to 8 sets of time
Month-Repeat
Week-Repeat
Charge Or Discharge Mode
Battery Discharge Power
Time
Save
Start Time
End Time
Repetition (Requires both monthly and weekly repetition to take effect)
Month-Repeat
None
Week-Repeat
None
Charge Or Discharge Mode
Battery Charging
Battery Discharge
Charge Cut-off SOC
0
0
Range[0,100]%
Delayed Charging
Save
Peak Power Sales Limit
100.0
100.0
Range[0,100]%
PV Prioritizes Charging Battery
ON: PV power generation changes from selling electricity to charging batteries
Start Charging Time
Suggest setting a time point with strong sunlight exposure
22:57
Every Month
Peak Shaving
Save
Reserved SOC for Peak Shaving
Range[0,100]%
Peak Power Purchase Limit
Range[0,1000]kW
Time For Charging From Grid
Quick Settings
Quick Setting Is Complete!
11
Complete

No.	Parameters	Description
Back-up mode		
1	Charging Power From Grid	Enable Charging Power From Grid to allow power purchasing from the utility grid.
2	Charging Power	The percentage of the purchasing power to the rated power of the inverter.
TOU mode		
3	Start Time	Within the Start Time and End Time, the battery is charged or discharged according to the set Battery Mode as well as the Rated Power.
4	End Time	
5	Charge or Discharge Mode	Set the battery mode to Charging or Discharging accordingly.
6	Charge Cut-off SOC	The battery stop charging/discharging once the battery SOC reaches Charge Cut-off SOC.
7	Rated Power	The percentage of the charging/discharging power to the rated power of the inverter.
Peakshaving		
8	Reserved SOC For Peakshaving	In Peak Shaving mode, the battery SOC should be lower than **Reserved SOC For Peakshaving**. Once the battery SOC is higher than **Reserved SOC For Peakshaving**, the peak shaving mode fails.
9	Peak Power Purchase Limit	Set the maximum power limit allowed to purchase from the grid. When the loads consume power exceed the sum of the power generated in the PV system and Peak Power Purchase Limit, the excess power will be made up by the battery.
10	Time for Charging From Grid	The utility grid will charge the battery between Start Time and End Time if the load power consumption do not exceed the power quota. Otherwise, only PV power can be used to charge the battery.
Delayed Charging		
11	Peak Power Sales Limit	Set the Peak Power Sales Limit in compliance with local laws and regulations. The power limit shall be lower then the output power limit specified by local requirements.
12	PV Prioritizes Charging Battery	During Charging time, the PV power will first charge the battery.
13	Start Charging Time	

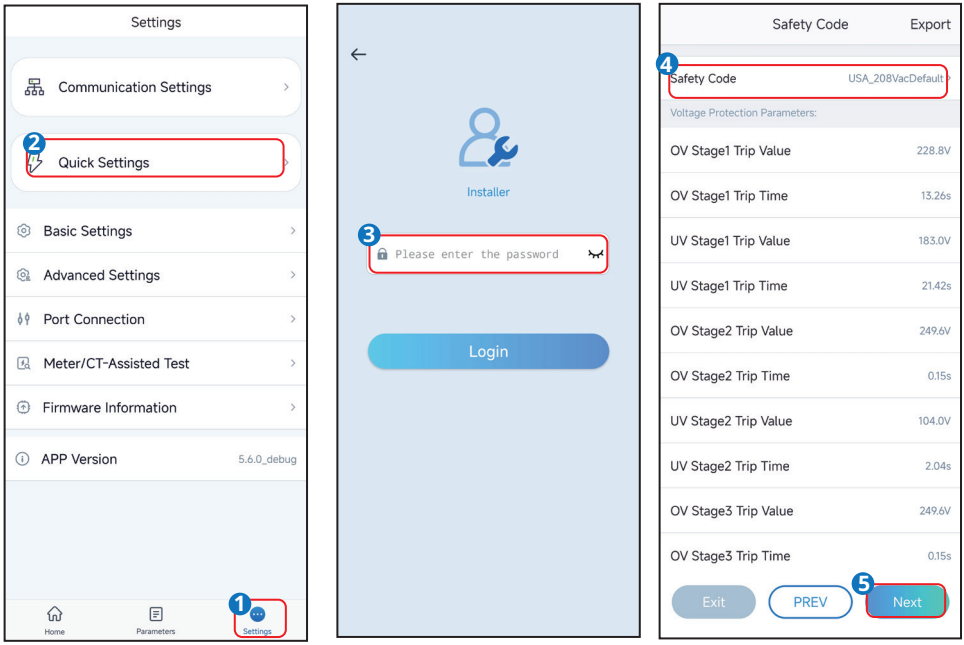
Type III

NOTICE

The parameters will be configured automatically after selecting the safety country/region, including overvoltage protection, undervoltage protection, overfrequency protection, underfrequency protection, voltage/frequency connection protection, cosφ curve, Q(U) curve, P(U) curve, FP curve, HVRT, LVRT, etc. Tap **Home > Settings > Advanced Settings > Safety Parameters** to check the parameters after selecting the safety country.

The power generation efficiency is different in different working modes. Set the working mode according to the local requirements and situation.

- **General Mode:** The power generated by the PV panels firstly supports the load, secondly it charges the battery, and the rest of the power is exported to the grid.
- **Forced Off-Grid Mode:** PV and batteries form a purely off-grid system, suitable for grid-free areas.
- **Backup mode:** Battery is only discharged for urgent use to support backup loads when grid is unavailable.
- **TOU mode:** It is recommended to use economic mode in scenarios when the peak-valley electricity price varies a lot. Select Economic mode only when it meets the local laws and regulations.
- **Peak Shaving Mode:** Peak Shaving mode is mainly applicable to industrial and commercial scenarios. When the total power consumption of the load exceeds the power consumption quota in a short period of time, battery discharge can be used to reduce the power exceeding the quota.



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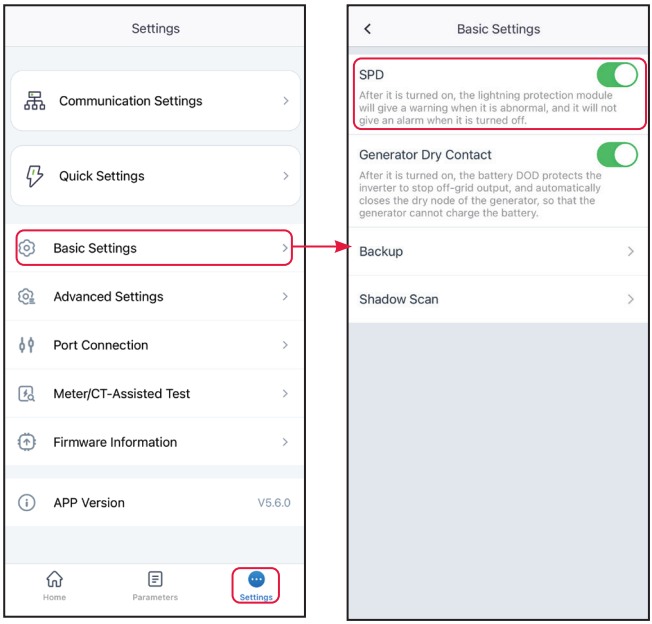
No.	Parameters	Description
TOU mode		
1	Start Time	Within the Start Time and End Time, the battery is charged or discharged according to the set battery mode as well as the Rated Power.
2	End Time	
3	Rated Power	The percentage of the charging/discharging power to the ratedpower of the inverter.
4	Select Mode	Set the battery mode to Charge or Discharge accordingly.
5	Charge Cut-off SOC	The battery stop charging/discharging once the battery SOC reaches Charge Cut-off SOC.
Delayed charging		
6	Peak Power Sales Limit	Set the Peak Power Sales Limit in compliance with local laws and regulations. The power limit shall be lower then the output power limit specified by local requirements.
7	PV Prioritizes Charging Battery	During charging time, the PV power will first charge the battery.
8	Start Charging Time	
Peakshaving		
9	Start Time	The utility grid will charge the battery between Start Time and End Time if the load power consumption do not exceed the power quota. Otherwise, only PV power can be used to charge the battery.
10	End Time	
11	Purchase Power Limit	Set the maximum power limit allowed to purchase from the grid. When the loads consume power exceed the sum of the power generated in the PV system and **Import Power Limit**, the excess power will be made up by the battery.
12	SOC	In Peak Shaving mode, the battery SOC should be lower than the set **SOC**. Once the battery SOC is higher than the set **SOC**, the peak shaving mode fails.

4.6 Setting the SPD

After enabling **SPD**, when the SPD module is abnormal, there will be SPD module abnormal alarm prompt.

Step 1 Tap **Home > Settings > Basic Settings > SPD**, to set the parameters.

Step 2 Tap or to enable or disable the function based on actual needs.

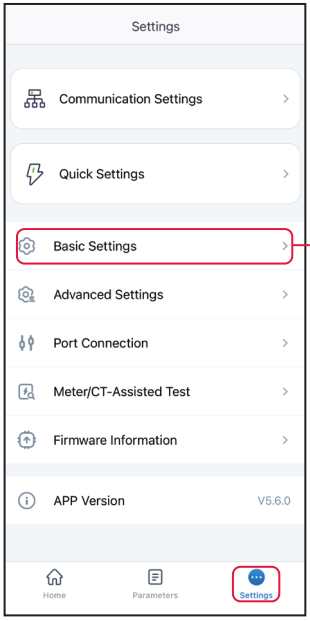


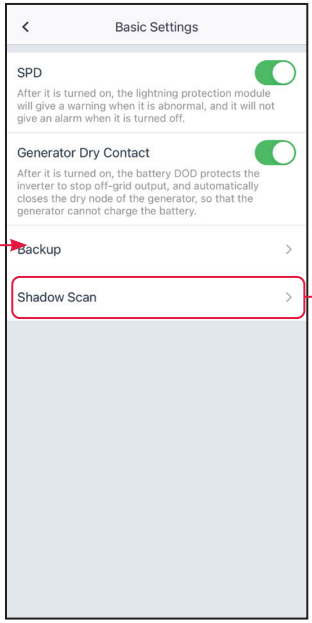
4.7 Setting the Shadow Scan

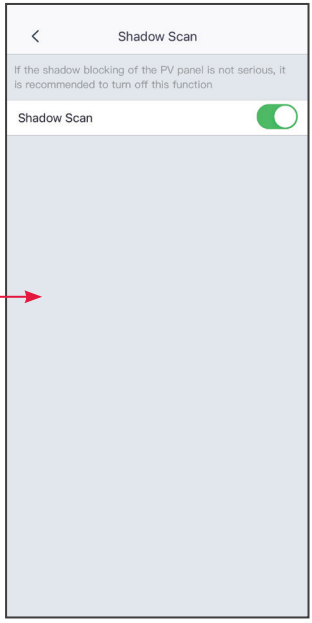
Enable Shadow Scan when the PV panels are severely shadowed to optimize the power generation efficiency.

Step 1 Tap **Home** > **Settings** > **Basic Settings**> **Shadow Scan**, to set the parameters.

Step 2 Tap or to enable or disable the function based on actual needs. Set the **Shadow Scan interval** and **MPPT shadow scan** if the inverter supports.





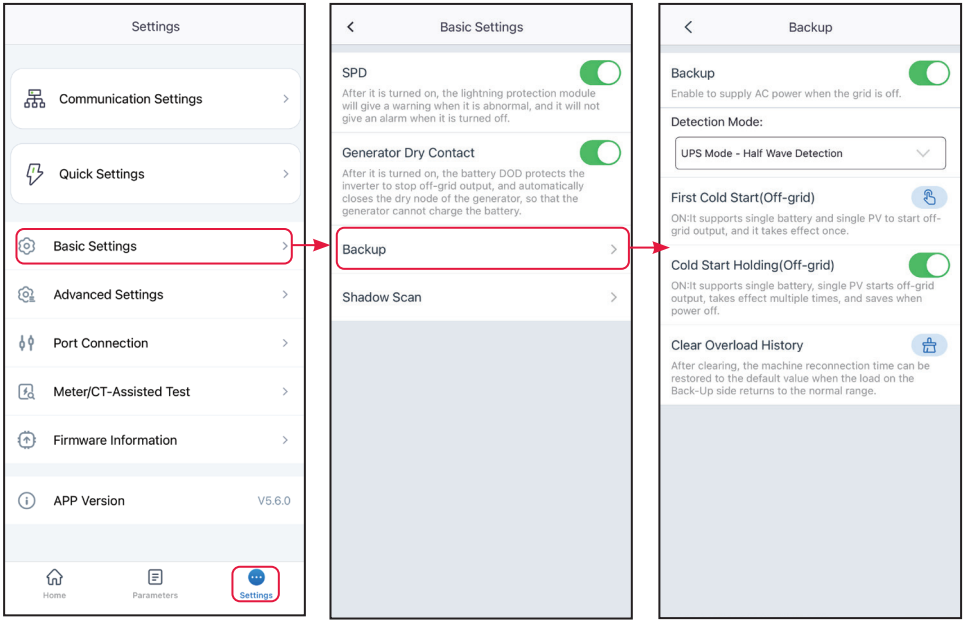


4.8 Setting the Back-up Power

After enabling Backup, the battery will power the load connected to the backup port of the inverter to ensure Uninterrupted Power Supply when the power grid fails.

Step 1 Tap **Home** > **Settings** > **Basic Settings** > **Backup**, to set the parameters.

Step 2 Set the backup supply function based on actual needs.



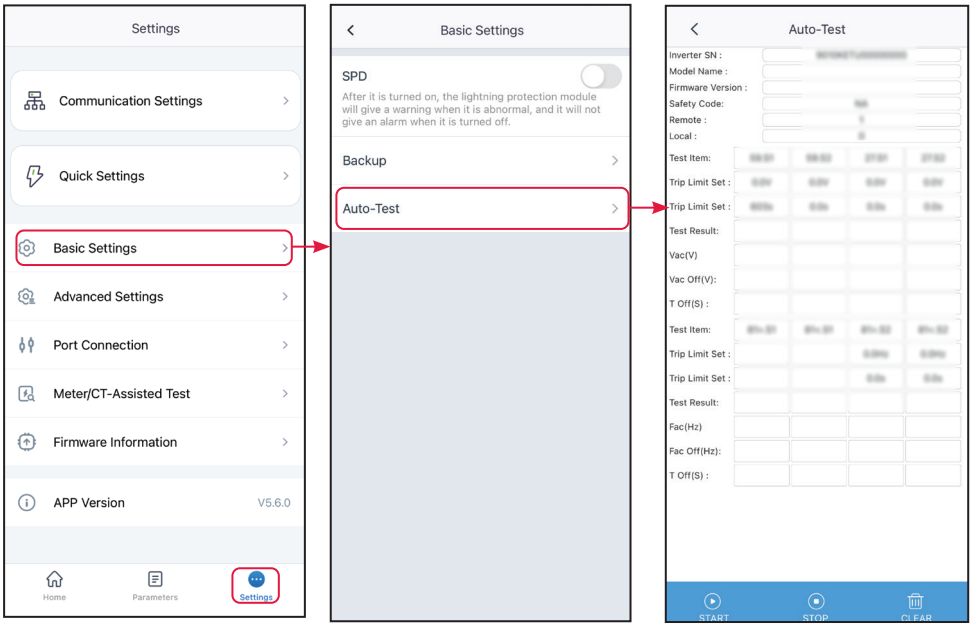
No.	Parameters	Description
1	UPS Mode - Full Wave Detection	Check whether the utility grid voltage is too high or too low.
2	UPS Mode - Half Wave Detection	Check whether the utility grid voltage is too low.
3	UPS Mode - Supports LVRT	Stop detecting utility grid voltage.
4	First Cold Start (Off-grid)	Take effect once. In off-grid mode, enable First Cold Start (Off-grid) to output backup supply with battery or PV.
5	Cold Start Holding (Off-grid)	Take effect multiple times. In off-grid mode, enable First Cold Start (Off-grid) to output backup supply with battery or PV.
6	Clear Overload History	Once the power of loads connected to the inverter BACK-UP ports exceeds the rated load power, the inverter will restart and detect the power again. The inverter will perform restart and detection several times until the overloading problem is solved. Tap **Clear Overload History** to reset the restart time interval after the power of the loads connected to the BACK-UP ports meets the requirements. The inverter will restart immediately.

4.9 Setting Auto-Test

Enable AUTO TEST to set auto test for grid tying in compliance with local grid standards and requirements.

Step 1 Tap **Home > Settings > Basic Settings > Auto Test** to set the parameters.

Step 2 Set Auto-Test based on actual needs.

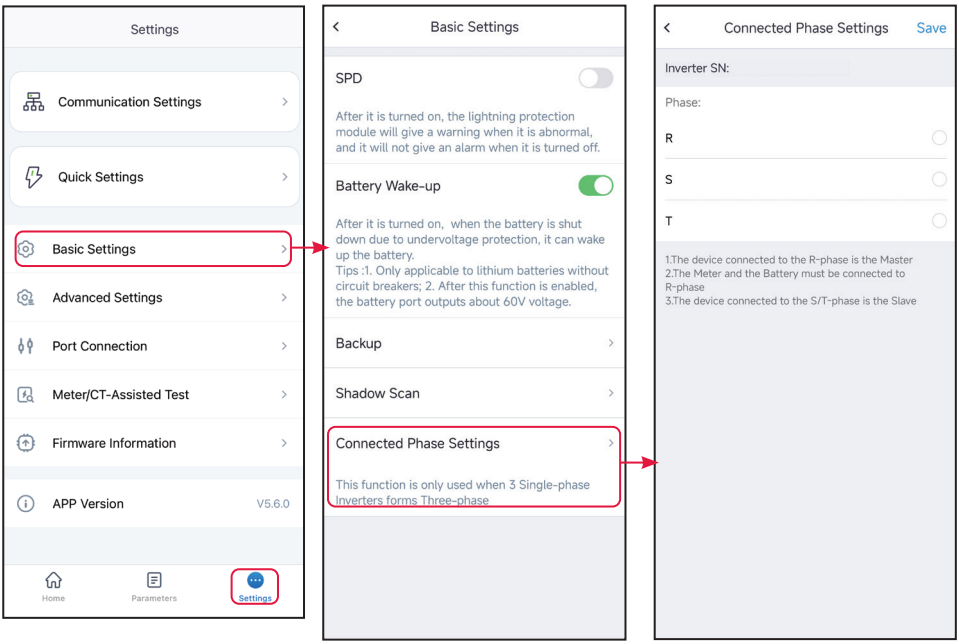


4.10 Setting the Connected Phase

The standards of some countries/regions require that the phase sequence of inverters should be set when three single phase inverters form a three phase equipment.

Step 1 Tap **Home > Settings > Basic Settings > Connected Phase Settings** to set the parameters.

Step 2 Set the phase sequence of the inverter based on actual connections. Tap **Save** to complete the settings.



4.11 Setting DRED/Remote Shutdown/RCR/EnWG 14a

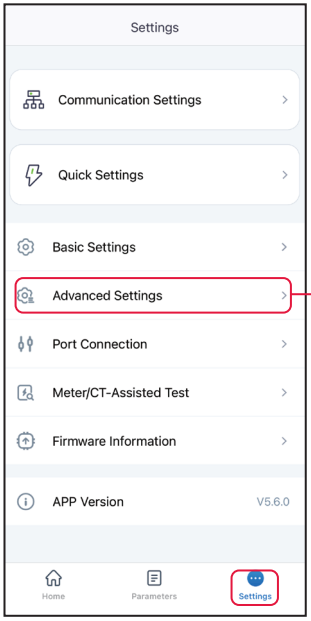
NOTICE
Contact the supplier or after sales service for Advanced Setting password. Password for professional technicians only.

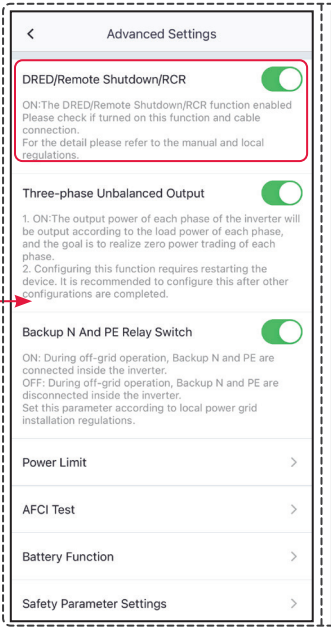
Enable **DRED/Remote Shutdown/RCR** before connecting the third party DRED, remote shutdown, or RCR device to comply with local laws and regulations.

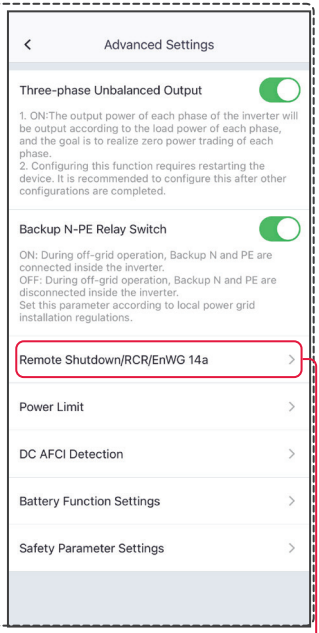
Step 1 Tap **Home > Settings > Advanced Settings > DRED/Remote Shutdown/RCR** to set the parameters.

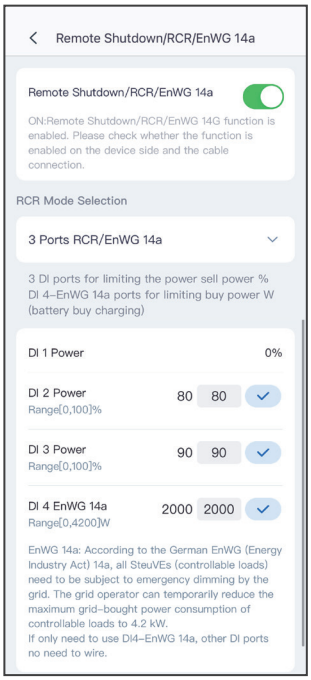
Step 2 Tap or to enable or disable the function based on actual needs.

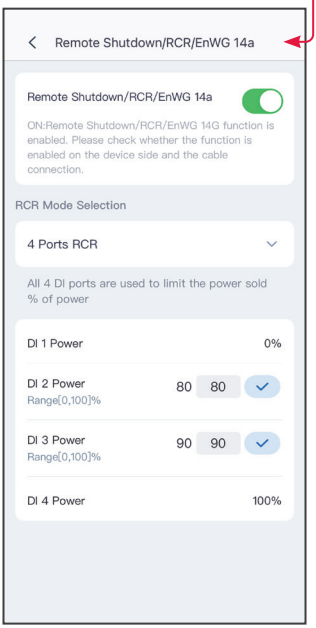
Step 3 For areas where the EnWG 14a regulation applies, when enabling the RCR function, you need to select the RCR mode according to the actual device type and set the DI port power.


Settings
Communication Settings
Quick Settings
Basic Settings
Advanced Settings
Port Connection
Meter/CT-Assisted Test
Firmware Information
APP Version
V5.6.0
Home
Parameters
Settings


Advanced Settings
DRED/Remote Shutdown/RCR
ON:The DRED/Remote Shutdown/RCR function enabled Please check if turned on this function and cable connection.
For the detail please refer to the manual and local regulations.
Three-phase Unbalanced Output
1. ON:The output power of each phase of the inverter will be output according to the load power of each phase, and the goal is to realize zero power trading of each phase.
2. Configuring this function requires restarting the device. It is recommended to configure this after other configurations are completed.
Backup N And PE Relay Switch
ON: During off-grid operation, Backup N and PE are connected inside the inverter.
OFF: During off-grid operation, Backup N and PE are disconnected inside the inverter.
Set this parameter according to local power grid installation regulations.
Power Limit
AFCI Test
Battery Function
Safety Parameter Settings


Advanced Settings
Three-phase Unbalanced Output
1. ON:The output power of each phase of the inverter will be output according to the load power of each phase, and the goal is to realize zero power trading of each phase.
2. Configuring this function requires restarting the device. It is recommended to configure this after other configurations are completed.
Backup N-PE Relay Switch
ON: During off-grid operation, Backup N and PE are connected inside the inverter.
OFF: During off-grid operation, Backup N and PE are disconnected inside the inverter.
Set this parameter according to local power grid installation regulations.
Remote Shutdown/RCR/EnWG 14a
Power Limit
DC AFCI Detection
Battery Function Settings
Safety Parameter Settings


Remote Shutdown/RCR/EnWG 14a
Remote Shutdown/RCR/EnWG 14a
ON:Remote Shutdown/RCR/EnWG 14G function is enabled. Please check whether the function is enabled on the device side and the cable connection.
RCR Mode Selection
3 Ports RCR/EnWG 14a
3 DI ports for limiting the power sell power %
DI 4–EnWG 14a ports for limiting buy power W (battery buy charging)
DI 1 Power 0%
DI 2 Power 80 80
Range[0,100]%
DI 3 Power 90 90
Range[0,100]%
DI 4 EnWG 14a 2000 2000
Range[0,4200]W
EnWG 14a: According to the German EnWG (Energy Industry Act) 14a, all SteuVEs (controllable loads) need to be subject to emergency dimming by the grid. The grid operator can temporarily reduce the maximum grid-bought power consumption of controllable loads to 4.2 kW.
If only need to use DI4–EnWG 14a, other DI ports no need to wire.

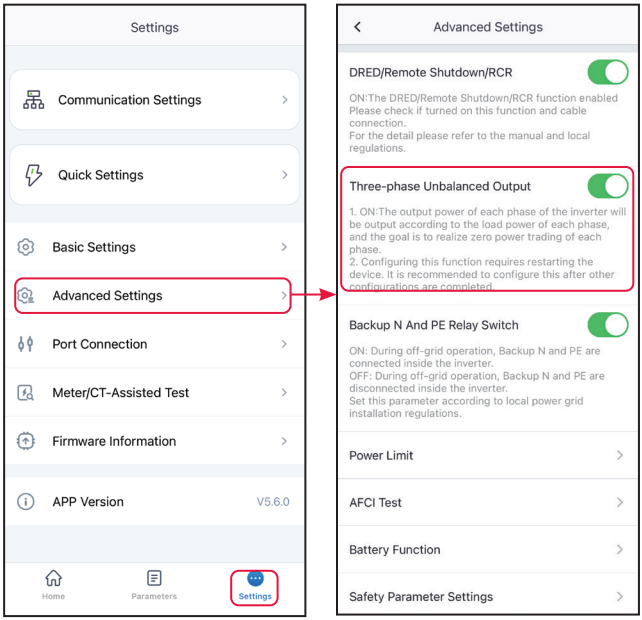

Remote Shutdown/RCR/EnWG 14a
Remote Shutdown/RCR/EnWG 14a
ON:Remote Shutdown/RCR/EnWG 14G function is enabled. Please check whether the function is enabled on the device side and the cable connection.
RCR Mode Selection
4 Ports RCR
All 4 DI ports are used to limit the power sold % of power
DI 1 Power 0%
DI 2 Power 80 80
Range[0,100]%
DI 3 Power 90 90
Range[0,100]%
DI 4 Power 100%

4.12 Setting Three-phase Unbalanced Output

Enable the Three-phase unbalanced output when connecting unbalanced loads, which means L1, L2, L3 of the inverter respectively connected to loads with different power. Only for three phase inverters.

Step 1 Tap **Home > Settings > Advanced Settings > Three-phase Unbalanced Output** to set the parameters.

Step 2 Tap or to enable or disable the function based on actual needs.

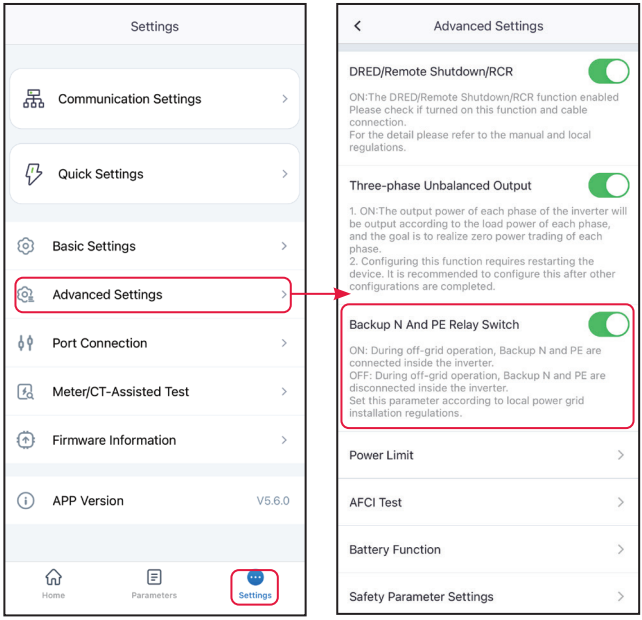


4.13 Setting the Backup N and PE Relay Switch

To comply with local laws and regulations, ensure that the relay inside the back-up port remains closed and the N and PE wires are connected when the inverter is working off-grid.

Step 1 Tap **Home > Settings > Advanced Settings > Backup N and PE Relay Switch** to set the parameters.

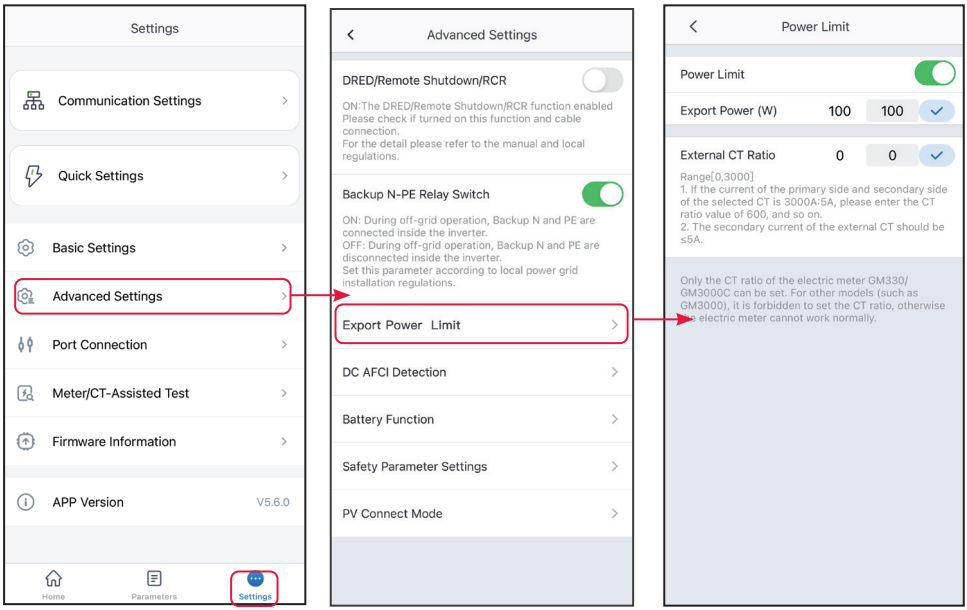
Step 2 Tap or to enable or disable the function based on actual needs.



4.14 Setting Power Limit Parameters

4.14.1 Power Limit Setting (For countries/regions except Australia)

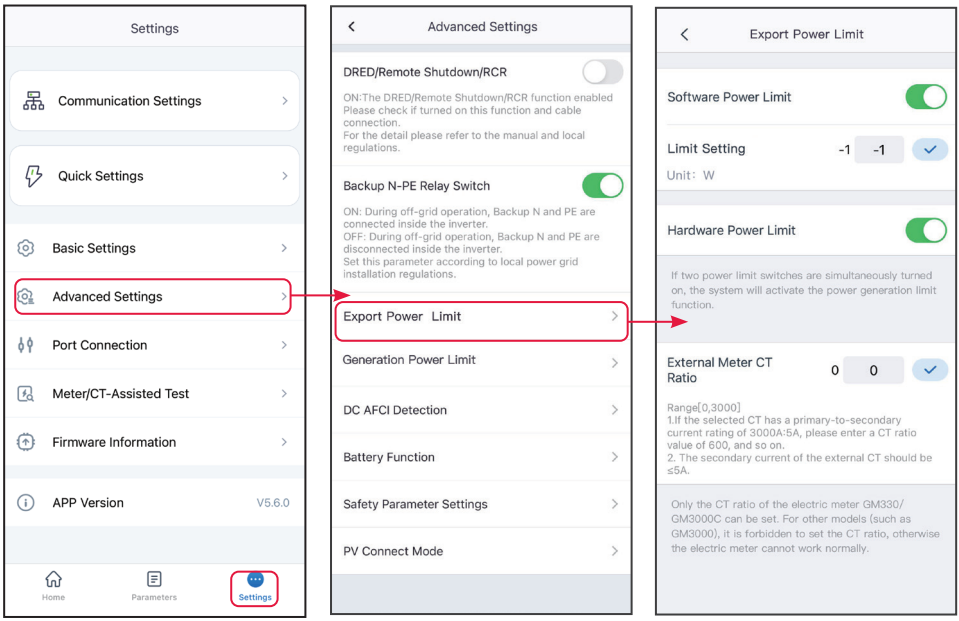
Step 1 Tap **Home > Settings > Advanced Settings > Export Power Limit** to set the parameters.
Step 2 Tap or to enable or disable the function based on actual needs.
Step 3 Enter the parameters and tap √. The parameters are set successfully.



No.	Parameters	Description
1	Power Limit	Enable **Power Limit** when power limiting is required by local grid standards and requirements.
2	Export Power	Set the value based on the actual maximum power feed into the utility grid.
3	External CT Ratio	Set the ratio of the primary current to the secondary current of the external CT.

4.14.2 Power Limit Setting (Only for Australia)

Step 1 Tap **Home > Settings > Advanced Settings > Export Power Limit** to set the parameters.
Step 2 Tap or to enable or disable the function based on actual needs.
Step 3 Enter the parameters and tap √. The parameters are set successfully.

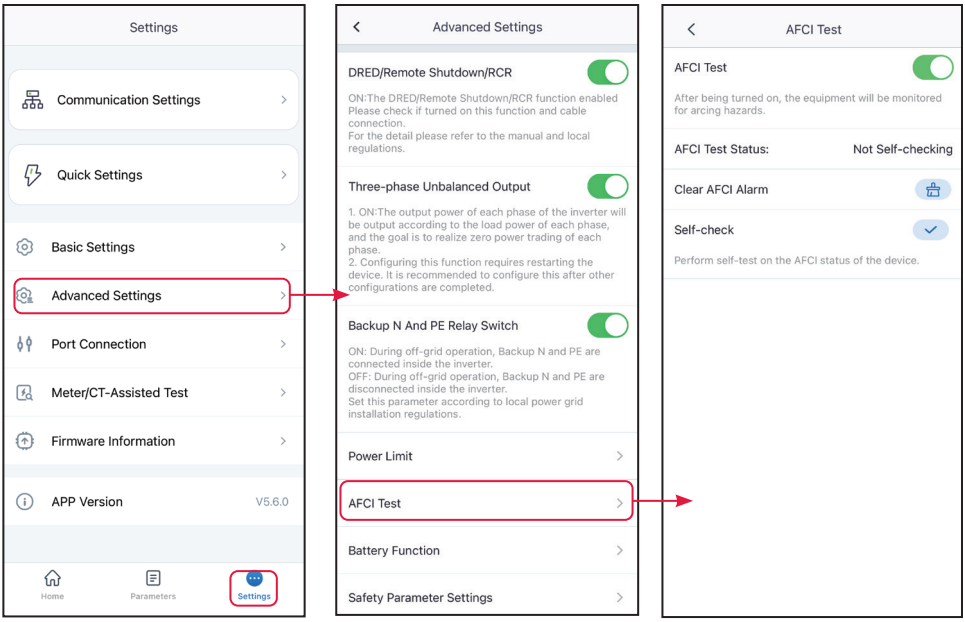


No.	Parameters	Description
1	Software Power Limit	Enable Soft Limit when power limiting is required by local grid standards and requirements.
2	Limit Setting	Set the value based on the actual maximum power feed into the utility grid.
3	Hardware Power Limit	After enabling this function, the inverter and the utility grid will automatically disconnect when the power feeds into the grid exceeds the required limit.
4	External CT Ratio	Set the ratio of the primary current to the secondary current of the external CT.

4.15 Set the AFCI Detection

Step 1 Tap **Home** > **Settings** > **Advanced Settings** > **AFCI Test** to set the parameters.

Step 2 Enable **AFCI Test**, Clear AFCI Alarm and Self-Check based on actual needs.



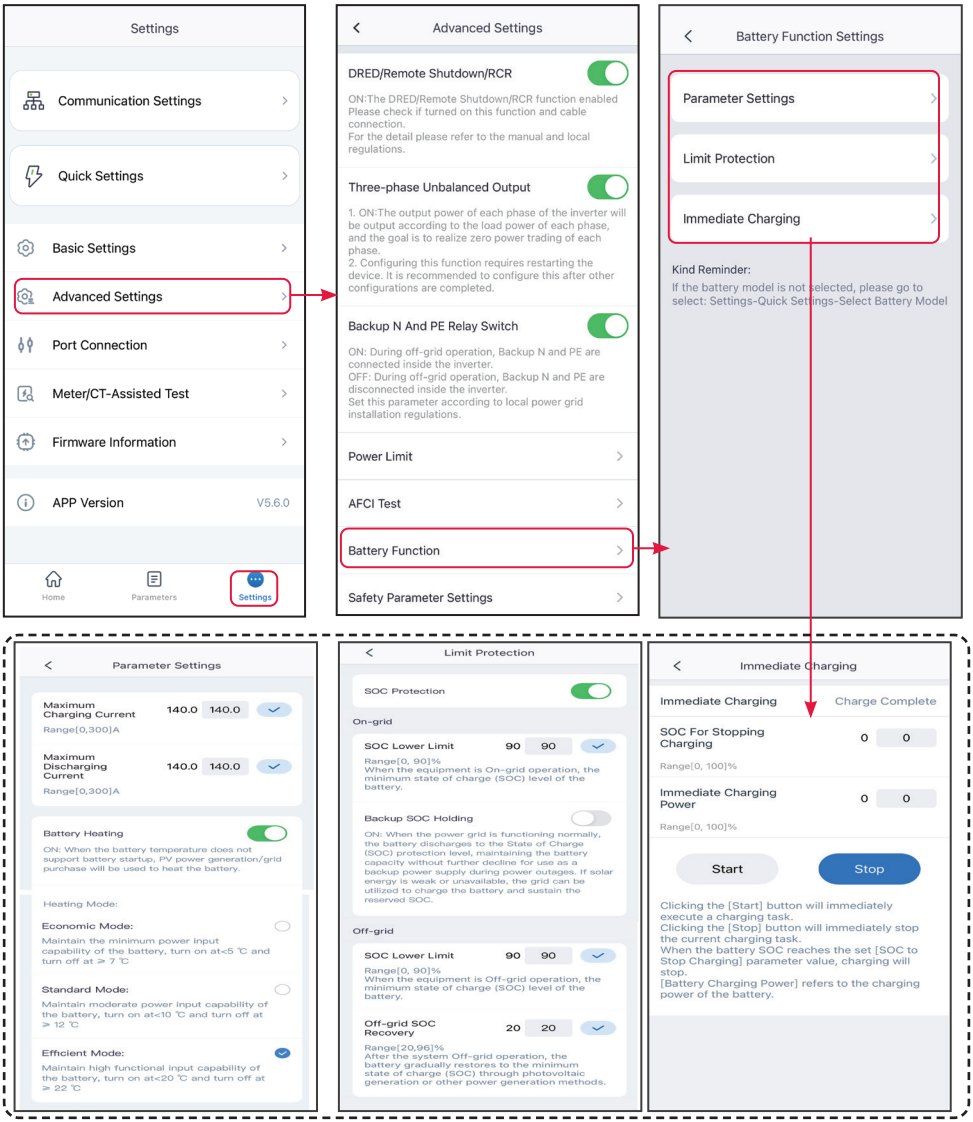
No.	Parameters	Description
1	AFCI Test	Enable or disable AFCI accordingly.
2	AFCI Test Status	The detection status like Not Self-checking.
3	Clear AFCI Alarm	Clear alarm records.
4	Self-check	Tap to check whether the AFCI function works normally.

4.16 Setting the Battery

Step 1 Tap **Home > Settings > Advanced Settings > Battery Function Setting** to set the parameters.

Step 2 Enter the parameters and tap '√'. The parameters are set successfully.

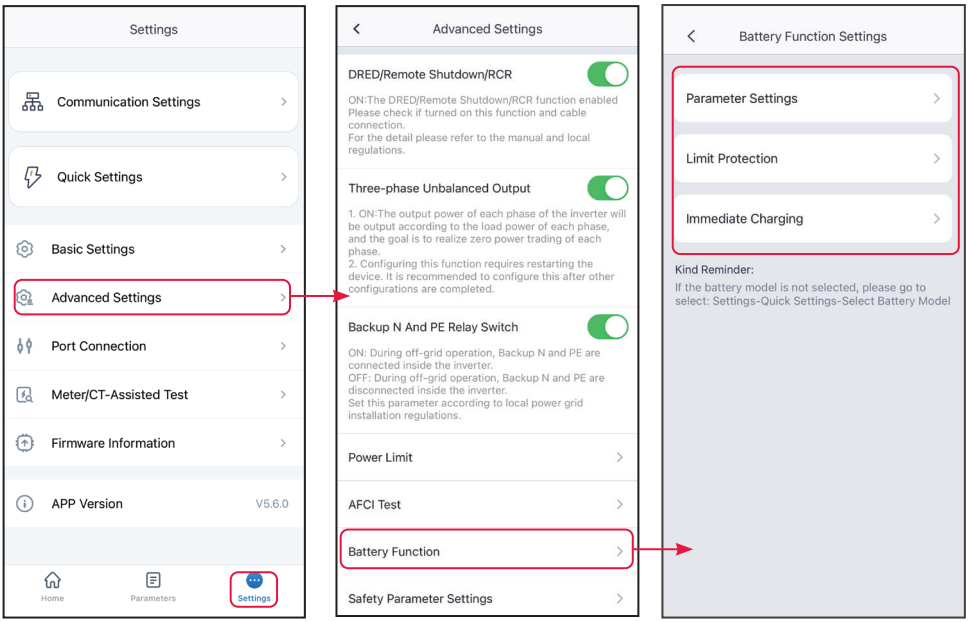
Lithium battery

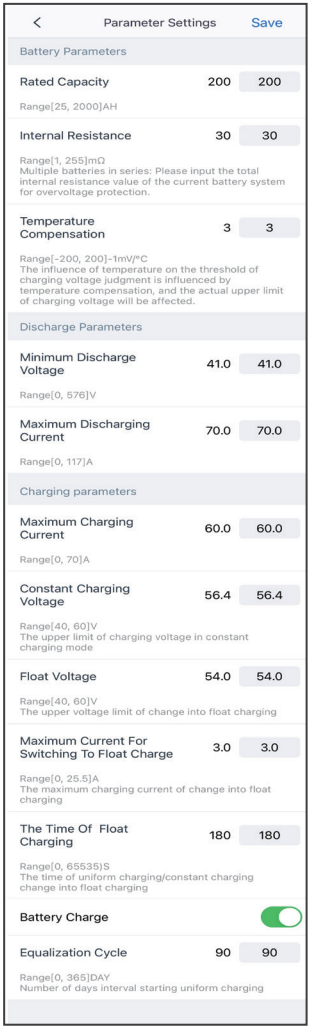


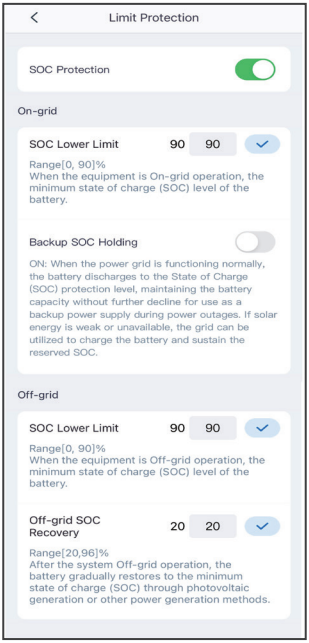
No.	Parameters	Description
Parameters Setting		
1	Maximum Charging Current	Set the maximum charging current based on actual needs.
2	Maximum Discharging Current	Set the maximum discharging current based on actual needs.
3	Battery Heating	Optional. This option is displayed on the interface when a battery that supports heating is connected. After the battery heating function is turned on, when the temperature is below the value that starts up the battery, PV power or electricity from the grid will be used to heat the battery. Heating Mode: • TOU mode: to maintain the minimum power input capacity of the battery. It will be turned on when the temperature is less than 5℃, and turned off when it is greater than or equal to 7℃. • Standard Mode: to maintain the moderate power input capacity of the battery. It will be turned on when the temperature is less than 10℃, and turned off when it is greater than or equal to 12℃. • Efficient Mode: to maintain the higher power input capacity of the battery. It will be turned on when the temperature is less than 20℃, and turned off when it is greater than or equal to 22℃.
4	Battery Wake-up	After turned on, the battery can be awakened when it shuts down due to undervoltage protection. Only applicable to lithium batteries without circuit breakers. After turned on, the output voltage of the battery port is about 60V.
Limit Protection		
5	SOC Protection	Start battery protection when the battery capacity is lower than the Depth of Discharge.
6	SOC Lower Limit (On-Grid)	Indicates the minimum state of charge the battery must maintain during grid-tied operation.
7	Backup SOC Holding	The battery will be charged to preset SOC protection value by purchasing from the grid when the system is running on-grid. So that the battery SOC is sufficient to maintain normal working when the system is off-grid.
8	SOC Lower Limit (Off-Grid)	Indicates the minimum state of charge the battery must maintain during off-grid operation.
9	Off-grid SOC Recovery	In off-grid mode, the inverter stops output and only charges the battery when battery SOC reaches the lower limit, until SOC recovers to the Off-grid SOC Recovery. If the lower limit exceeds the recovery value, the inverter charges to SOC lower limit +10%.

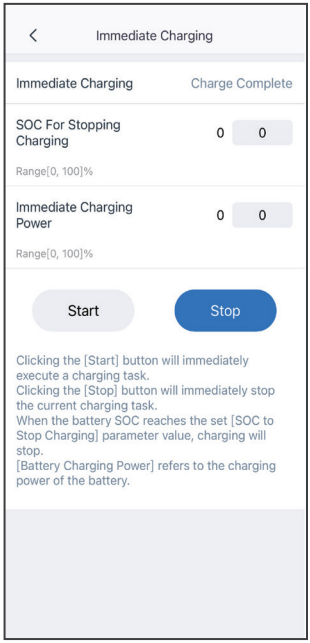
No.	Parameters	Description
Immediate Charging		
10	Immediate Charging	Enable to charge the battery by the grid immediately. This takes effect once. Enable or Disable based on actual needs.
11	SOC For Stopping Charging	Stop charging the battery once the battery SOC reaches **SOC For Stopping Charging.**
12	Immediate Charging Power	Indicates the percentage of the charging power to the inverter rated power when enabling **Immediate Charging**. For example, setting the **Immediate Charging Power** of a 10kW inverter to 60 means the charging power of the inverter is 10kW*60%=6kW.
13	Start	Tap to start charging immediately.
14	Stop	Tap to stop charging immediately.

Lead Acid Battery




Parameter Settings
Save
Battery Parameters
Rated Capacity
200
200
Range[25, 2000]AH
Internal Resistance
30
30
Range[1, 255]mΩ
Multiple batteries in series: Please input the total internal resistance value of the current battery system for overvoltage protection.
Temperature Compensation
3
3
Range[-200, 200]-1mV/°C
The influence of temperature on the threshold of charging voltage judgment is influenced by temperature compensation, and the actual upper limit of charging voltage will be affected.
Discharge Parameters
Minimum Discharge Voltage
41.0
41.0
Range[0, 576]V
Maximum Discharging Current
70.0
70.0
Range[0, 117]A
Charging parameters
Maximum Charging Current
60.0
60.0
Range[0, 70]A
Constant Charging Voltage
56.4
56.4
Range[40, 60]V
The upper limit of charging voltage in constant charging mode
Float Voltage
54.0
54.0
Range[40, 60]V
The upper voltage limit of change into float charging
Maximum Current For Switching To Float Charge
3.0
3.0
Range[0, 25.5]A
The maximum charging current of change into float charging
The Time Of Float Charging
180
180
Range[0, 65535]S
The time of uniform charging/constant charging change into float charging
Battery Charge
Equalization Cycle
90
90
Range[0, 365]DAY
Number of days interval starting uniform charging


Limit Protection
SOC Protection
On-grid
SOC Lower Limit
90
90
Range[0, 90]%
When the equipment is On-grid operation, the minimum state of charge (SOC) level of the battery.
Backup SOC Holding
ON: When the power grid is functioning normally, the battery discharges to the State of Charge (SOC) protection level, maintaining the battery capacity without further decline for use as a backup power supply during power outages. If solar energy is weak or unavailable, the grid can be utilized to charge the battery and sustain the reserved SOC.
Off-grid
SOC Lower Limit
90
90
Range[0, 90]%
When the equipment is Off-grid operation, the minimum state of charge (SOC) level of the battery.
Off-grid SOC Recovery
20
20
Range[20,96]%
After the system Off-grid operation, the battery gradually restores to the minimum state of charge (SOC) through photovoltaic generation or other power generation methods.


Immediate Charging
Immediate Charging
Charge Complete
SOC For Stopping Charging
0
0
Range[0, 100]%
Immediate Charging Power
0
0
Range[0, 100]%
Start
Stop
Clicking the [Start] button will immediately execute a charging task.
Clicking the [Stop] button will immediately stop the current charging task.
When the battery SOC reaches the set [SOC to Stop Charging] parameter value, charging will stop.
[Battery Charging Power] refers to the charging power of the battery.

No.	Parameters	Description
Parameter Settings		
1	Rated Capacity	Set the battery capacity based on actual connected battery.
2	Internal Resistance	Set the battery internal resistance based on actual connected battery.
3	Temperature Compensation	• The battery charging voltage will be influenced by the battery temperature. Based on 25℃, each time the battery temperature changes 1℃, the upper limit of the charging voltage will be adjusted according to the **Temperature Compensation**. • For example, if the **Temperature Compensation** is 10, when the battery temperature rises to 26℃, the upper limit of the charging voltage will decrease by 10mV.
4	Lower Limit of Discharge Voltage	Set the minimum voltage during battery discharging based on actual needs.
5	Maximum Discharging Current	Set the maximum discharging current based on actual needs.
6	Maximum Charging Current	Set the maximum charging current based on actual needs.
7	Constant Charging Voltage	Set the charging voltage during constant charging based on actual needs.
8	Float Voltage	Set the charging voltage during floating charging based on actual needs.
9	Maximum Current For Switching To Float Charge	Set the maximum charging current when the charging mode switch from equalization/constant charging to float charging.
10	The Time of Float Charging	Set the switching time when the charging mode switch from equalization/constant charging to float charging.
11	Equalization Cycle	Set the charging intervals for equalization charge.
Limit Protection		
12	SOC Protection	Start battery protection when the battery capacity is lower than the **Depth of Discharge**.
13	SOC Lower Limit (On-Grid)	Indicates the minimum state of charge the battery must maintain during grid-tied operation.
14	Backup SOC Holding	The battery will be charged to preset SOC protection value by purchasing from the grid when the system is running on-grid. So that the battery SOC is sufficient to maintain normal working when the system is off-grid.

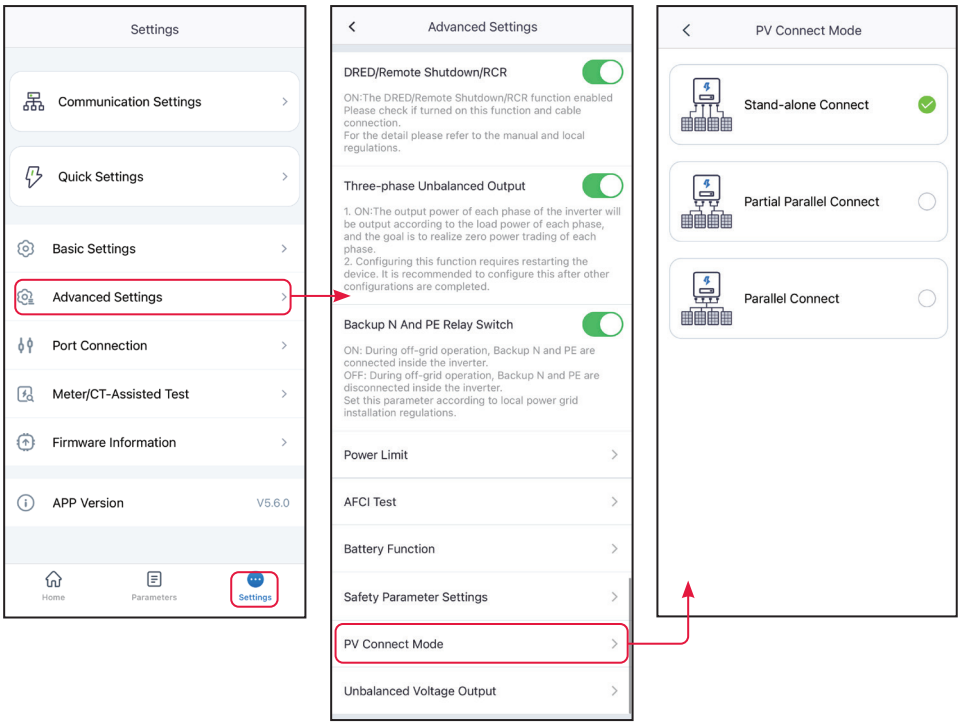
No.	Parameters	Description
15	SOC Lower Limit (Off-Grid)	Indicates the minimum state of charge the battery must maintain during off-grid operation.
16	Off-grid SOC Recovery	In off-grid mode, the inverter stops output and only charges the battery when battery SOC reaches the lower limit until SOC recovers to the **Off-grid SOC Recovery.** If the lower limit exceeds the recovery value, the inverter charges to SOC lower limit +10%.
Immediate Charging		
17	SOC For Stopping Charging	Stop charging the battery once the battery SOC reaches **SOC For Stopping Charging**.
18	Immediate Charging Power	Indicates the percentage of the charging power to the inverter rated power when enabling **Immediate Charging**. For example, setting the **Immediate Charging Power** of a 10kW inverter to 60 means the charging power of the inverter is 10kW*60%=6kW.
19	Start	Tap to start charging immediately.
20	Stop	Tap to stop charging immediately.

4.17 Setting PV Connect Mode

Select the PV access mode based on the actual connections between the PV strings and MPPT ports of the inverter.

Step 1 Tap Home > **Settings** > **Advanced Settings** > **PV Connect Mode** to set the parameters.

Step 2 Set the access mode to **Independent Access**, **Partial Parallel Connect** or **Parallel Connection** based on actual connections. Tap **Save** to complete the settings.



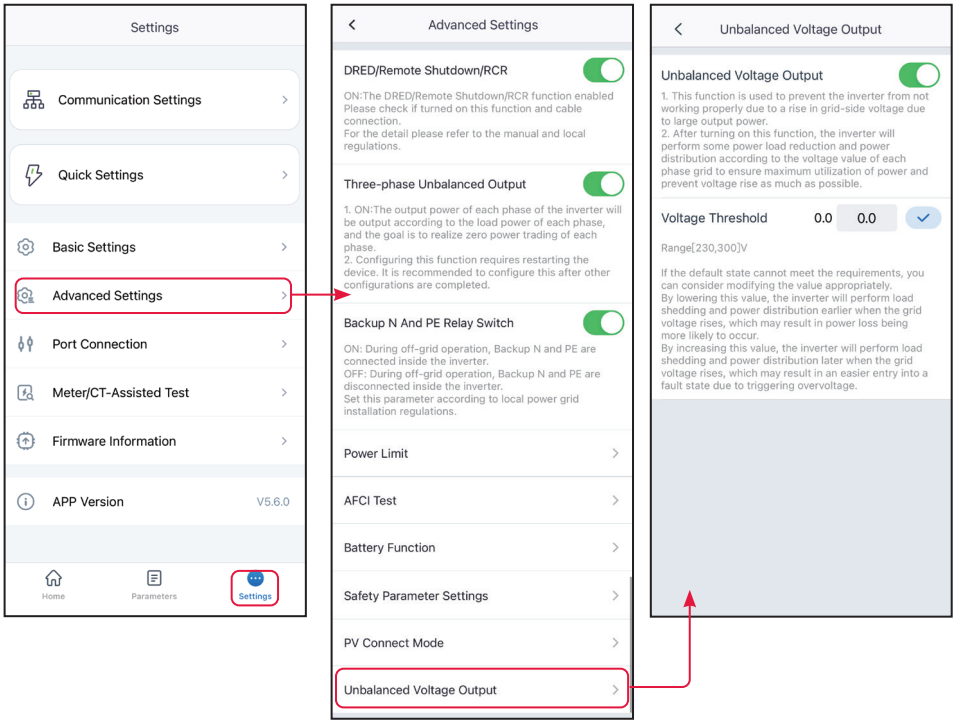
No.	Parameters	Description
1	Stand-alone Connect	The PV strings are connected to the MPPT terminals one by one.
2	Partial Parallel Connect	The PV strings are connected to the inverter in both stand-alone and parallel connection. For example, one PV string connect to MPPT1 ad MPPT2, another PV string connect to MPPT3.
3	Parallel Connect	The external PV string is connected to multi MPPT terminals of the inverter.

4.18 Setting the Unbalance Voltage Function

Step 1 Tap **Home > Settings > Advanced Settings > Unbalance Voltage Function** to se the parameters.

Step 2 Tap or to enable or disable the function based on actual needs.

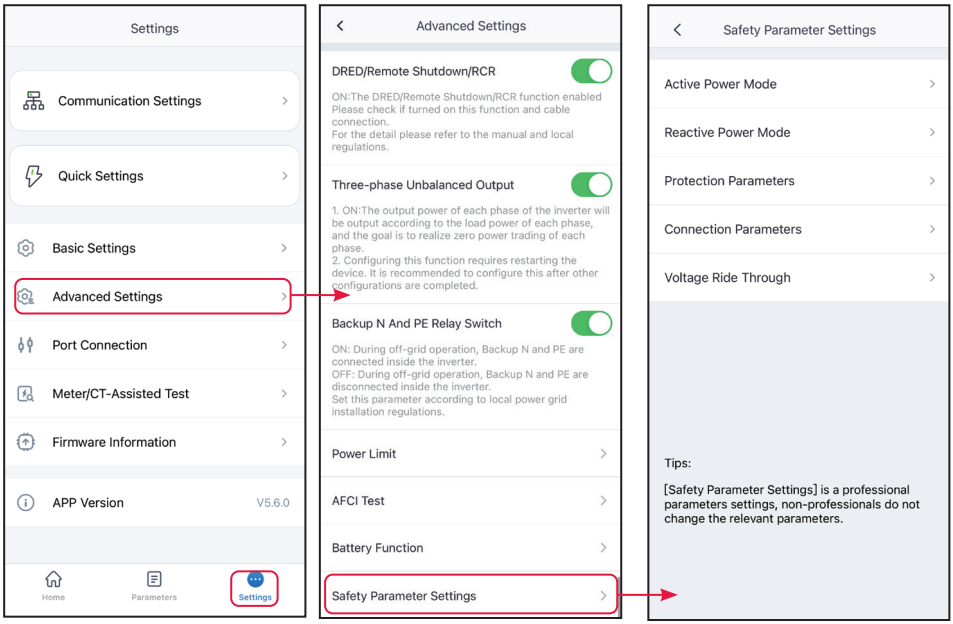
Step 3 After enabling the Unbalance Voltage Function, set parameters based on actual needs. And tap '√'.The parameters are set successfully.



4.19 Setting Safety Parameters

NOTICE

Set the custom safety parameters in compliance with local requirements. Do not change the parameters without the prior consent of the grid company.

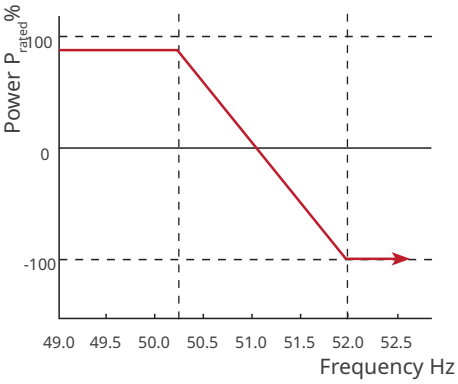


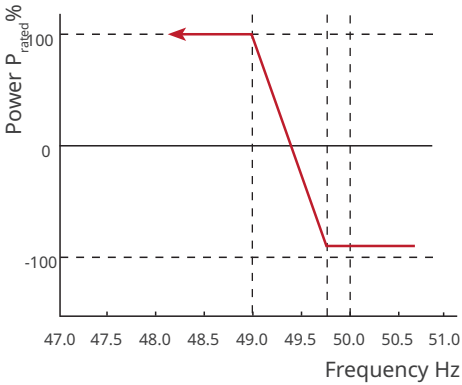
4.19.1 Setting the Active Curve

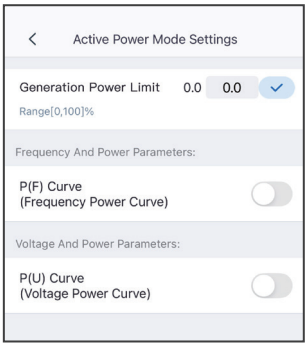
4.19.1.1 Setting the P(F) Curve

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Active Curve Settings** to set the parameters.

Step 2 Set the parameters based on actual needs.







No.	Parameters	Description
1	Generation Power Limit	Set the output power of the inverter.
2	P(F) Curve	Enable P(F) Curve when it is required by local grid standards and requirements.
3	Overfrequency Threshold	The inverter output active power will decrease when the utility grid frequency is too high. The inverter output power will decrease when the utility grid frequency is higher than **Overfrequency Threshold**.
4	Overfrequency Endpoint	The inverter output active power will decrease when the utility grid frequency is too high. The inverter output power will stop decreasing when the utility grid frequency is higher than **Overfrequency Endpoint**.
5	Overfrequency Unloading	The inverter output active power will decrease when the utility grid frequency is too high.
6	Underfrequency Threshold	The inverter output active power will increase when the utility grid frequency is too low. The inverter output power will increase when the utility grid frequency is lower than **Underfrequency Threshold**.
7	Underfrequency Endpoint	The inverter output active power will increase when the utility grid frequency is too low. The inverter output power will stop increasing when the utility grid frequency is lower than **Underfrequency Endpoint**.
8	Power Response to Underfrequency Gradient	The inverter output active power will increase when the utility grid frequency is too low. Indicates the slope when the inverter output power increases.
9	Observation Time	Indicates the time the output power of the inverter needs for recovering after the power grid recovers.
10	Upper Frequency	The inverter output active power will decrease when the utility grid frequency is too high. The inverter output power will increase when the utility grid frequency is lower than **Underfrequency Threshold**.

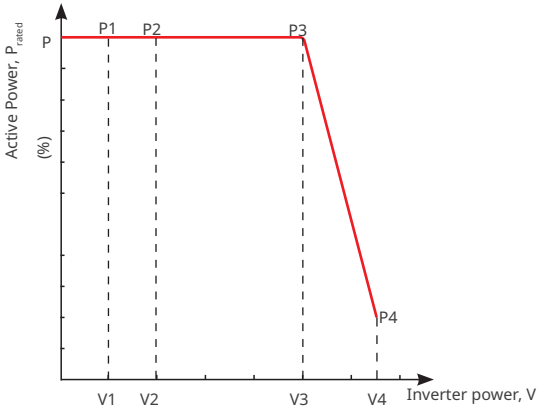
No.	Parameters	Description
11	Lower Frequency	The inverter output active power will increase when the utility grid frequency is too low. The inverter output power will decrease when the utility grid frequency is higher than **Overfrequency Threshold**.
12	Reconnection Gradient	Indicates the variation slope when the power recovers.
13	Recovery Power Slope	Indicates the variation slope when the power recovers.

4.19.1.2 Setting the P(U) Curve

When the grid voltage is too high, decrease the inverter output power to decrease the grid-tied power.

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Active Curve Settings** to set the parameters.

Step 2 Enter the parameters. The inverter will adjust the active output power to the apparent power ratio in real-time according to the actual grid voltage to the rated voltage ratio.



No.	Parameters	Description
1	P(U) Curve	Enable P(U) Curve when it is required by local grid standards and requirements.
2	Vn Voltage	The percentage of actual voltage to the rated voltage at Vn point, n=1, 2, 3, 4. For example, setting **Vn Voltage** to 90 means V/V_{rated}%=90%.
3	Vn Active Power	The percentage of the output active power to the apparent power at Vn point, (n=1, 2, 3, 4). For example, setting **Vn Reactive Power** to 48.5 means P/P_{rated}%=48.5%
4	Time Constant	The power is required to reach 95% in the first order LPF curve within three time constant.

4.19.2 Setting the Reactive Power Mode

4.19.2.1 Setting the Fix PF

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Reactive Power Mode Settings** to set the parameters.

Step 2 Set the parameter based on actual needs. The power factor remains fixed during the inverter working process.

No.	Parameters	Description
1	Fix PF	Enable Fix PF when it is required by local grid standards and requirements.
2	Under-excited	Set the power factor as lagging or leading based on actual needs and local grid standards and requirements.
3	Over-excited	
4	Power Factor	Set the power factor based on actual needs. Range: 0-~-0.8, or +0.8~+1.

4.19.2.2 Setting the Fix Q

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Reactive Power Mode Settings** to set the parameters.

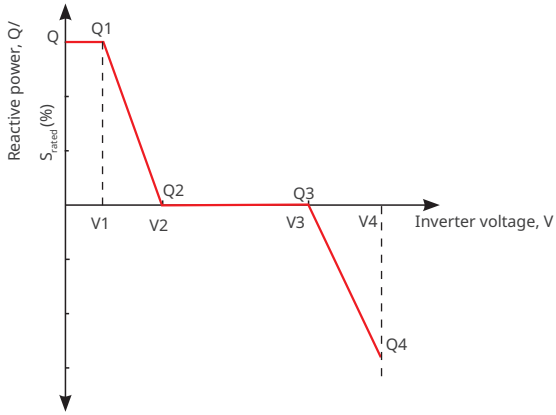
Step 2 Set the parameter based on actual needs. The output reactive power remains fixed during the inverter working process.

No.	Parameters	Description
1	Fix Q	Enable Fix Q when it is required by local grid standards and requirements.
2	Under-excited	Set the reactive power as inductive or capacitive reactive power based on actual needs and local grid standards and requirements.
3	Over-excited	
4	Reactive Power	The percentage of reactive power to the apparent power.

4.19.2.3 Setting the Q(U) Curve

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Reactive Power Mode Settings** to set the parameters.

Step 2 Enter the parameters. The inverter will adjust the reactive power to the apparent power ratio in real-time according to the actual grid voltage to the rated voltage ratio.

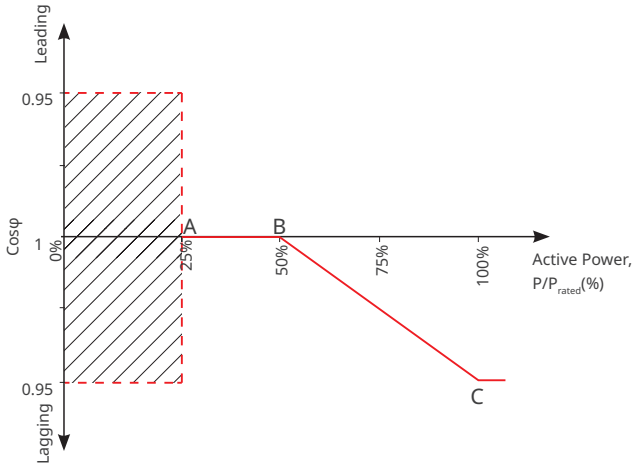


No.	Parameters	Description
1	Q(U) Curve	Enable Q(U) Curve when it is required by local grid standards and requirements.
2	Vn Voltage	The percentage of actual voltage to the rated voltage at Vn point, n=1, 2, 3, 4. For example, setting **Vn Voltage** to 90 means V/V_{rated}%=90%.
3	Vn Reactive Power	The percentage of the reactive output power to the apparent power at Vn point, n=1, 2, 3, 4. For example, setting **Vn Reactive Power** to 48.5 means Q/S_{rated}%=48.5%
4	Time Constant	The power is required to reach 95% in the first order LPF curve within three time constant.
5	Lock-In Power	When the inverter output reactive power to the rated power ratio is between the Lock-in power and Lock-out power, the ratio meets Q(U) curve requirements.
6	Lock-out Power	
7	Min. cosPhi	Set the lower limit of the power factor.

4.19.2.4 Setting the Cosφ Curve

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Reactive Power Mode Settings** to set the parameters.

Step 2 Enter the parameters. The inverter will adjust the active output power to the apparent power ratio in real-time according to the actual grid voltage to the rated voltage ratio.



No.	Parameters	Description
1	Cosφ(P) Curve	Enable Cosφ Curve when it is required by local grid standards and requirements.
2	Point A/B/C/D Power	The percentage of the inverter output active power to the rated power at point A/B/C/D.
3	Point A/B/C/D Cosφ	The power factor at point A/B/C/D.
4	Time Constant	The power is required to reach 95% in the first order LPF curve within three time constant.
5	Lock-in Voltage	When the grid voltage is between Lock-in Voltage and Lock-out Voltage, the voltage meets Cosφ curve requirements.
6	Lock-out Voltage	
7	Lock-out Power	The Cosφ curve cannot work when the output active power to rated power ratio is lower than the Lock-out power.

4.19.3 Setting Protection Parameters

4.19.3.1 Setting Voltage Protection Parameters

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Protection Parameters** to set the parameters.

Step 2 Set the parameters based on actual needs.

No.	Parameters	Description
1	OV Stage n Trip Value	Set the grid overvoltage protection threshold value.
2	OV Stage n Trip Time	Set the grid overvoltage protection tripping time.
3	UV Stage n Trip Value	Set the grid undervoltage protection threshold value.
4	UV Stage n Trip Time	Set the grid undervoltage protection tripping time.
5	10min Overvoltage Trip Threshold	Set the 10min overvoltage protection threshold value.

4.18.3.2 Setting Frequency Protection Parameters

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Protection Parameters** to set the parameters.

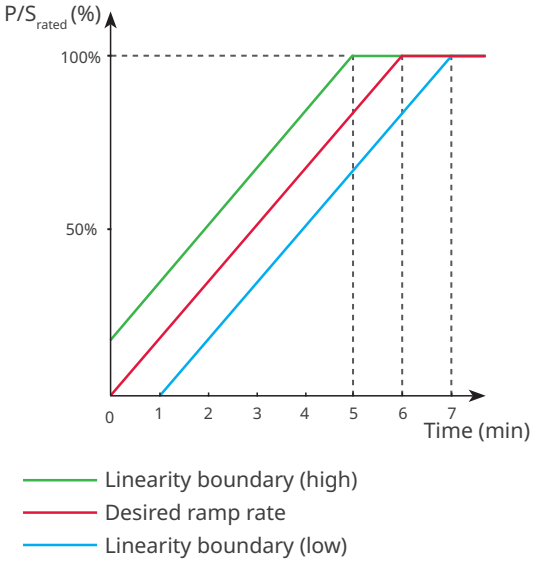
Step 2 Set the parameters based on actual needs.

No.	Parameters	Description
1	OF Stage n Trip Value	Set the level n overfrequency protection threshold value.
2	OF Stage n Trip Time	Set the level n overfrequency protection tripping time.
3	UF Stage n Trip Value	Set the level n underfrequency protection threshold value.
4	UF Stage n Trip Time	Set the level n underfrequency protection tripping time.
5	OF Stage n Trip Value	Set the grid overfrequency protection threshold value.
6	OF Stage n Trip Time	Set the grid overfrequency protection tripping time.
7	UF Stage n Trip Value	Set the grid underfrequency protection threshold value.
8	UF Stage n Trip Time	Set the grid underfrequency protection tripping time.

4.19.4 Setting Connection Parameters

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Protection Parameters** to set the parameters.

Step 2 Set the parameters based on actual needs.



No.	Parameters	Description
Ramp Up		
1	Upper Voltage	The inverter cannot connect to the grid if it is powered on for the first connection and the grid voltage is higher than the **Upper Voltage**.
2	Lower Voltage	The inverter cannot connect to the grid if it is powered on for the first connection and the grid voltage is lower than the **Lower Voltage**.
3	Upper Frequency	The inverter cannot connect to the grid if it is powered on for the first connection and the grid frequency is higher than the **Upper Frequency**.
4	Lower Frequency	The inverter cannot connect to the grid if it is powered on for the first connection and the grid frequency is lower than the **Lower Frequency**.
5	Observation Time	The waiting time for connecting the inverter to the grid when meeting the following requirements. 1. The inverter is powered on for the first connection. 2. The utility grid voltage and frequency meet certain requirements.
6	Soft Ramp Up Gradient	Enable the start up power slope.

No.	Parameters	Description
7	Soft Ramp Up Gradient	Indicates the percentage of incremental output power per minute based on the local requirements when the inverter is powered on for the first time. For example, setting **Soft Ramp Up Gradient** to 10 means the start-up slope is 10%P_{rated}/min.
8	Observation Time	Time for self-checking when the inverter is powered on for the first time.
Reconnection		
9	Upper Voltage	The inverter cannot connect to the grid if it is reconnecting due to a fault and the grid voltage is higher than the **Upper Voltage**.
10	Lower Voltage	The inverter cannot connect to the grid if it is reconnecting due to a fault and the grid voltage is lower than the **Lower Voltage**.
11	Upper Frequency	The inverter cannot connect to the grid if it is reconnecting due to a fault and the grid frequency is higher than the **Upper Frequency**.
12	Lower Frequency	The inverter cannot connect to the grid if it is reconnecting due to a fault and the grid frequency is lower than the **Lower Frequency**.
13	Observation Time	The waiting time for connecting the inverter to the grid when meeting the following requirements. 1. The inverter is reconnecting to the grid due to a fault. 2. The utility grid voltage and frequency meet certain requirements.
14	Reconnection Gradient	Enable the start up power slope.
15	Reconnection Gradient	Indicates the percentage of incremental output power per minute based on the local requirements when the inverter is not connected to the grid for the first time. For example, setting **Reconnection Gradient** to 10 means the reconnect slope is 10%P/S_{rated}/min.
16	Observation Time	Indicates the duration for the output power increases to the rated power when the inverter reconnects to the utility grid due to a fault.

4.19.5 Setting Voltage Ride Through Parameters

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Voltage Ride Through** to set the parameters.

Step 2 Set the parameters based on actual needs.

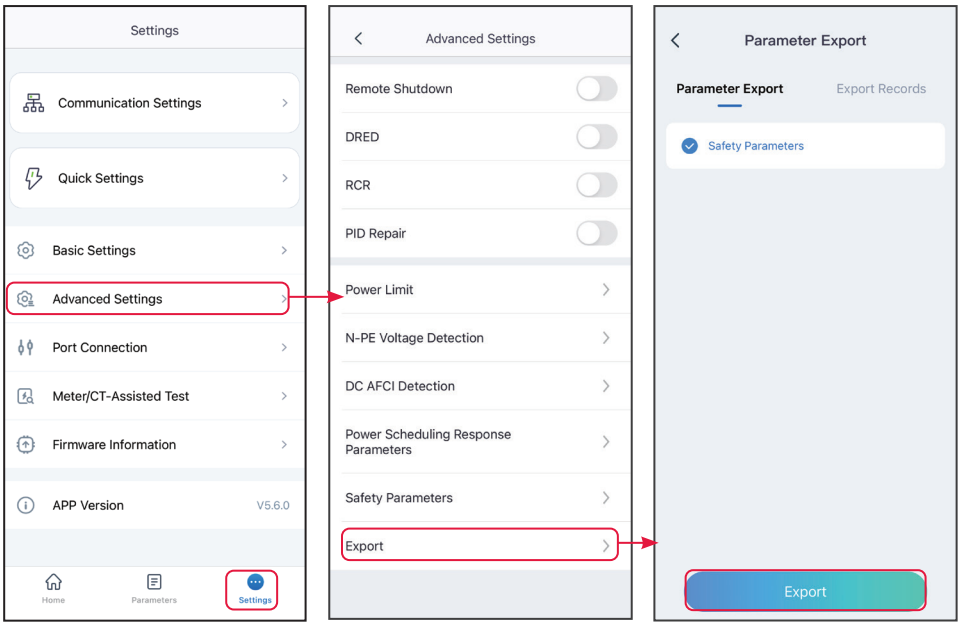
No.	Parameters	Description
LVRT		
1	UVn Voltage	The ratio of the ride through voltage to the rated voltage at UVn point during LVRT.
2	UVn Time	The ride through time at UVn point during LVRT.
3	Enter Into LVRT Threshold	The inverter will not be disconnected from the utility grid immediately when the grid voltage is between **Enter Into LVRT Threshold** and **Exit LVRT Endpoint.**
4	Exit LVRT Endpoint	
5	Gradient K1	K-factor for reactive power during LVRT.
6	Zero Current Mode	The system outputs zero current during LVRT.
7	Entry Threshold	Set the entry threshold of zero current mode.
HVRT		
6	OVn Voltage	The ratio of the ride through voltage to the rated voltage at OVn point during HVRT.
7	OVn Time	The ride through time at OVn point during HVRT.
8	Enter High Crossing Threshold	The inverter will not be disconnected from the utility grid immediately when the grid voltage is between **Enter High Crossing Threshold** and **Exit High Crossing Threshold.**
9	Exit High Crossing Threshold	
10	Slope K2	K-factor for reactive power during HVRT.
11	Zero Current Mode	The system outputs zero current during HVRT.
12	Entry Threshold	Set the entry threshold of zero current mode.

4.20 Exporting Safety Parameters

After selecting the safety code, some models support exporting safety parameter files.

Step 1 Tap **Home** > **Settings** > **Advanced Settings** > **Export** to export the parameters.

Step 2 Select **Safety Parameters**, and tap **Export** to start downloading the current safety parameter file. When the export is complete, tap **Share** and choose how you want to open the exported file.



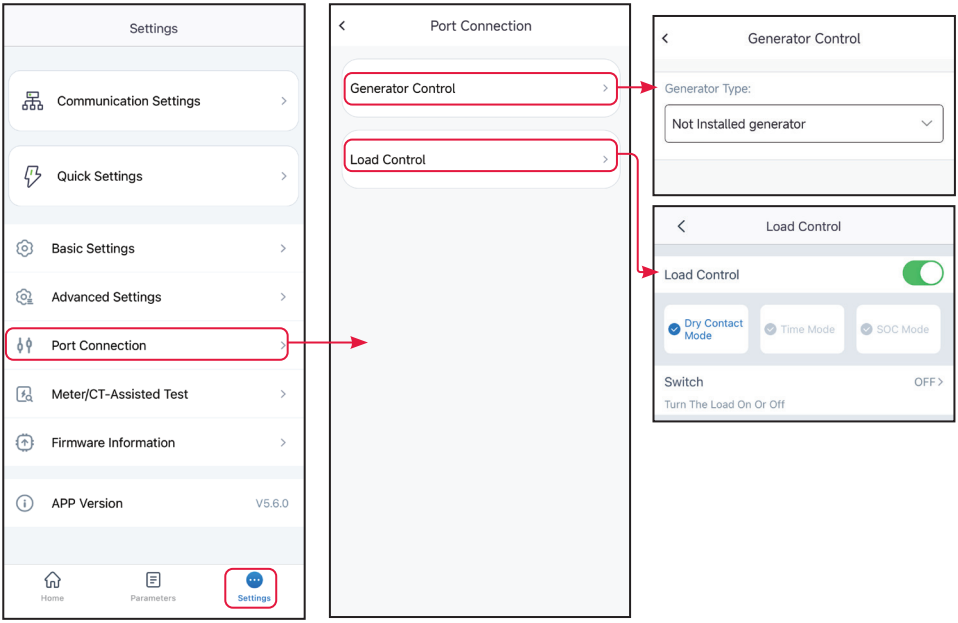
4.21 Setting Generator/Load Control

Loads and generators can be controlled by SolarGo app when the inverter supports load control function.

NOTICE
Some inverters support load control only.

Type I

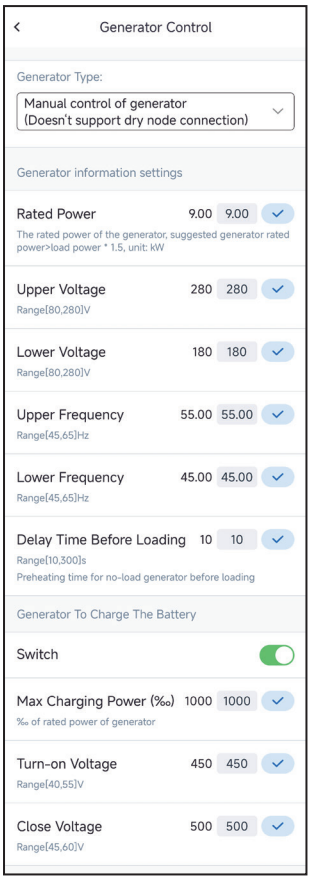
Step 1 Tap **Home** > **Settings** > **Port Connection**, to set the parameters.

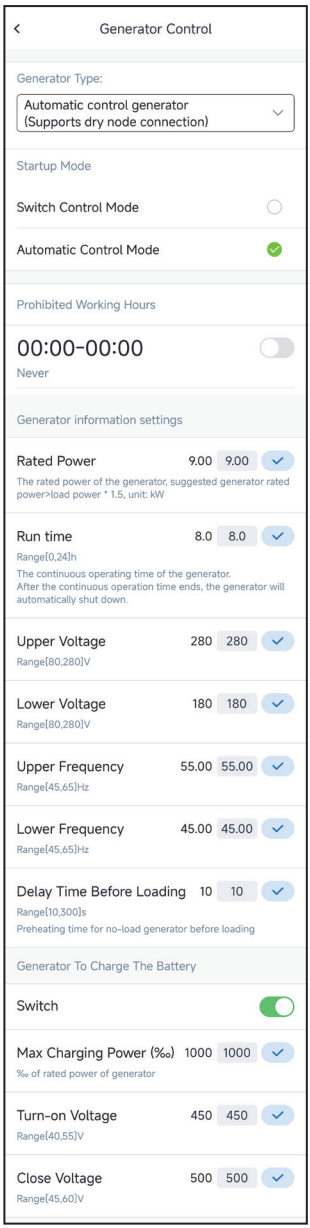


Step 2 Select **Generator Control** or **Load Control** based on actual needs.

Step 3 (Optional) When setting the generator control function, select the generator type according to the actual access situation. Currently supported:**Not Installed**, **Manual Control Of Generator,** or **Automatic Control Generator.** And set the parameters according to the selected generator type.

- **Not Installed**: if no generator is connected, select **Not Installed**.
- **Manual Control Of Generator(Doesn't Support Dry Node Connection):**
- **Automatic control generator (Supports dry node connection):**

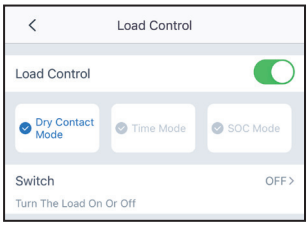

Generator Control
Generator Type:
Manual control of generator
(Doesn't support dry node connection)
Generator information settings
Rated Power
9.00
9.00
The rated power of the generator, suggested generator rated power>load power * 1.5, unit: kW
Upper Voltage
280
280
Range[80,280]V
Lower Voltage
180
180
Range[80,280]V
Upper Frequency
55.00
55.00
Range[45,65]Hz
Lower Frequency
45.00
45.00
Range[45,65]Hz
Delay Time Before Loading
10
10
Range[10,300]s
Preheating time for no-load generator before loading
Generator To Charge The Battery
Switch
Max Charging Power (‰)
1000
1000
‰ of rated power of generator
Turn-on Voltage
450
450
Range[40,55]V
Close Voltage
500
500
Range[45,60]V


Generator Control
Generator Type:
Automatic control generator
(Supports dry node connection)
Startup Mode
Switch Control Mode
Automatic Control Mode
Prohibited Working Hours
00:00-00:00
Never
Generator information settings
Rated Power
9.00
9.00
The rated power of the generator, suggested generator rated power>load power * 1.5, unit: kW
Run time
8.0
8.0
Range[0,24]h
The continuous operating time of the generator.
After the continuous operation time ends, the generator will automatically shut down.
Upper Voltage
280
280
Range[80,280]V
Lower Voltage
180
180
Range[80,280]V
Upper Frequency
55.00
55.00
Range[45,65]Hz
Lower Frequency
45.00
45.00
Range[45,65]Hz
Delay Time Before Loading
10
10
Range[10,300]s
Preheating time for no-load generator before loading
Generator To Charge The Battery
Switch
Max Charging Power (‰)
1000
1000
‰ of rated power of generator
Turn-on Voltage
450
450
Range[40,55]V
Close Voltage
500
500
Range[45,60]V

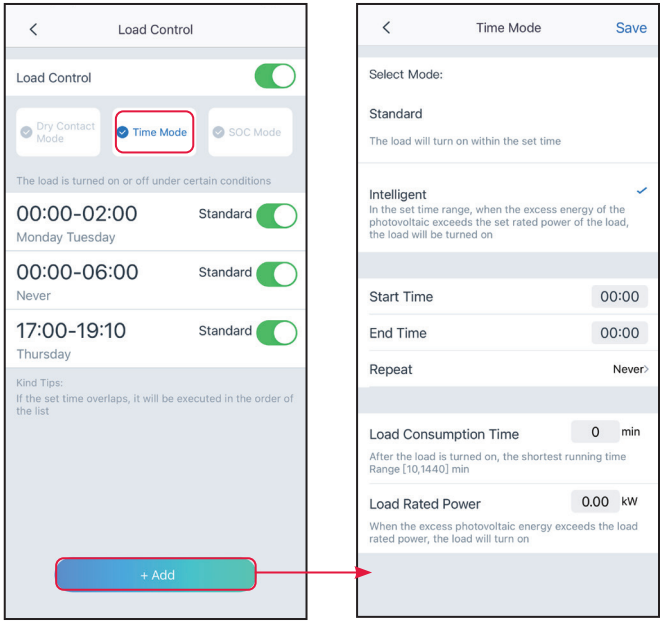
No.	Parameters	Description
1	Startup Mode	Switch Control Mode/Automatic Control Mode
2	Generator Dry Node Switch	Only for Switch Control Mode. Enable Generator Dry Node Switch to start the generator.
3	Prohibited Working Hours	Only for Automatic Control Mode. Set the time period during which the generator cannot work.
Generator Information Settings		
4	Rated Power	Set the rated power of the generator.
5	Running Time	Set the generator's continuous runtime, after which the generator will be turned off.
6	Upper Voltage	Set the operation voltage range of the generator.
7	Lower Voltage	
8	Upper Frequency	Set the operation frequency range of the generator.
9	Lower Frequency	
10	Delay Time Before Loading	Set the time generator running without loads.
Generator To Charge The Battery		
11	Max Charging Power	Set the charging power to charge the battery with a generator.
12	Start SOC	Set the SOC threshold to turn on the generator when lithium batteries are connected. The dry contact will be connected to start the generator when the battery SOC is lower than **Start SOC**.
13	Stop SOC	Set the SOC threshold to turn off the generator when lithium batteries are connected. The dry contact will be disconnected to stop the generator when the battery SOC is higher than Stop SOC.
14	Turn-on Voltage	Set the voltage threshold to turn on the generator when lead-acid batteries are connected. The dry contact will be connected to start the generator when the battery voltage is lower than **Turn-on Voltage**.
15	Close Voltage	Set the voltage threshold to turn off the generator when lead-acid batteries are connected. The dry contact will be disconnected to stop the generator when the battery voltage is higher than **Close Voltage**.

Step 4 (Optional) Set the control mode based on actual needs. Currently supports: **Dry Contact Mode**, **Time Mode**, **SOC Mode**.

- **Dry Contact Mode**: when the switch is **ON**, the loads will be powered; when the switch is **OFF**, the power will be cut off. Turn on or off the switch based on actual needs.



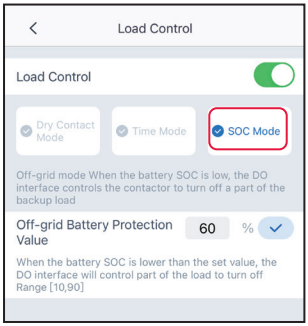
- **Time Mode**: set the time to enable the load, and the load will be powered automatically within the setting time period. Select standard mode or intelligent mode.



No.	Parameters	Description
1	Standard	The loads will be powered within the setting time period.
2	Intelligent	Once the excess energy of the photovoltaic exceeds the load nominal power within the time period, the loads will be powered.
3	Start Time	The time mode will be on between the **Start Time** and **End Time**.
4	End Time	
5	Repeat	The repeat days.

No.	Parameters	Description
6	Load Consumption Time	The shortest load working time after the loads been powered. The time is set to prevent the loads be turned on and off frequently when the PV power fluctuates greatly. Only for Intelligent mode.
7	Load Rated Power	The loads will be powered when the excess energy of the photovoltaic exceeds the nominal power of load. Only for Intelligent mode.

- **SOC Mode**: the inverter has integrated dry contact controlling port, which can control whether the load is powered or not by contactor. In off-grid mode, the load connected to the port will not be powered if the BACKUP overload is detected or the battery SOC value is lower than the Off-grid battery protection value. Set **Off-grid Battery Protection** Value based on actual needs.

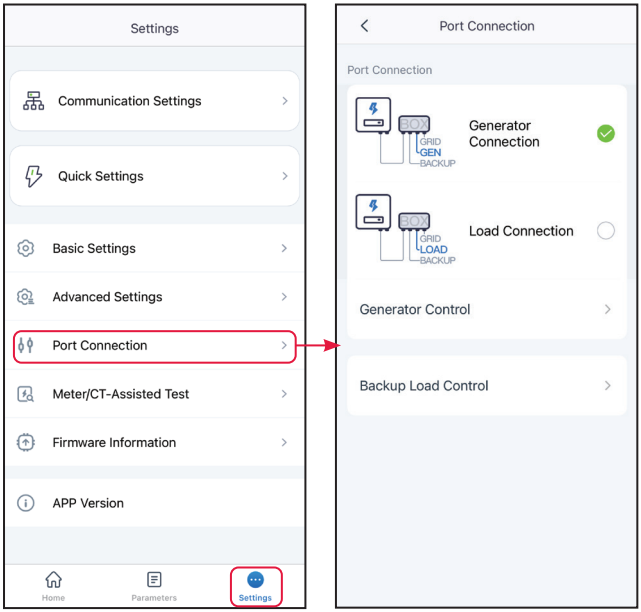


Type II

NOTICE

- Only for ET40-50kW series inverters.
- Generator connection and control is supported only when an STS is connected to the inverter.
- Load control is supported only when an STS is connected to the inverter. The inverter can control loads connected to the GENERATOR port or BACKUP LOAD port of the STS.

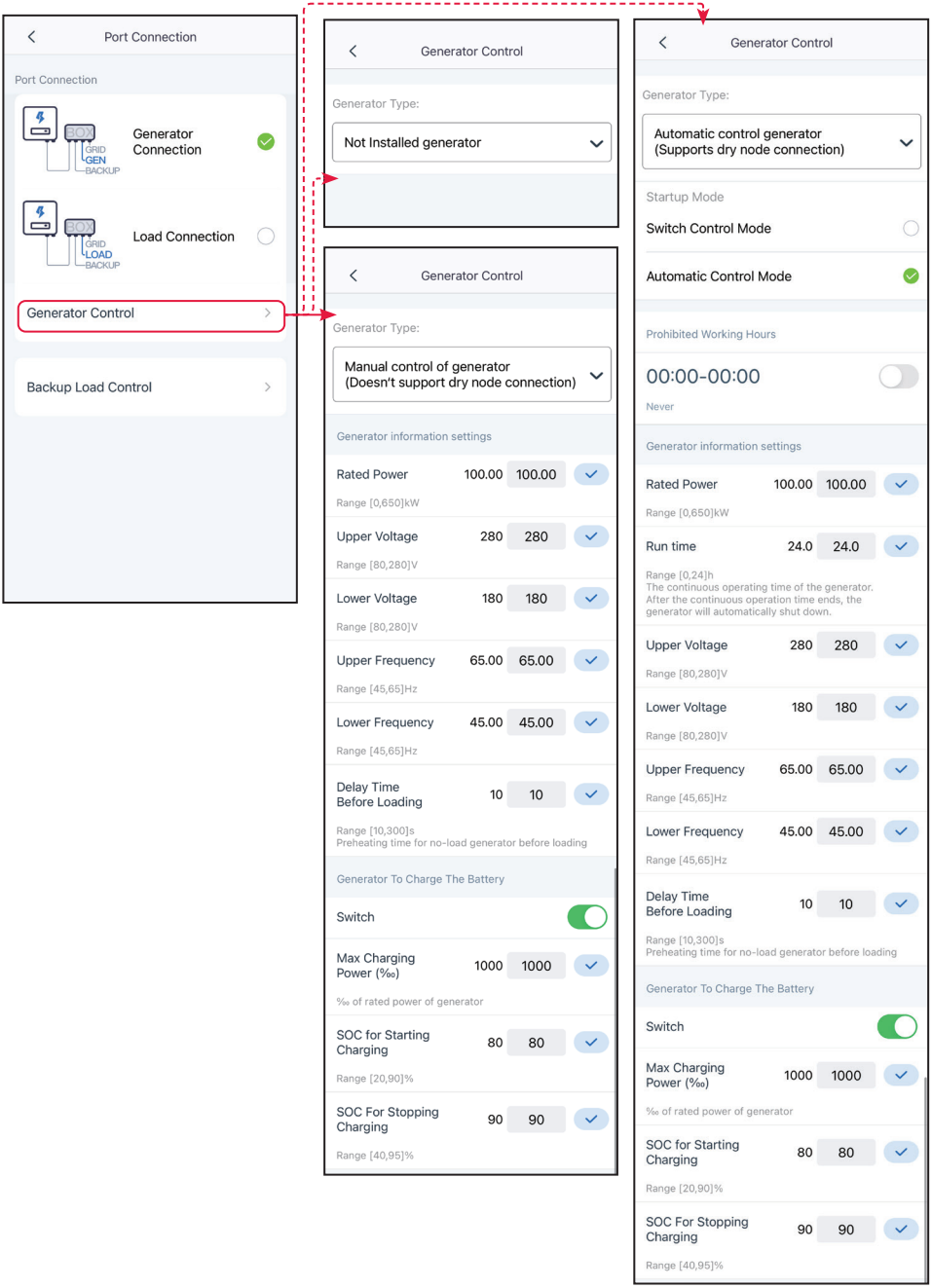
Step 1 Tap **Home > Settings > Port Connection**, to set the parameters.



Step 2 Select **Generator Connection** or **Load Connection** based on actual needs.

Step 3 (Optional) When setting the generator control function, select the generator type according to the actual access situation. Currently supported:**Not Installed**, **Manual Control Of Generator,** or **Automatic Control Generator.** And set the parameters according to the selected generator type.

- **Not Installed**: if no generator is connected in the system, select **Not Installed**.
- **Manual Control Of Generator(Doesn't Support Dry Node Connection):** Start or stop the generator manually. The inverter cannot control the generator when **Manual Control Of Generator(Doesn't Support Dry Node Connection)** is selected.
- **Automatic control generator (Supports dry node connection):** If the generator has dry contact port and is connected to the inverter, set the generator control mode to **Switch Control Mode** or **Automatic Control Mode** based on actual needs.
  - **Switch Control Mode:** The generator will start working when the **Generator Dry Node Switch** is on, and stop automaticallly after reaching **Run Time**.
  - **Automatic Control Mode:** The generator will work during **Run Time**, but stop working during **Prohibited Working Hours**.


Port Connection
Port Connection
Generator Connection
Load Connection
Generator Control
Backup Load Control
Generator Control
Generator Type:
Not Installed generator
Generator Control
Generator Type:
Manual control of generator (Doesn't support dry node connection)
Generator information settings
Rated Power 100.00 100.00
Range [0,650]kW
Upper Voltage 280 280
Range [80,280]V
Lower Voltage 180 180
Range [80,280]V
Upper Frequency 65.00 65.00
Range [45,65]Hz
Lower Frequency 45.00 45.00
Range [45,65]Hz
Delay Time Before Loading 10 10
Range [10,300]s
Preheating time for no-load generator before loading
Generator To Charge The Battery
Switch
Max Charging Power (‰) 1000 1000
‰ of rated power of generator
SOC for Starting Charging 80 80
Range [20,90]%
SOC For Stopping Charging 90 90
Range [40,95]%
Generator Control
Generator Type:
Automatic control generator (Supports dry node connection)
Startup Mode
Switch Control Mode
Automatic Control Mode
Prohibited Working Hours
00:00-00:00
Never
Generator information settings
Rated Power 100.00 100.00
Range [0,650]kW
Run time 24.0 24.0
Range [0,24]h
The continuous operating time of the generator. After the continuous operation time ends, the generator will automatically shut down.
Upper Voltage 280 280
Range [80,280]V
Lower Voltage 180 180
Range [80,280]V
Upper Frequency 65.00 65.00
Range [45,65]Hz
Lower Frequency 45.00 45.00
Range [45,65]Hz
Delay Time Before Loading 10 10
Range [10,300]s
Preheating time for no-load generator before loading
Generator To Charge The Battery
Switch
Max Charging Power (‰) 1000 1000
‰ of rated power of generator
SOC for Starting Charging 80 80
Range [20,90]%
SOC For Stopping Charging 90 90
Range [40,95]%

No.	Parameters	Description
1	Startup Mode	Switch Control Mode/Automatic Control Mode
Switch Control Mode		
2	Generator Dry Node Switch	Only for Switch Control Mode. Enable Generator Dry Node Switch to start the generator.
3	Run Time	Set the generator's continuous runtime, after which the generator will be turned off.
Automatic Control Mode		
4	Prohibited Working Hours	Only for Automatic Control Mode. Set the time period during which the generator cannot work.
5	Run Time	Set the generator's continuous runtime, after which the generator will be turned off.

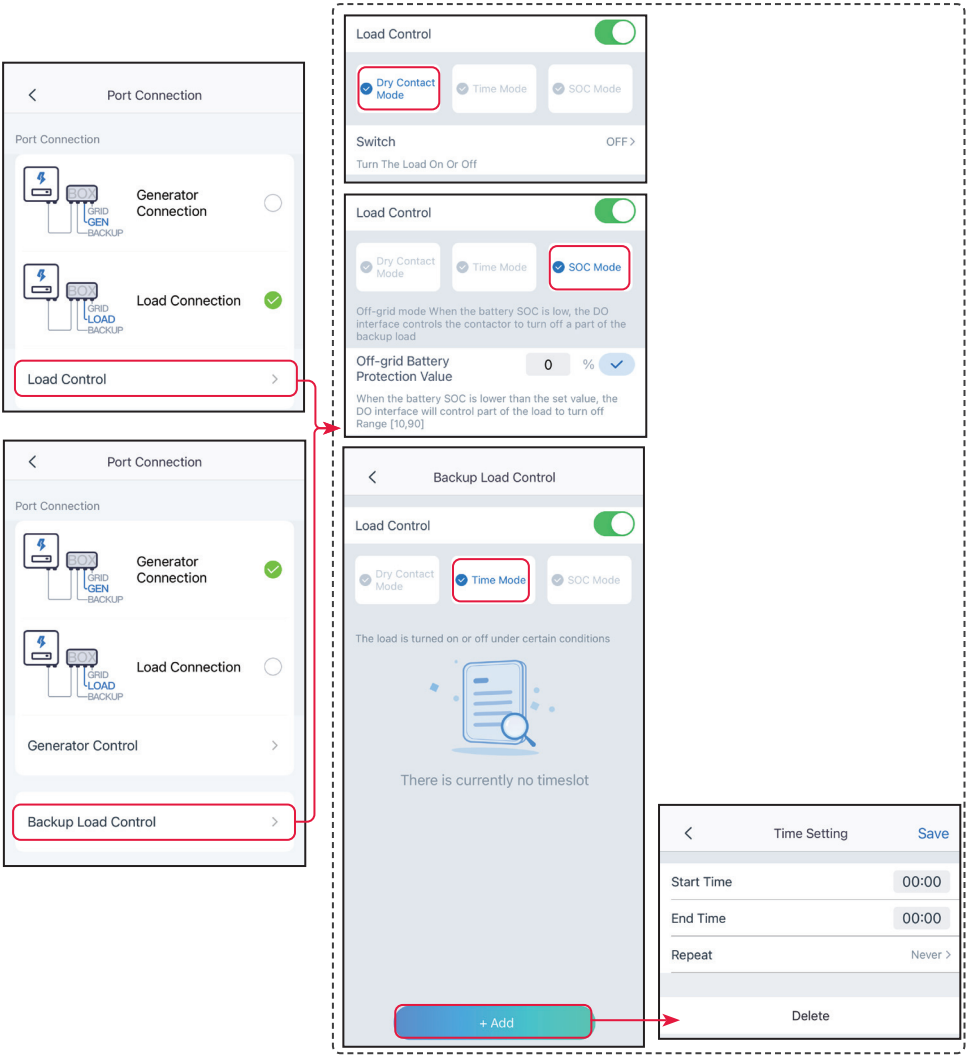
No.	Parameters	Description
Generator Information Settings		
1	Rated Power	Set the rated power of the generator.
2	Upper Voltage	Set the operation voltage range of the generator.
3	Lower Voltage	
4	Upper Frequency	Set the operation frequency range of the generator.
5	Lower Frequency	
6	Delay Time Before Loading	Set the time generator running without loads.
Generator To Charge The Battery		
7	Max Charging Power	Set the charging power to charge the battery with a generator.
8	SOC for Starting Charging	Set the SOC threshold to turn on the generator when lithium batteries are connected. The dry contact will be connected to start the generator when the battery SOC is lower than SOC for Starting Charging.
9	SOC for Stoping Charging	Set the SOC threshold to turn off the generator when lithium batteries are connected. The dry contact will be disconnected to stop the generator when the battery SOC is higher than SOC for Stoping Charging.
11	Turn-on Voltage	Set the voltage threshold to turn on the generator when lead-acid batteries are connected. The dry contact will be connected to start the generator when the battery voltage is lower than **Turn-on Voltage**.
12	Close Voltage	Set the voltage threshold to turn off the generator when lead-acid batteries are connected. The dry contact will be disconnected to stop the generator when the battery voltage is higher than **Close Voltage**.

Step 4 (Optional) Control loads connected to the GENERATOR port or BACKUP LOAD port. Set the control mode based on actual needs. Currently supports: **Dry Contact Mode**, **Time Mode**, **SOC Mode**.

- **Dry Contact Mode**: when the switch is **ON**, the loads will be powered; when the switch is **OFF**, the power will be cut off. Turn on or off the switch based on actual needs.
- **Time Mode**: set the time to enable the load, and the load will be powered automatically within the setting time period. Select standard mode or intelligent mode.

No.	Parameters	Description
1	Standard	The loads will be powered within the setting time period.
2	Intelligent	Once the excess energy of the photovoltaic exceeds the load nominal power within the time period, the loads will be powered.
3	Start Time	The time mode will be on between the **Start Time** and **End Time**.
4	End Time	
5	Repeat	The repeat days.
6	Load Consumption Time	The shortest load working time after the loads been powered. The time is set to prevent the loads be turned on and off frequently when the PV power fluctuates greatly. Only for Intelligent mode.
7	Load Rated Power	The loads will be powered when the excess energy of the photovoltaic exceeds the nominal power of load. Only for Intelligent mode.

- **SOC Mode**: the STS has integrated dry contact controlling port, which can control whether the load is powered or not by contactor. In off-grid mode, the load connected to the port will not be powered if the BACKUP/GENERATOR overload is detected or the battery SOC value is lower than the Off-grid battery protection value. Set **Off-grid Battery Protection** Value based on actual needs.


Port Connection
Port Connection
Generator Connection
Load Connection
Load Control
Port Connection
Port Connection
Generator Connection
Load Connection
Generator Control
Backup Load Control
Load Control
Dry Contact Mode
Time Mode
SOC Mode
Switch
OFF
Turn The Load On Or Off
Load Control
Dry Contact Mode
Time Mode
SOC Mode
Off-grid mode When the battery SOC is low, the DO interface controls the contactor to turn off a part of the backup load
Off-grid Battery Protection Value
0
%
When the battery SOC is lower than the set value, the DO interface will control part of the load to turn off
Range [10,90]
Backup Load Control
Load Control
Dry Contact Mode
Time Mode
SOC Mode
The load is turned on or off under certain conditions
There is currently no timeslot
+ Add
Time Setting
Save
Start Time
00:00
End Time
00:00
Repeat
Never
Delete

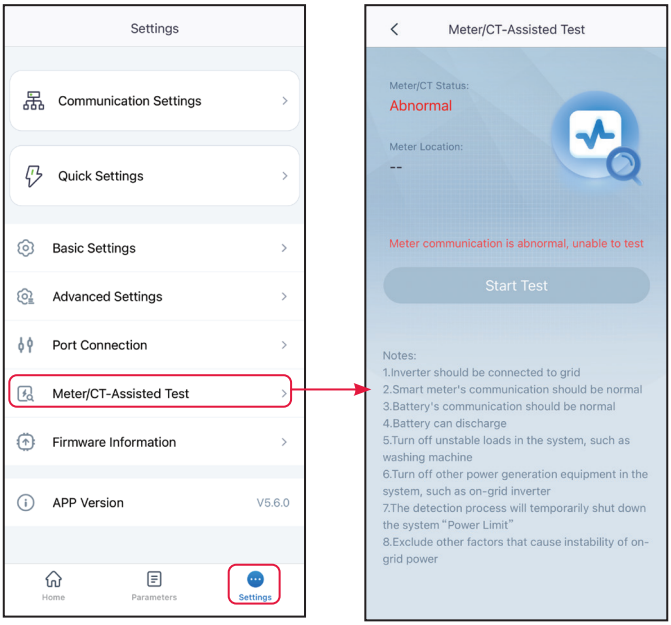
4.22 Equipment Maintenance

4.22.1 Meter/CT-Assisted Test

Meter/CT-Assisted Test is used to auto-check if the Smart Meter and CT are connected in the right way and their working status.

Step 1 Tap **Home** > **Settings** > **Meter/CT Assisted Test** to set the function.

Step 2 Tap **Start Test** to start test. Check **Test Result** after test.



4.22.2 Checking Firmware Information/Upgrading Firmware Version

NOTICE

- Upgrade the DSP version, ARM version, BMS version, AFCI version, or STS version of the inverter, or firmware version of the communication module. Some devices do not support upgrading the firmware version through SolarGo app.
- If the Firmware Upgrade dialog box pops up once logging into the app, click **Firmware Upgrade** to directly go to the firmware information page.

Type I

NOTICE

- When prompted by a red dot on the right of the **Firmware Information**, click to get the firmware update information.
- During the upgrade process, ensure that the network is stable and the device remains connected to SolarGo, otherwise the upgrade may fail.

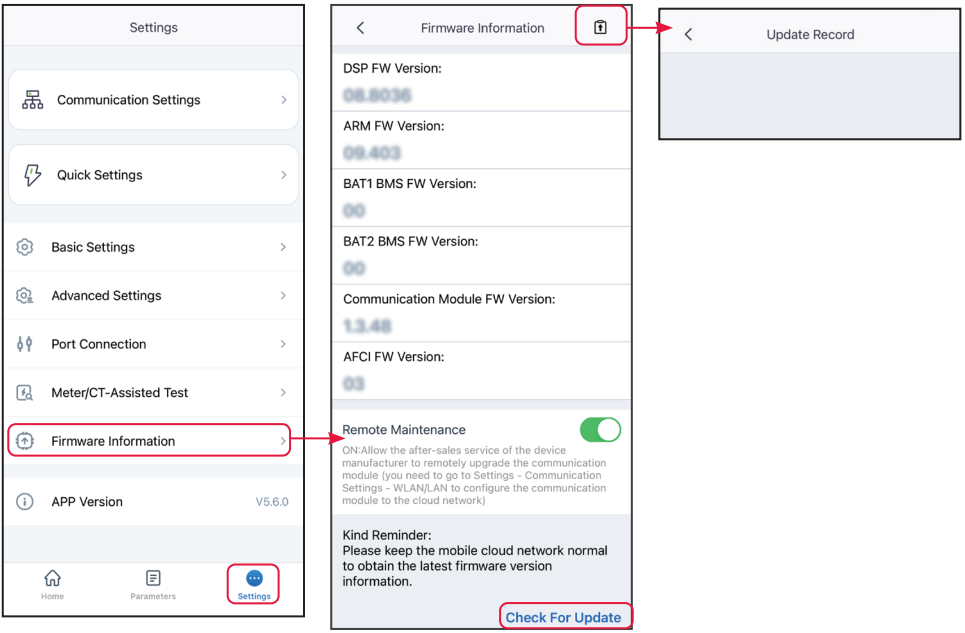
Step 1 Tap **Home > Settings > Firmware Information** to check the firmware version.

Step 2 (Optional) Tap Check For Update to check whether there is a latest version to be updated.

Step 3 Tap **Firmware Information** as prompted to enter the firmware upgrade page.

Step 4 (Optional) Tap Learn More to check the firmware related information, such as **Current Version**, **New Version**, **Update Record**, etc.

Step 5 Tap **Upgrade** and follow the prompts to complete the upgrading.



Type II

NOTICE
• The automatic upgrade function is allowed only when a WiFi/LAN Kit-20 or WiFi Kit-20 module is applied, and the module firmware version is V2.0.1 and above. • After enabling the auto-upgrade function, if there is any update and the device is connected to the network, the kit firmware version can be automatically upgraded.

Step 1 Tap **Home** > **Settings** > **Firmware Information** to check the firmware version.

Step 2 Tap or to enable or disable the **Automatic Upgrade.**

4.22.3 Change the WiFi Password

NOTICE
The WiFi password of the communication module can be changed. Keep the changed password in mind after changing it. Contact the after-sales service if you forget the password.

Step 1 Tap **Home** > **Settings** > **Communication Setting** > **Change Password**, to change the password.

Step 2 Change the password based on actual needs.

5 App Operations for Micro Inverters

NOTICE

- All the user interface (UI) screenshots or words in this document are based on **SolarGo app V6.0.0**. The UI may be different due to the version upgrade. The screenshots, words or data are for reference only.
- The method to set parameters is the same for all inverters. But the parameters displayed varies based on the equipment model and safety code. Refer to the actual interface display for specific parameters.
- Before setting any parameters, read through user manual of the app and the inverter to learn the product functions and features. When the inverter parameters are set improperly, the inverter may fail to connect to the utility grid or fail to connect to the utility grid in compliance with related requirements and damage the battery, which will affect the inverter's power generation.

5.1 Log In as Micro Inverter

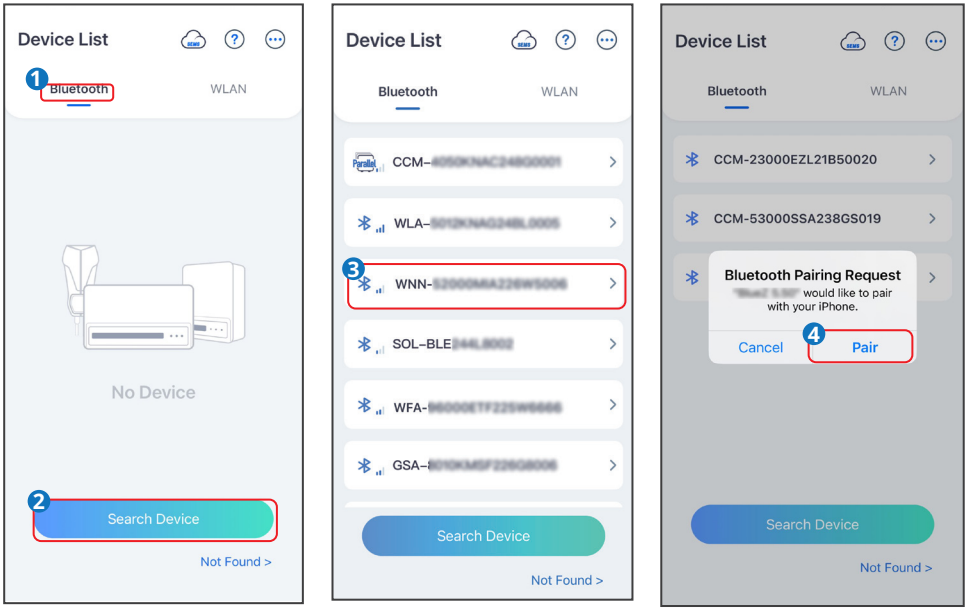
Step 1 Ensure that the inverter is power on and works properly.

Step 2 Select **Bluetooth** tab on the SolarGo app hompage.

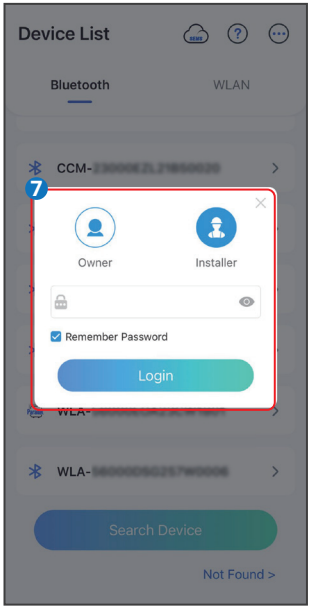
Step 3 Pull down or tap **Search Device** to refresh the device list. Find the device by the the inverter serial number. Tap the device name to log into the **Home** page.

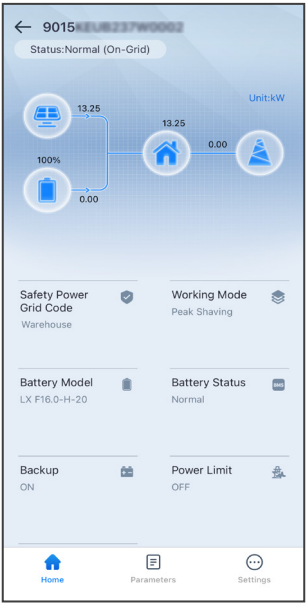
Step 4 (optional): For first connection with the inverter via Bluetooth, there will be a Bluetooth pairing prompt, tap **Pair** to continue the connection.

Step 5 Log in as an Owner or an Installer. Password: 1234.



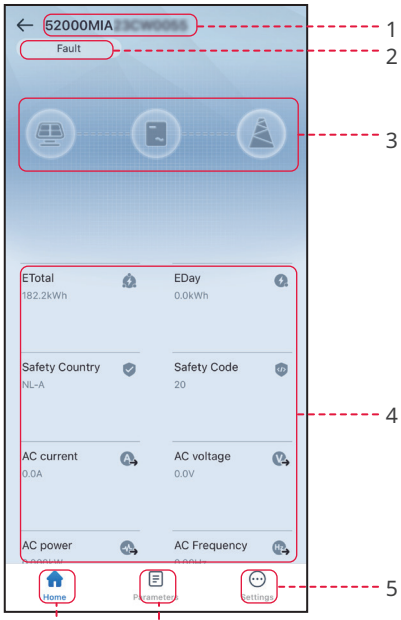
SLG00CON0089





SLG00CON0090

5.2 GUI Introductions to Micro Inverters



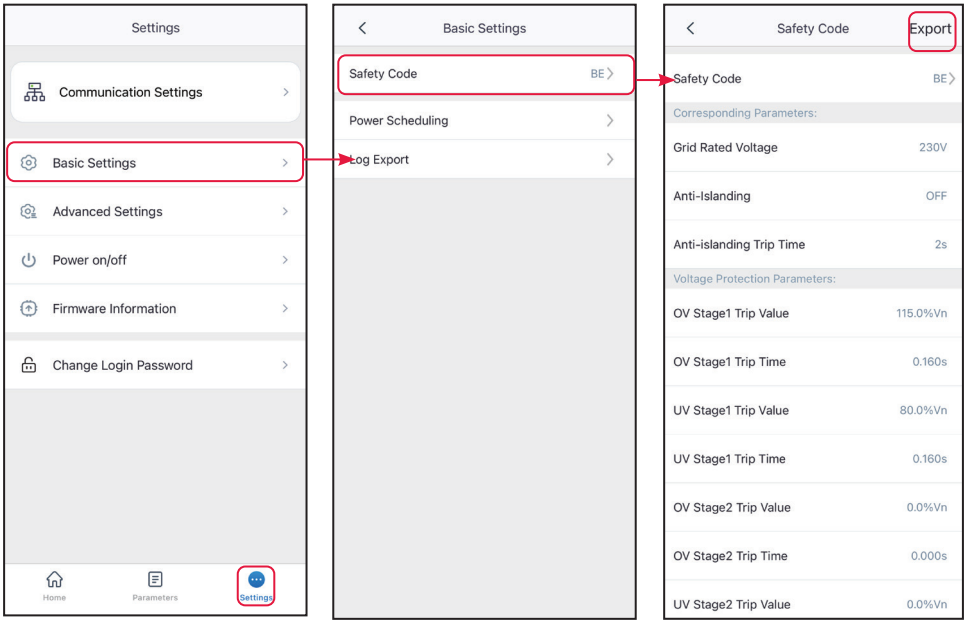
SLG00CON0091

No.	Name/Icon	Description
1	Serial Number	Serial number of the connected inverter.
2	Device Status	Indicates the status of the inverter, such as **Working**, **Fault**, etc.
3	Energy Flow Chart	Indicates the energy flow chart of the PV system. The actual page prevails.
4	System Status	Indicates the working status of the PV system, such as **Etotal**, **Safety Country**, **AC Current**, **AC Voltage**, etc.
5		Home Tap **Home** to check**Serial Number**, **Device Status**, **Energy Flow Chart**, **System Status**, etc.
6		Parameters Tap Parameters to check the inverter **Data**, like **Device Model**, **FW Version**, **PV**, **AC Current**, **AC Voltage**, etc.. Or check **Alarm** like **Utility Loss**, **Undervoltage**, etc..
7		Settings Tap **Settings** to set parameters like **Safety Code**, **Communication Settings**, **Power Limit**, **Firmware Update**, **AFCI Detection**, **Equipment Power Supply**, etc..

5.3 Setting the Basic Information

Step 1 Tap **Home** > **Settings** > **Basic Settings**, to set the basic parameters according to the inverter location and actual application scenarios.

Step 2 (Optional) Tap **Safety Code** > **Export** to export the default value of some parameters.

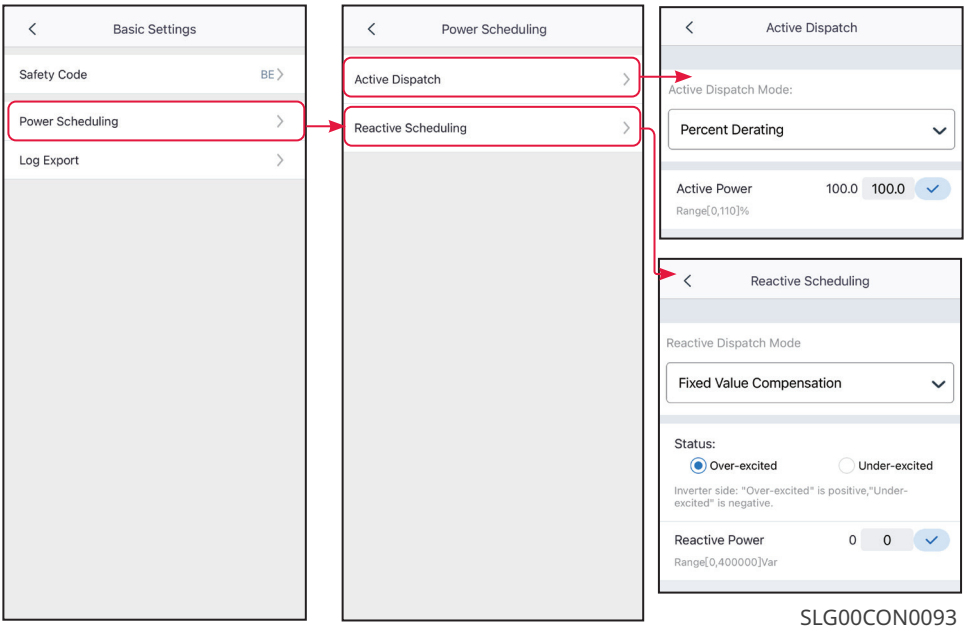


SLG00CON0092

No.	Parameters	Description
1	Safety Code	Set the safety country in compliance with local grid standards and application scenario of the inverter. The default parameters varies depending on different safety code. The safety parameters can be changed in Safety Parameters.
2	Power Scheduling	Set the power scheduling mode. Support: Active Dispatch and Reactive Scheduling
3	Log Export	Export running log of the inverter.

Step 3 (Optional) Tap**Power Scheduling** > **Active Dispatch** to set the active power scheduling. Based on actual needs, select**Disable**, **Fixed Value Derating** or **Percent Derating** from the drop down list, and set the **Active Power**. Tap ✓ to save the **Active Power**.

Step 4 (Optional) Tap **Power Scheduling** > **Reactive Scheduling** to set the reactive power scheduling. Based on actual needs, **selectDisable**, **Fixed Value Compensation**, **Percent Compensation or PF Compensation**. Set the **Status** to **Over-excited** or **Under-excited**. And enter the **Reactive Power** value or **Power Factor** value. Tap ✓ to save the settings.



SLG00CON0093

No.	Parameters	Description
Active Dispatch		
1	Active Dispatch Mode	The standards of some countries/regions require to control the active power according to the dispatch mode. Supports: • **Disable**: disable the Active Dispatch Mode. • **Fixed Value Derating**: enable the Active Dispatch Mode based on fixed values. • **Percent Derating**: enable the Active Dispatch Mode based on the percentage of the rated power.
2	Active Power	• The **Active Power** is a fixed value when the **Active Dispatch Mode** is set to **Fixed Value Derating**. • The **Active Power** is the percentage of the active power and the rated power when the **Active Dispatch Mode** is set to **Percent Derating**.
Reactive Scheduling		
3	Reactive Dispatch Mode	The standards of some countries/regions require to control the reactive power according to the dispatch mode. Supports: • **Disable**: disable Reactive Dispatch Mode • **Fixed Value Compensation**: enable the Reactive Dispatch Mode based on fixed values. • **Percent Compensation**: enable the Reactive Dispatch Mode based on the percentage of the rated power. • **PF Compensation**.

No.	Parameters	Description
4	Status	Set the power factor as lagging or leading based on actual needs and local grid standards and requirements.
5	Reactive Power	• The **Reactive Power** is a fixed value when the **Reactive Dispatch Mode** is set to **Fixed Value Compensation**. • The **Reactive Power** is the percentage of the reactive power and the rated power when the **Reactive Dispatch Mode** is set to **Percent Compensation**.
6	Power Factor	Set the power factor when the **Reactive Dispatch Mode** is set to **PF Compensation.**

Step 5 (Optional) Tap **Log Export** > **Export**. After downloading the log, decide whether to encrypt the log following the prompts. If encryption is required, set a password. Tick the log to be exported, and tap**Export** to export running log of the inverter.

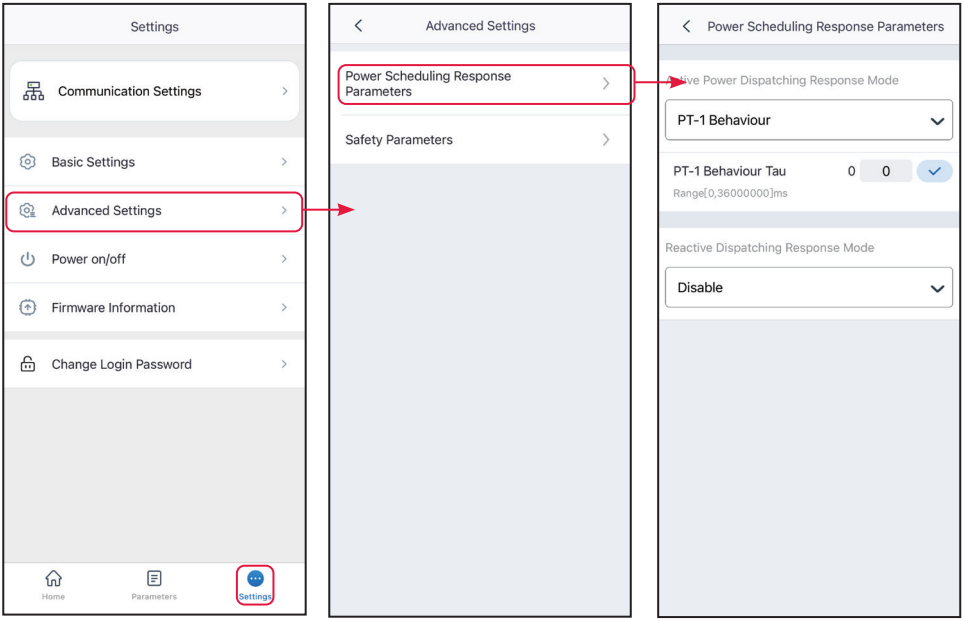
5.4 Setting the Power Scheduling Response Parameters

Step 1 Tap **Home > Settings > Advanced Settings > Power Scheduling Response Parameters** to set the parameters.

Step 2 Select **Disable**, **Gradient Control,** or **PT-1 Behavior** from the **active power dispatching response mode** drop down list based on actual needs. If **Gradient Control** is selected, enter **Power Gradient** value. If **PT-1 Behavior** is selected, enter **PT-1 Behavior Tau** based on actual needs.

Step 3 Select **Disable**, **Gradient Control,** or **PT-1 Behavior** from the **Reactive Dispatching Response Mode** drop down list based on actual needs. If **Gradient Control** is selected, enter **Power Gradient** value. If **PT-1 Behavior** is selected, enter **PT-1 Behavior Tau** based on actual needs.

Step 4 Tap to save the settings.

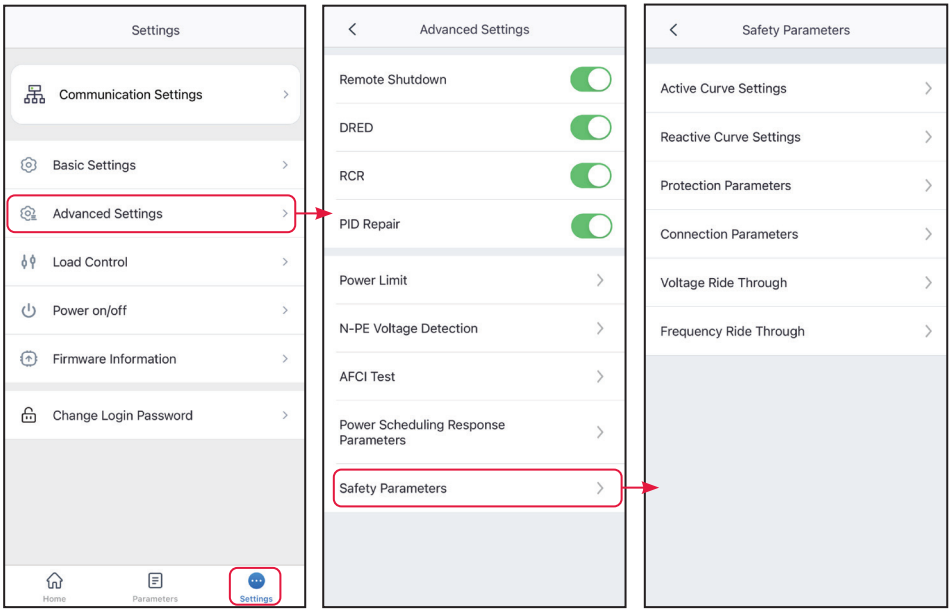


No.	Parameters	Description
Active Power Dispatching Response Mode		
1	PT-1 Behavior	Realize active scheduling based on the first-order LPF curve within the response time constant.
2	PT-1 Behavior Tau	Set the time constant within which the active power changes based on the first order LPF curve.
3	Gradient Control	Realize active scheduling based on the power change slope.
4	Power Gradient	Set the active power change slope.
Reactive Dispatching Response Mode		
5	PT-1 Behavior	Realize reactive scheduling based on the first-order LPF curve within the response time constant.
6	PT-1 Behavior Tau	Set the time constant within which the reactive power changes based on the first order LPF curve.
7	Gradient Control	Realize reactive scheduling based on the power change slope.
8	Power Gradient	Set the reactive power change slope.

5.5 Setting Safety Parameters

NOTICE

Set the custom safety parameters in compliance with local requirements. Do not change the parameters without the prior consent of the grid company.

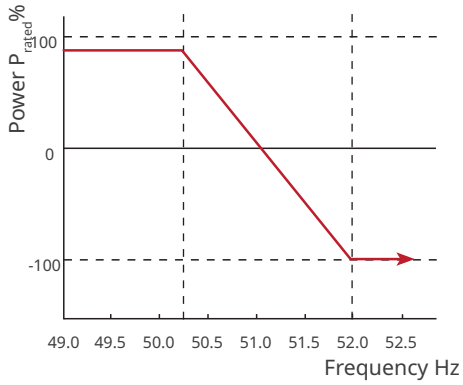


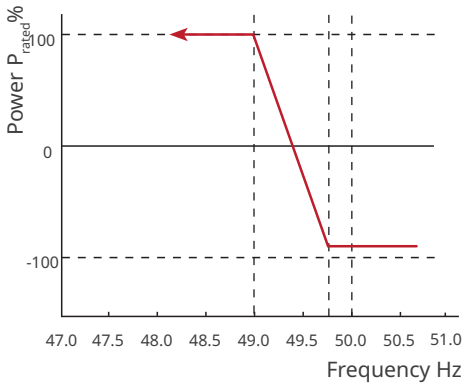
5.5.1 Setting the Active Curve

5.5.1.1 Setting the P(F) Curve

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Active Curve Settings** to set the parameters.

Step 2 Set the parameters based on actual needs.





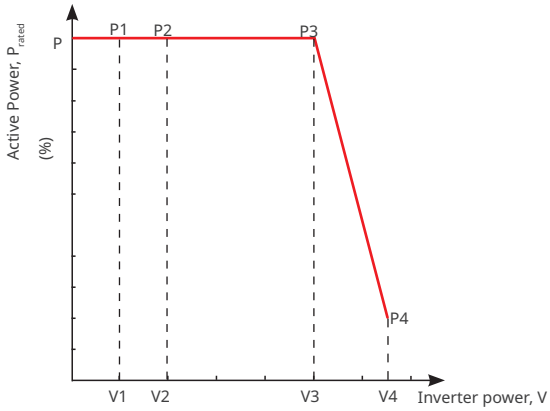
No.	Parameters	Description
1	P(F) Curve	Enable P(F) Curve when it is required by local grid standards and requirements.
Overfrequency Unloading		
2	Overfrequency Threshold	The inverter output active power will decrease when the utility grid frequency is too high. The inverter output power will decrease when the utility grid frequency is higher than **Overfrequency Threshold**.
3	Overfrequency Endpoint	The inverter output active power will decrease when the utility grid frequency is too high. The inverter output power will stop decreasing when the utility grid frequency is higher than **Overfrequency Endpoint**.
4	Power Reference	Adjust the inverter output power based on Apparent Active Power, Rated Active Power, Momentary Active Power, Or Max. Active Power.
5	Power Response To Underfrequency Gradient	The inverter output active power will decrease when the utility grid frequency is too high. Indicates the slope when the inverter output power decreases.
6	Tentional Delay Ta	Indicates the delayed response time when the inverter output power is higher than the **Overfrequency Threshold**.
7	Hysteretic Power Recovery Slope	Indicates the variation slope when the power recovers.
Underfrequency Loading		
8	Underfrequency Threshold	The inverter output active power will increase when the utility grid frequency is too low. The inverter output power will increase when the utility grid frequency is lower than **Underfrequency Threshold**.
9	Underfrequency Endpoint	The inverter output active power will increase when the utility grid frequency is too low. The inverter output power will stop increasing when the utility grid frequency is lower than **Underfrequency Endpoint**.
10	Power Reference	Adjust the inverter output power based on Apparent Active Power, Rated Active Power, Momentary Active Power, Or Max. Active Power.
11	Power Response To Underfrequency Gradient	The inverter output active power will increase when the utility grid frequency is too low. Indicates the slope when the inverter output power increases.
12	Tentional Delay Ta	Indicates the delayed response time when the inverter output power is lower than the **Underfrequency Threshold**.
13	Hysteretic Power Recovery Slope	Indicates the variation slope when the power recovers.

5.5.1.2 Setting the P(U) Curve

When the grid voltage is too high, decrease the inverter output power to decrease the grid-tied power.

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Active Power Mode Settings** to set the parameters.

Step 2 Enter the parameters. The inverter will adjust the active output power to the apparent power ratio in real-time according to the actual grid voltage to the rated voltage ratio.



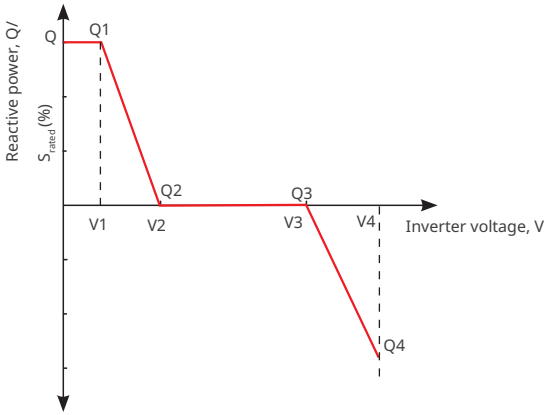
No.	Parameters	Description
1	P(U) Curve	Enable P(U) Curve when it is required by local grid standards and requirements.
2	Vn Voltage	The percentage of actual voltage to the rated voltage at Vn point, n=1, 2, 3, 4. For example, setting **Vn Voltage** to 90 means V/V_{rated}%=90%.
3	Vn Active Power	The percentage of the output active power to the apparent power at Vn point, (n=1, 2, 3, 4). For example, setting **Vn Reactive Power** to 48.5 means P/P_{rated}%=48.5%
4	Output Response Mode	Set the active power output response mode. Supports: • **PT-1 Behavio**r, realize active scheduling based on the first-order LPF curve within the response time constant. • **Gradient Control**, realize active scheduling based on the power change slope.
5	PT-1 Behavior Tau	Set the time constant within which the active power changes based on the first order LPF curve.
6	Power Gradient	Set the active power change slope.

5.5.2 Setting the Reactive Curve

5.5.2.1 Setting the Q(U) Curve

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Reactive Curve Settings** to set the parameters.

Step 2 Enter the parameters. The inverter will adjust the reactive power to the apparent power ratio in real-time according to the actual grid voltage to the rated voltage ratio.

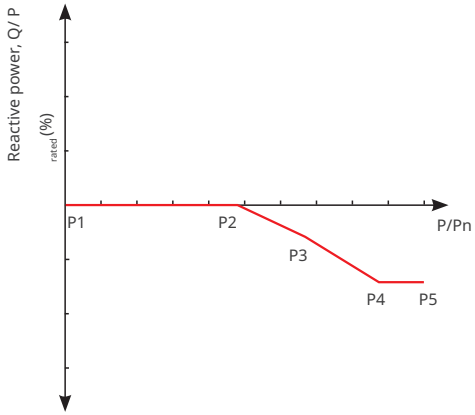


No.	Parameters	Description
1	Q(U) Curve	Enable Q(U) Curve when it is required by local grid standards and requirements.
2	Vn Voltage	The percentage of actual voltage to the rated voltage at Vn point, n=1, 2, 3, 4. For example, setting **Vn Voltage** to 90 means V/V_{rated}%=90%.
3	Vn Reactive Power	The percentage of the reactive output power to the apparent power at Vn point, n=1, 2, 3, 4. For example, setting **Vn Reactive Power** to 48.5 means Q/S_{rated}%=48.5%
4	Time Constant	The power is required to reach 95% in the first order LPF curve within three time constant.
5	Lock-In Power	When the inverter output reactive power to the rated power ratio is between the Lock-in power and Lock-out power, the ratio meets Q(U) curve requirements.
6	Lock-out Power	
7	Min. cosPhi	Set the lower limit of the power factor.

5.5.2.2 Setting the Q(P) Curve

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Reactive Curve Settings** to set the parameters.

Step 2 Enter the parameters. The inverter will adjust the reactive power to the apparent power ratio in real-time according to the actual grid voltage to the rated voltage ratio.

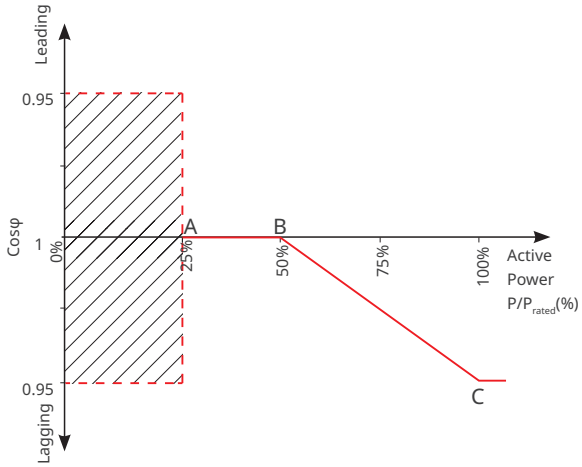


No.	Parameters	Description
1	Q(P) Curve	Enable Q(P) Curve when it is required by local grid standards and requirements.
2	Pn Reactive Power	The percentage of the output reactive power to the rated power at Pn point, n=1, 2, 3, 4, 5, 6. For example, setting **Vn Active Power** to 90 means Q/P_{rated}%=90%.
3	Pn Power	The percentage of the output active power to the rated power at Pn point, n=1, 2, 3, 4, 5, 6. For example, setting **Pn Active Power** to 90 means P/P_{rated}%=90%.
4	Time Constant	The power is required to reach 95% in the first order LPF curve within three time constant.

5.5.2.3 Setting the Cosφ(P) Curve

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Reactive Curve Settings** to set the parameters.

Step 2 Enter the parameters. The inverter will adjust the active output power to the apparent power ratio in real-time according to the actual grid voltage to the rated voltage ratio.



No.	Parameters	Description
1	Cosφ(P) Curve	Enable Cosφ Curve when it is required by local grid standards and requirements.
2	Point A/B/C/D Power	The percentage of the inverter output active power to the rated power at point A/B/C.
3	Point A/B/C/D Cosφ	The power factor at point A/B/C.
4	Time Constant	The power is required to reach 95% in the first order LPF curve within three time constant.
5	Lock-in Voltage	When the grid voltage is between Lock-in Voltage and Lock-out Voltage, the voltage meets Cosφ curve requirements.
6	Lock-out Voltage	
7	Lock-out Power	The Cosφ curve cannot work when the output active power to rated power ratio is lower than the **Lock-out Power**.

5.5.3 Setting Protection Parameters

5.5.3.1 Setting Voltage Protection Parameters

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Protection Parameters** to set the parameters.

Step 2 Set the parameters based on actual needs.

No.	Parameters	Description
1	OV Stage n Trip Value	Set the grid overvoltage protection threshold value.
2	OV Stage n Trip Time	Set the grid overvoltage protection tripping time.
3	UV Stage n Trip Value	Set the grid undervoltage protection threshold value.
4	UV Stage n Trip Time	Set the grid undervoltage protection tripping time.
5	10Min Overvoltage Trip Threshold	Set the 10min overvoltage protection threshold value.
6	10Min Overvoltage Trip Time	Set the 10min overvoltage protection tripping time.

5.5.3.2 Setting Frequency Protection Parameters

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Protection Parameters** to set the parameters.

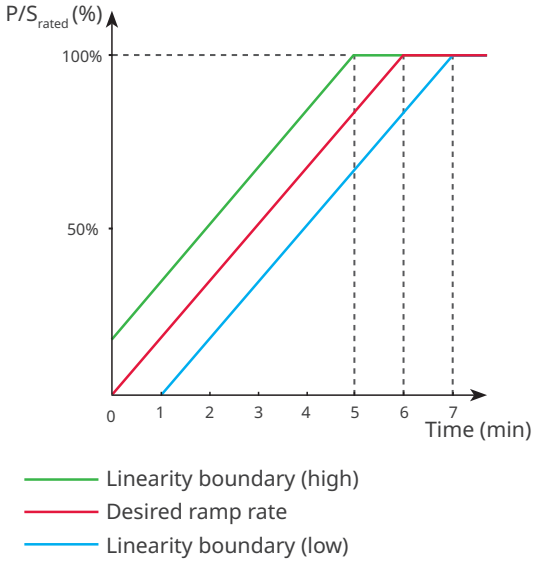
Step 2 Set the parameters based on actual needs.

No.	Parameters	Description
1	OF Stage n Trip Value	Set the grid overfrequency protection threshold value.
2	OF Stage n Trip Time	Set the grid overfrequency protection tripping time.
3	UF Stage n Trip Value	Set the grid underfrequency protection threshold value.
4	UF Stage n Trip Time	Set the grid underfrequency protection tripping time.

5.5.4 Setting Connection Parameters

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Connection Parameters** to set the parameters.

Step 2 Set the parameters based on actual needs.



No.	Parameters	Description
Ramp Up		
1	Upper Voltage	The inverter cannot connect to the grid if it is powered on for the first connection and the grid voltage is higher than the **Upper Voltage**.
2	Lower Voltage	The inverter cannot connect to the grid if it is powered on for the first connection and the grid voltage is lower than the **Lower Voltage**.
3	Upper Frequency	The inverter cannot connect to the grid if it is powered on for the first connection and the grid frequency is higher than the **Upper Frequency**.
4	Lower Frequency	The inverter cannot connect to the grid if it is powered on for the first connection and the grid frequency is lower than the **Lower Frequency**.
5	Observation Time	The waiting time for connecting the inverter to the grid when meeting the following requirements. 1. The inverter is powered on for the first connection. 2. The utility grid voltage and frequency meet certain requirements.

No.	Parameters	Description
6	Soft Ramp Up Gradient	Indicates the percentage of incremental output power per minute based on the local requirements when the inverter is powered on for the first time. For example, setting **Soft Ramp Up Gradient** to 10 means the start-up slope is 10%P_{rated}/min.
Reconnection		
7	Upper Voltage	The inverter cannot connect to the grid if it is reconnecting due to a fault and the grid voltage is higher than the **Upper Voltage**.
8	Lower Voltage	The inverter cannot connect to the grid if it is reconnecting due to a fault and the grid voltage is lower than the **Lower Voltage**.
9	Upper Frequency	The inverter cannot connect to the grid if it is reconnecting due to a fault and the grid frequency is higher than the **Upper Frequency**.
10	Lower Frequency	The inverter cannot connect to the grid if it is reconnecting due to a fault and the grid frequency is lower than the **Lower Frequency**.
11	Observation Time	The waiting time for connecting the inverter to the grid when meeting the following requirements. 1. The inverter is reconnecting to the grid due to a fault. 2. The utility grid voltage and frequency meet certain requirements.
12	Reconnection Gradient	Indicates the duration for the output power increases to the rated power when the inverter reconnects to the utility grid due to a fault.

5.5.5 Setting Voltage Ride Through Parameters

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Voltage Ride Through** to set the parameters.

Step 2 Set the parameters based on actual needs.

No.	Parameters	Description
LVRT		
1	UVn Voltage	The ratio of the ride through voltage to the rated voltage at UVn point during LVRT.
2	UVn Time	The ride through time at UVn point during LVRT.
3	Enter Into LVRT Threshold	The inverter will not be disconnected from the utility grid immediately when the grid voltage is between **Enter Into LVRT Threshold** and **Exit LVRT Endpoint.**
4	Exit LVRT Endpoint	
5	Gradient K1	K-factor for reactive power during LVRT.
6	Zero Current Mode	The system outputs zero current during LVRT.
7	Entry Threshold	Set the entry threshold of zero current mode.
HVRT		
6	OVn Voltage	The ratio of the ride through voltage to the rated voltage at OVn point during HVRT.
7	OVn Time	The ride through time at OVn point during HVRT.
8	Enter High Crossing Threshold	The inverter will not be disconnected from the utility grid immediately when the grid voltage is between **Enter High Crossing Threshold** and **Exit High Crossing Threshold.**
9	Exit High Crossing Threshold	
10	Slope K2	K-factor for reactive power during HVRT.
11	Zero Current Mode	The system outputs zero current during HVRT.
12	Entry Threshold	Set the entry threshold of zero current mode.

5.5.6 Setting Frequency Ride Through Parameters

Step 1 Tap **Home > Settings > Advanced Settings > Safety Parameters > Frequency Ride Through** to set the parameters.

Step 2 Set the parameters based on actual needs.

No.	Parameters	Description
1	UFn Frequency	The frequency at the UFn point during frequency ride through.
2	UFn Time	The ride through duration at the UFn point during frequency ride through.
3	OFn Frequency	The frequency at the OFn point during frequency ride through.
4	OFn Time	The ride through duration at the OFn point during frequency ride through.

5.6 Configuring Communication Parameters

5.6.1 Configuring WiFi

Step 1 Tap **Home** > **Settings** > **Communication Settings** > **WiFi** to set the parameters

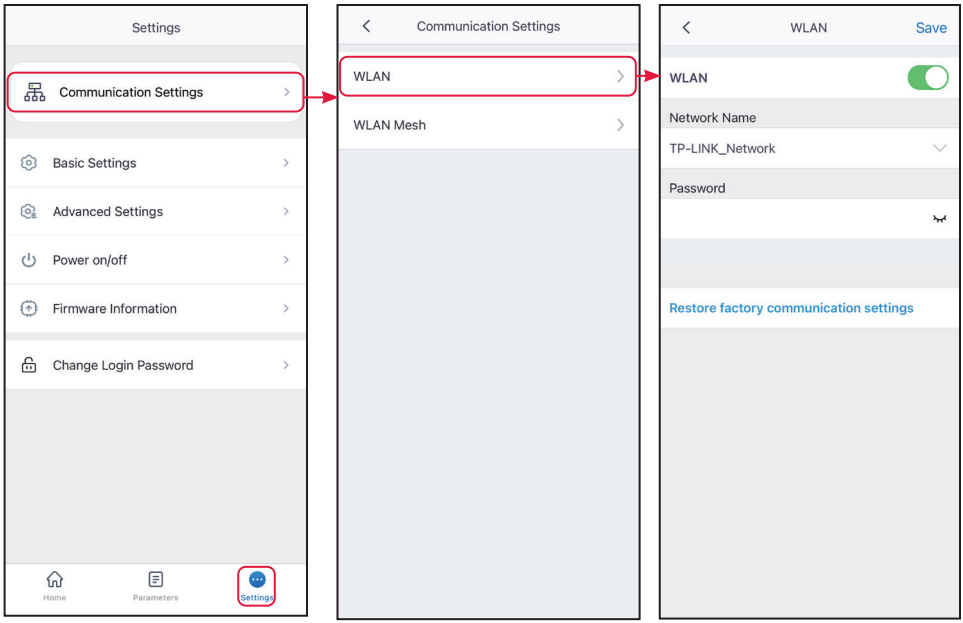
Step 2 Enable or disable **WLAN** based on actual needs.

Step 3 Tap **Network Name** to select the right network.

Step 4 Enter **Password** for the actual connected network.

Step 5 Enable or disable **DHCP** based on actual needs. Configure **IP Address**, **Subnet Mask**, **Gateway Address,** and **DNS Server** according to the router or switch information when **DHCP** is disabled.

Step 6 Tap **Save** to complete the settings.



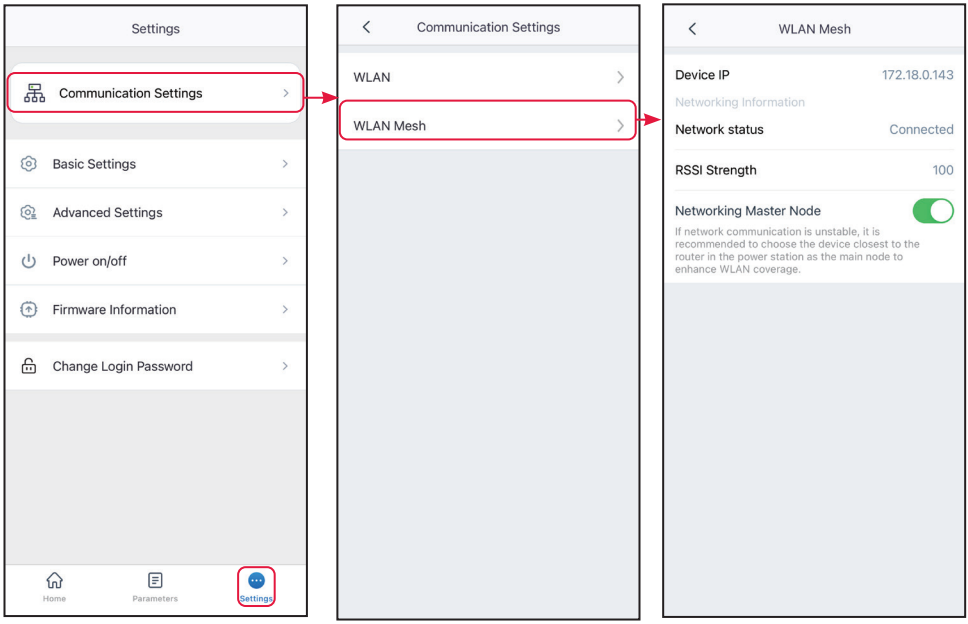
SLG00CON0096

No.	Parameters	Description
1	Network Name	Select WiFi based on the actual connecting.
2	Password	WiFi password for the actual connected network.
3	DHCP	• Enable DHCP when the router is in dynamic IP mode. • Disable DHCP when a switch is used or the router is in static IP mode.
4	IP Address	• Do not configure the parameters when DHCP is enabled. • Configure the parameters according to the router or switch information when DHCP is disabled.
5	Subnet Mask	
6	Gateway Address	
7	DNS Server	

5.6.2 Configuring WiFi Mesh

Step 1 Tap **Home > Settings > Communication Settings > WiFi Mesh** to set the parameters.

Step 2 Set the inverter as the **Networking Master Node** of the WiFi mesh**.** The inverter with higher RSSI is recommended to be set as the root node.

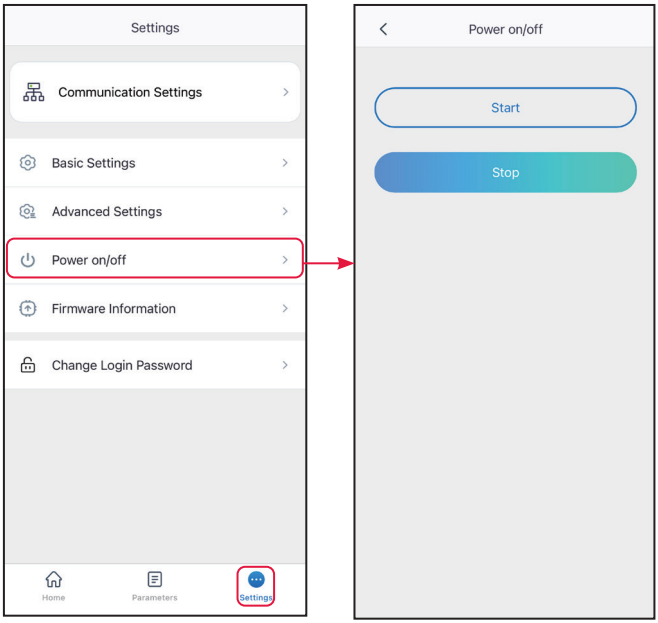


SLG00CON0097

5.7 Starting/Stopping the Grid

Step 1 Tap **Home** > **Settings** > **Advanced Settings** > **Equipment Power Supply**.

Step 2 Tap **Start** to start grid connection or tap **Stop** to stop grid connection.

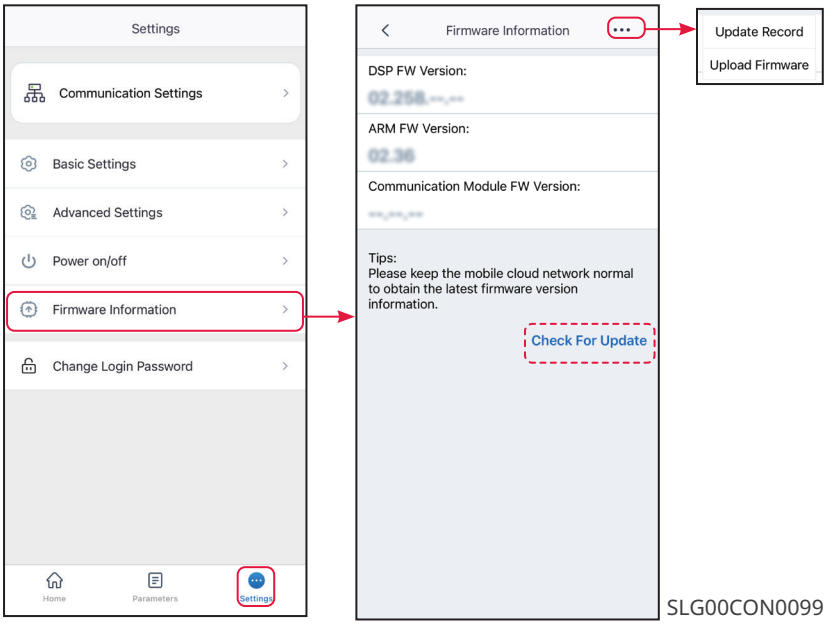


SLG00CON0098

5.8 Upgrading Firmware Version

NOTICE

- Upgrade the DSP version or ARM version of the inverter. Some devices do not support upgrading the firmware version through SolarGo app.
- If the Firmware Upgrade dialog box pops up once logging into the app, click **Firmware Upgrade** to directly go to the firmware information page.



SLG00CON0099

Type I

Local Upgrade Requirements:

- The upgrade patch has been obtained from the dealer or the after sales service.
- Duplicate the upgrade patch to the smart phone.

Step 1 Tap **Home** > **Settings** > **Firmware Information** to check the firmware version.

Step 2 Tap ••• > **Upload Firmware** to import local upgrade patch. Tap **Upgrade** and follow the prompts to complete the upgrading.

Step 3 (Optional) Tap ••• > **Update Record** to check firmware upgrade records.

Type II

NOTICE

- When prompted by a red dot on the right of the **Firmware Information**, click to get the firmware update information.
- During the upgrade process, ensure that the network is stable and the device remains connected to SolarGo, otherwise the upgrade may fail.

Step 1 Tap **Home** > **Settings** > **Firmware Information** to check the firmware version.

Step 2 (Optional) Tap Check For Update to check whether there is a latest version to be updated.

Step 3 Tap **Firmware Upgrade** as prompted to enter the firmware upgrade page.

Step 4 (Optional) Tap Learn More to check the firmware related information, such as **Current Version**, **New Version**, **Update Record**, etc.

Step 5 Tap **Upgrade** and follow the prompts to complete the upgrading.

6 AC Charger

6.1 Log In as AC Charger

NOTICE
Log in using the initial password for the first time and change the password as soon as possible. To ensure account security, you are advised to change the password periodically and keep the new password in mind.

Step 1 Ensure that the charger is power on and works properly.

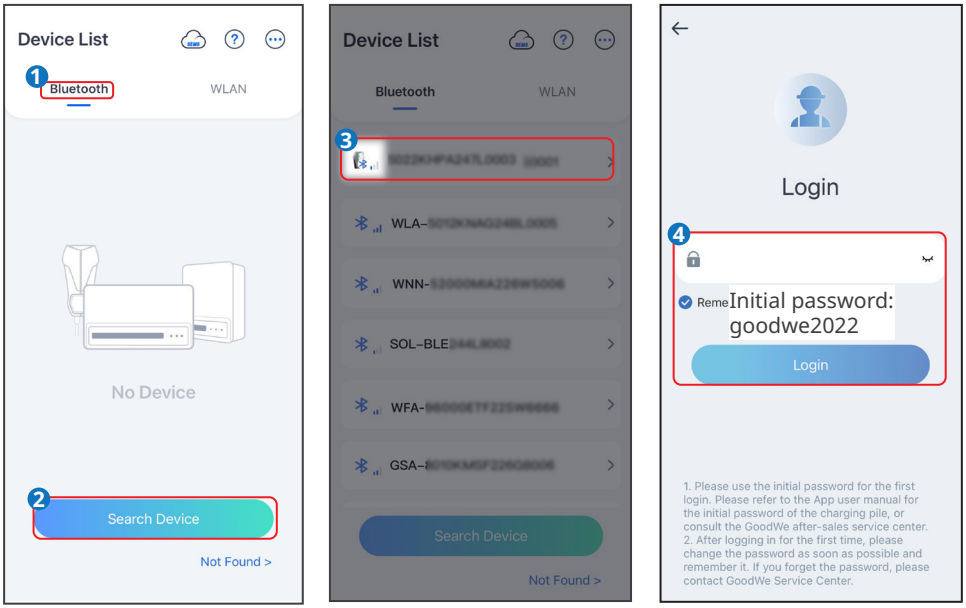
Step 2 Select **Bluetooth** tab on the SolarGo app hompage.

Step 3 Pull down or tap **Search Device** to refresh the device list. Find the device by the the charger serial number. Tap the device name to log into the **Home** page.

Step 4(optional): For first connection with the equipment via Bluetooth, there will be a Bluetooth pairing prompt, tap **Pair** to continue the connection.

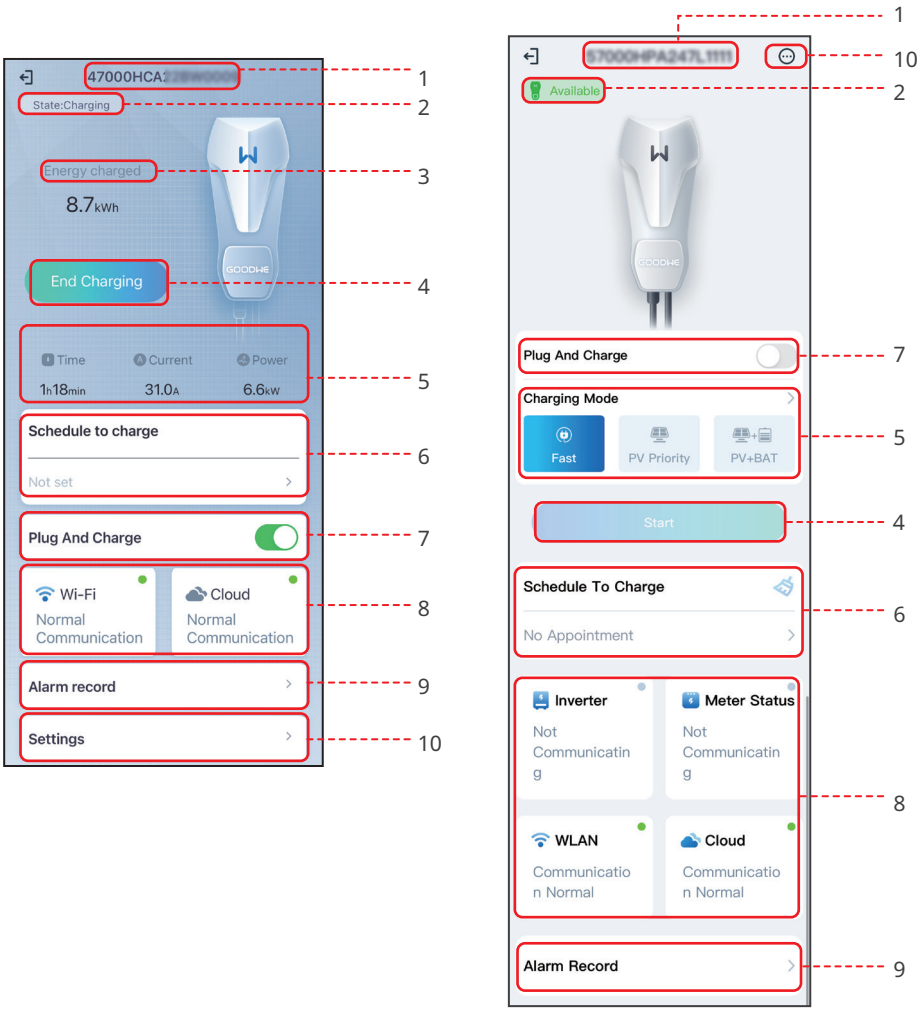
Step 5 Enter the login password to go to the homepage. Initial password: goodwe2022.

Step 6 (Optional): If the initial password is used, the app will prompt you to change the password after logging in. Change it or not according to your actual needs.



SLG00CON0101

6.2 GUI Introductions to AC Charger



SLG00CON0102

No.	Name/Icon	Description
1	Serial Number	Serial number of the connected inverter.
2	Device Status	Status of the charger, such as **Idle (plugged)**, **Charing**, etc..
3	Charging Status	• Charging status, such as**The charging gun is plugged and ready to charge**, **Energy Charged ***kWh**, etc.. • Displays information including:charged energy, time, current, and power during charging.
4	Start/ End Charging	Start charging the electric vehicle (EV for short) using the charger when all the settings are completed. • Start Charging: Start charging the EV. • End Charging: Stop charging the EV.
5	Charging Mode	Select the charging mode for EV.
6	Schedule To Charge	Set the single charging time or cycle charging time.
7	Plug And Charge	Start charging immediately after plugging in the charging plug.
8	Communication Status	**WiFi**: whether the charger is communicating with the router. **Cloud**: whether the charger is communicating with the Cloud.
9	Alarm Record	Check alarms.
10	Settings	Set the parameters of the charger.

6.3 Setting the Charger (HCA Series)

6.3.1 Setting Charging Mode

Set the **Charging Mode** and decide whether to enable **Schedule to Charge** or **Plug And Charge** before charging the EV.

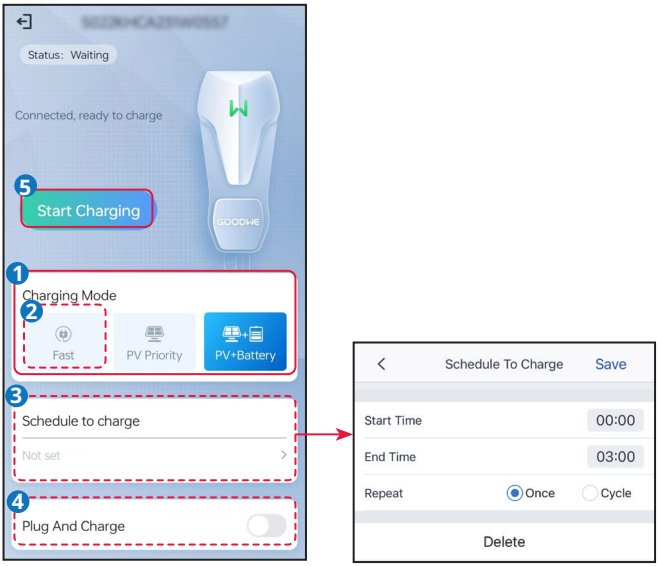
Step 1 Select **Fast**, **PV priority**, or **PV + Battery** to set **Charging Mode**.

Step 2 (Optional) If **Fast** is selected, tap **Charging Power** to set the maximum charging power and tap ✓ to save the settings.

Step 3 (Optional) Tap **Schedule To Charge** to reserve charging in advance. Set **Start Time** and **End Time**, and **Single** or **Cycle** repeat.Tap **Save** to complete the settings.

Step 4 (Optional) Enable or disable **Plug And Charge** based on actual needs.

Step 5 Tap **Start Charging** to charge EV.



SLG00CON0103

No.	Parameters	Description
1	Charging Mode	Select the charging mode for EV. • Fast: Charge the EV at the rated power of the charger. • PV priority: Only the PV power is used to charge the EV. Loads take priority in PV power consumption, the remaining power will charge the EV. For a single phase charger, the PV power should be higher than 1.4kw. For a three phase charger, the PV power should be higher than 4.2kw. • PV + Battery: The PV power and battery are used to charge the EV. Loads take priority in power consumption, the remaining power will charge the EV.

No.	Parameters	Description
2	Schedule To Charge	Set the single charging time or cycle charging time.
3	Plug And Charge	Start charging immediately after plugging in the charging plug.
4	Start/ End Charging	Start charging the EV using the charger when all the settings are completed. • Start Charging: Start charging the EV. • End Charging: Stop charging the EV.

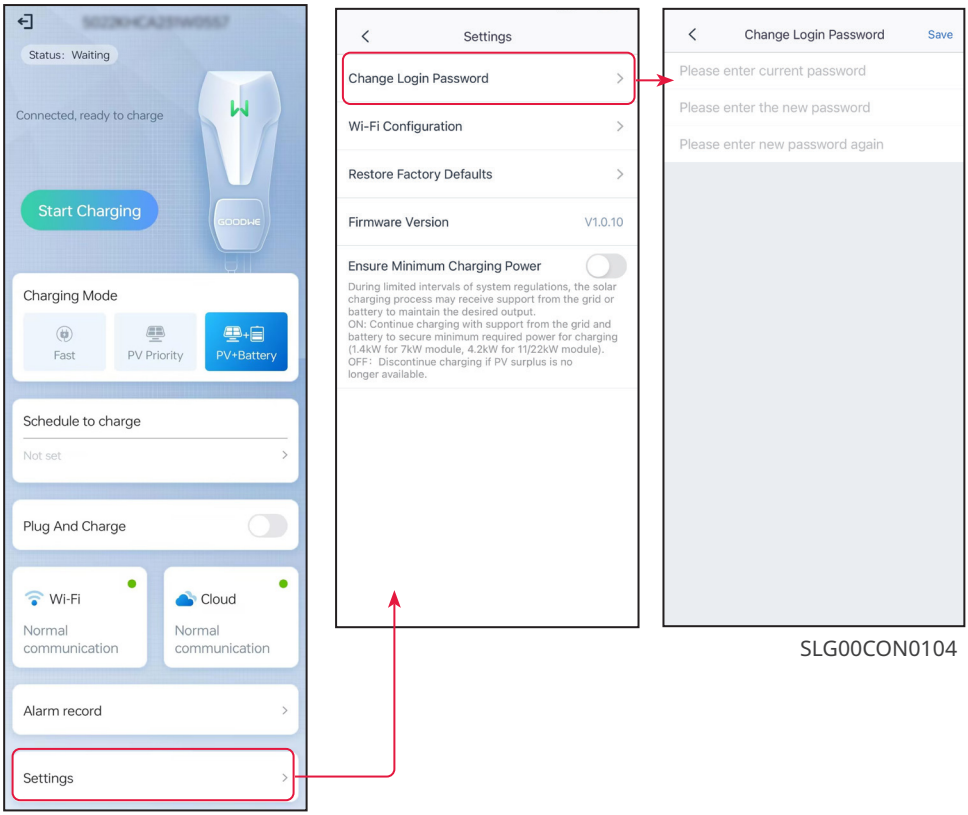
6.3.2 Changing the Password

To ensure account security, you are advised to change the password periodically and keep the new password in mind.

Step 1 Tap **Settings** > **Change Password** to set the password.

Step 2 Enter the current password and new password. Tap **Save** to complete the settings.

Step 3 Tap **Save** to complete the settings.



SLG00CON0104

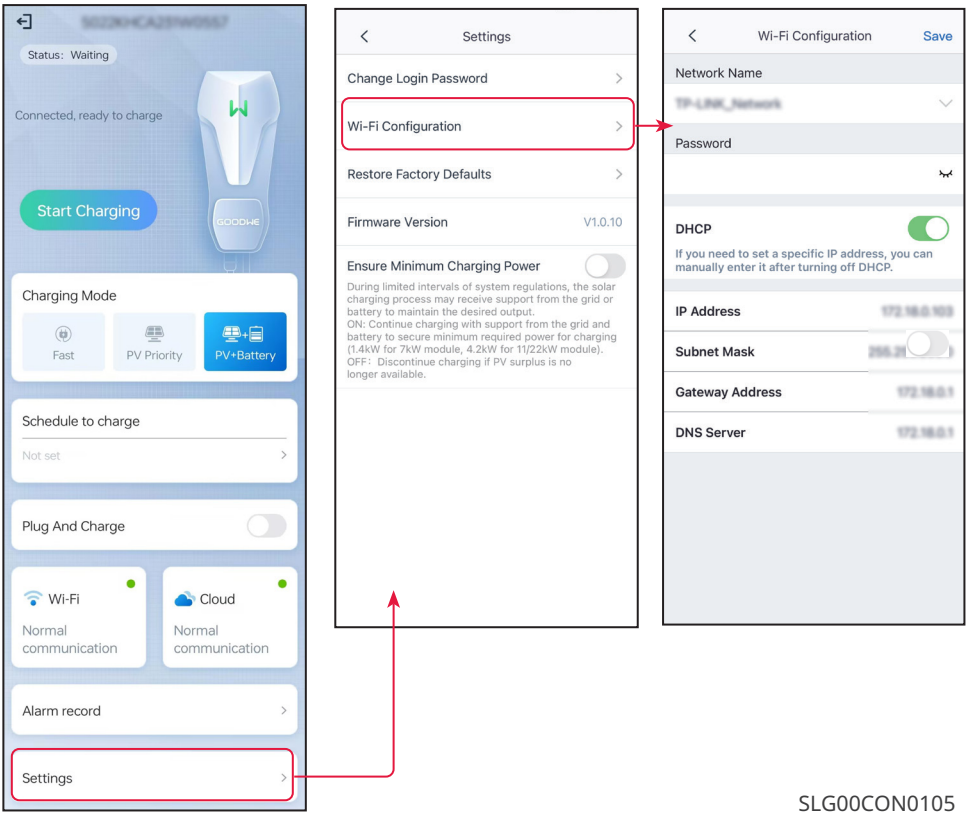
6.3.3 Configuring WiFi

Configure information of the router or switch which communicates with the charger to ensure communication between the charger and router or switch. Otherwise, the charger cannot connect to the server.

Step 1 Tap **Settings** > **Wi-Fi Configuration** to configure the parameters.

Step 2 Tap **Network Name** and select the right network. Enter the**Password** of the selected network.

Step 3 Tap **Save** to complete the settings.



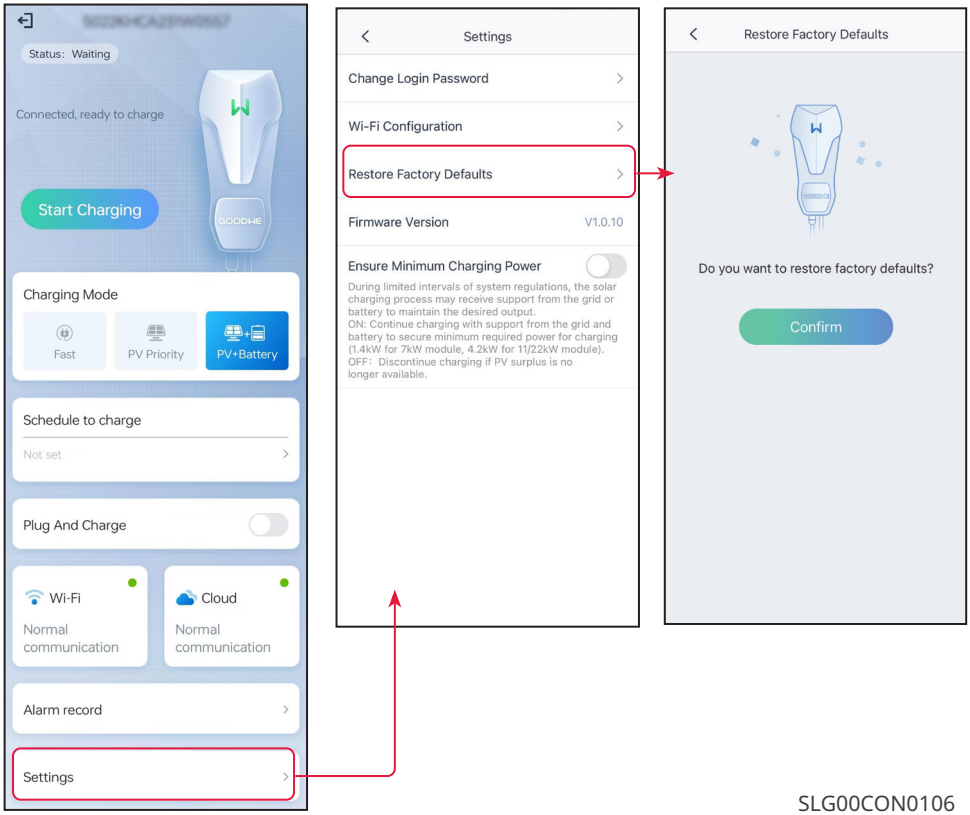
SLG00CON0105

6.3.4 Restoring Factory Defaults

Follow the steps below to restore the factory default settings of the charger.

Step 1 Tap **Settings** > **Restore Factory Defaults**.

Step 2 Restore factory settings as prompted.



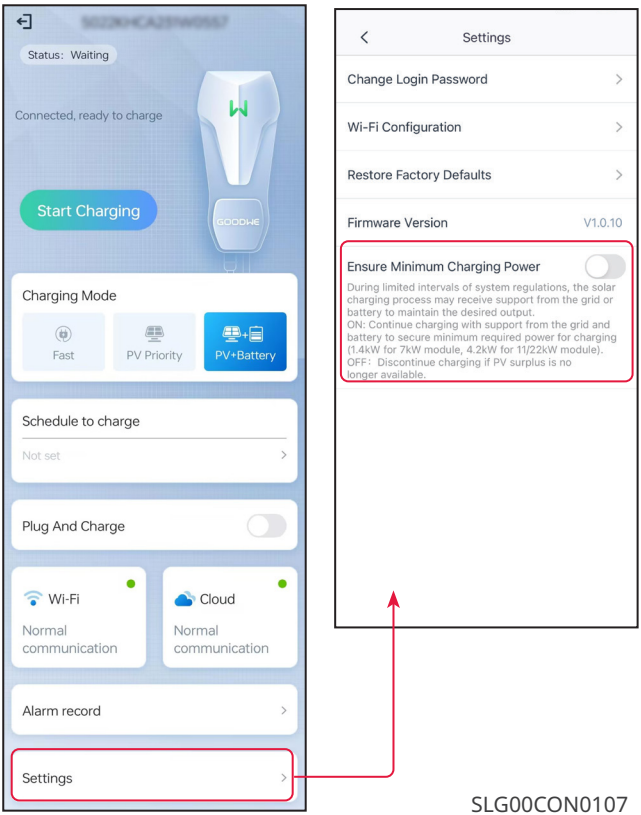
SLG00CON0106

6.3.5 Setting the Minimum Charging Power

The charger cannot charge the EV if the PV power is insufficient. If the PV power is insufficient, enable **Ensure Minimum Charging Power** to use the power from the utility grid or battery to meet the minimum charging power requirements.

Step 1 Tap **Settings** to enter the setting page.

Step 2 Enable or disable **Ensure Minimum Charging Power** based on actual needs.



SLG00CON0107

6.4 Setting the Charger (HCA G2 Series)

6.4.1 Setting Charging Mode

NOTICE

- Set the **Charging Mode** and decide whether to enable **Schedule to Charge** or **Plug And Charge** before charging the EV.
- In PV charging mode, if the PV energy is insufficient, charging will be paused; if the PV energy is insufficient but **Ensure Minimum Charging Power** has been enabled, the power grid or the battery will be used to maintain the minimum power required for charging.
- In PV+BAT charging mode, if the PV+BAT energy is insufficient, charging will be paused; if the PV+BAT energy is insufficient but **Ensure Minimum Charging Power** has been enabled, the power grid will be used to maintain the minimum power required for charging.

Step 1 Select **Fast**, **PV priority**, or **PV + BAT** to set **Charging Mode**.

Step 2 (Optional) Tap **Charging Mode** to set the mode and tap **Save** to complete the settings.

Step 3 (Optional) Tap **Schedule To Charge** to reserve charging in advance. Set **Start Time** and **End Time**, and **Single** or **Cycle** repeat. Tap **Save** to complete the settings.

Step 4 (Optional) Enable or disable **Plug And Charge** based on actual needs.

Step 5 Tap **Start Charging** to charge EV.

SLG00CON108

No.	Parameters	Description
Fast: The charger uses electricity from power grid, PV, or batteries to charge electric vehicles.		
1	Power	Set the charging power of the charger. The output power of the charger defaults to the nominal output power of the charger
2	SOC	The battery will stop charging when the battery's SOC≤ set SOC.
3	Max. Energy	The charger will stop charging the EV when the Max. Energy is reached.
PV Priority: Only the PV power is used to charge the EV. Loads which can be grid load or back-up load take priority in PV power consumption, the remaining power will charge the EV.		
4	Min. Energy	Set the minimum charging power for charging the EV.
5	Finish at	Set the time required to reach the Min. Energy.
6	Max. Energy	The charger will stop charging the EV when the Max. Energy is reached.
PV+BAT: The PV power and battery are used to charge the EV. Loads Loads which can be grid load or back-up load take priority in power consumption, the remaining power will charge the EV.		
7	SOC	The battery will stop charging when the battery's SOC≤ set SOC.
8	Min. Energy	Set the minimum charging power for charging the EV.
9	Finish at	Set the time required to reach the Min. Energy.
10	Max. Energy	The charger will stop charging the EV when the Max. Energy is reached.

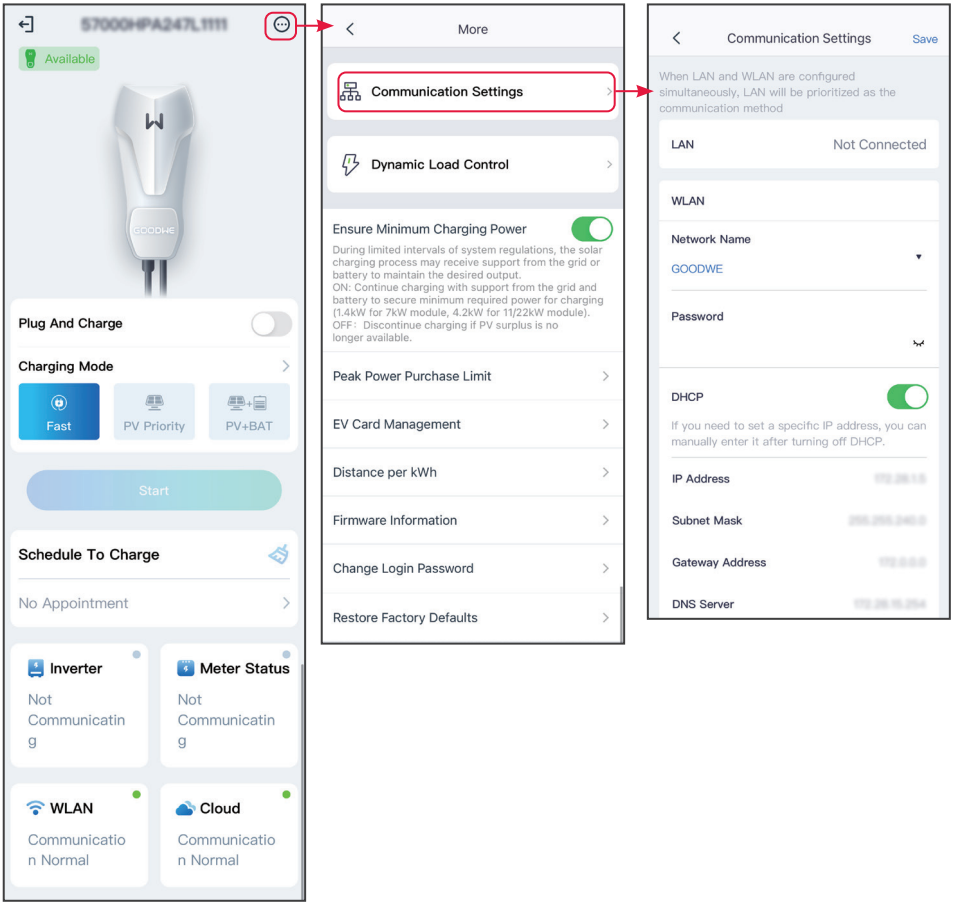
6.4.2 Configuring WiFi

Configure information of the router or switch which communicates with the charger to ensure communication between the charger and router or switch. Otherwise, the charger cannot connect to the server.

Step 1 Tap **Settings** > **Wi-Fi Configuration** to configure the parameters.

Step 2 Tap **Network Name** and select the right network. Enter the**Password** of the selected network.

Step 3 Tap **Save** to complete the settings.

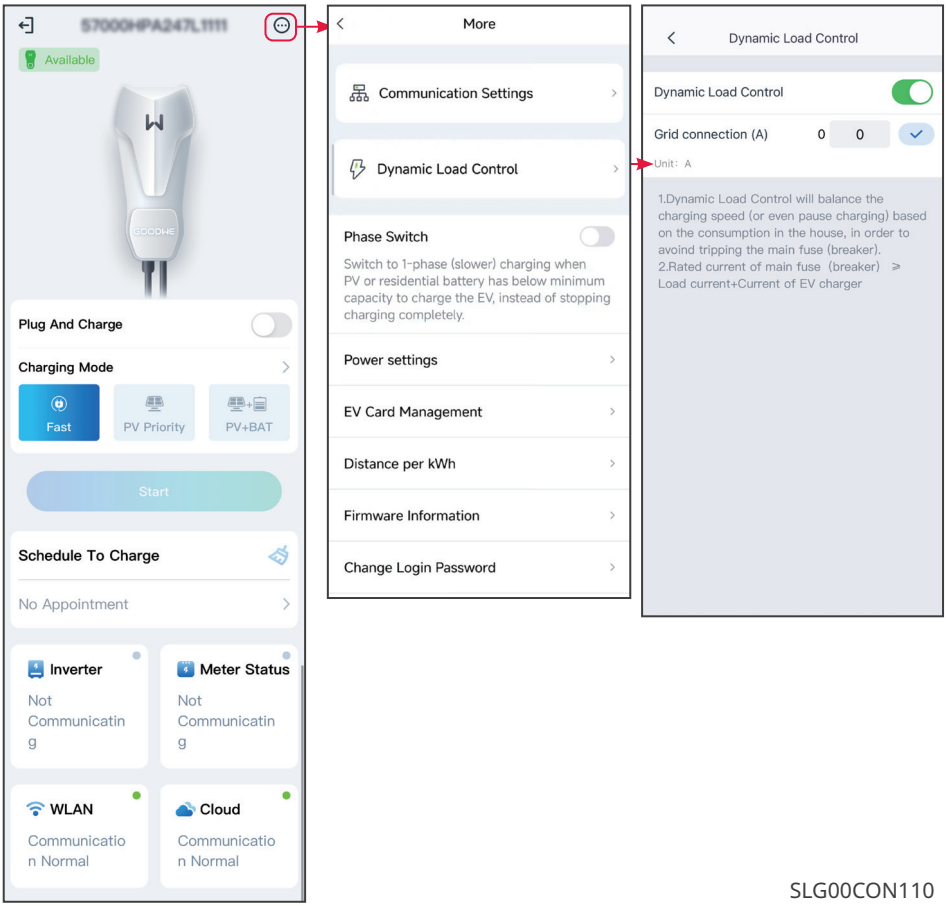


6.4.3 Setting the Dynamic Load Control

After you turn on the dynamic load control, the charger will balance the charging speed (or even pause charging) based on the obtained meter data and the set grid connection current to avoid tripping the main fuse. When the actual current purchased is close to the set grid connection current, in order to avoid tripping, the charger will reduce the charging power till pause charging. The charger will restart automatically after the difference between the set grid connection current and the current purchased from the grid meets the starting conditions of the charger.

Step 1 Tap ⋯ **> Dynamic Load Control** to enter the setting page.

Step 2 Enable or disable **Dynamic Load Control** and set **Grid connection** value based on actual needs.



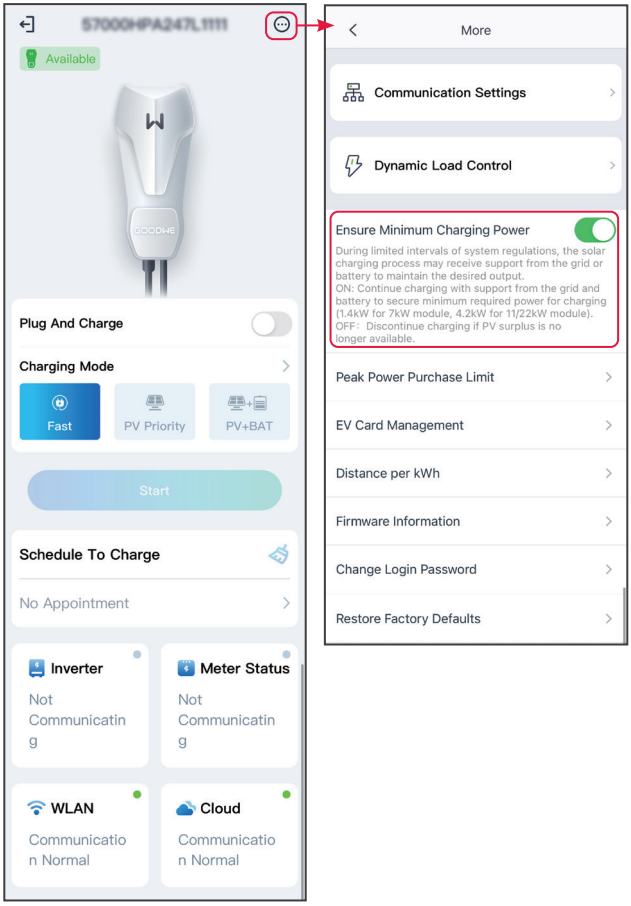
SLG00CON110

6.4.4 Setting the Minimum Charging Power

When the energy of the PV or PV + battery is insufficient, the charger can get support from the grid or the battery to maintain the desired power output if the Ensure Minimun Charging Power is turn on. The function is only available under the PV Priority or PV + Battery modes.

Step 1 Tap ⋯ to enter the setting page.

Step 2 Enable or disable **Ensure Minimum Charging Power** based on actual needs.

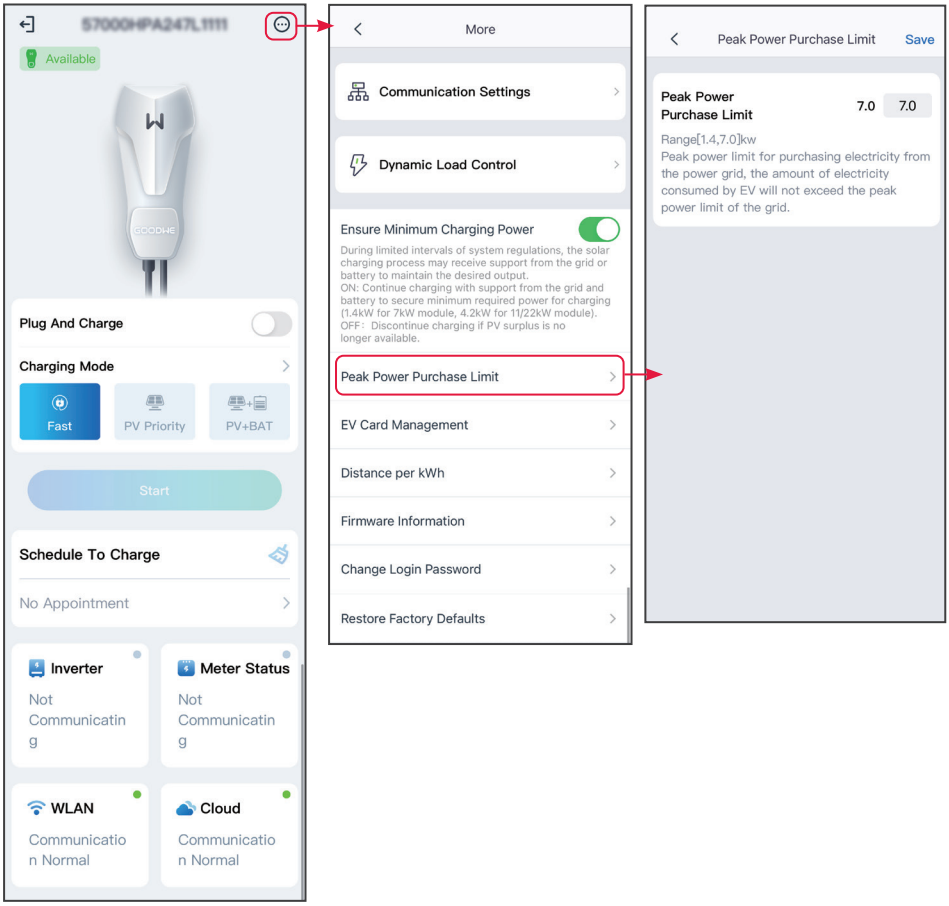


6.4.5 Setting the Purchase Power Limit

Step 1 Tap ⋯ > **Peak Power Purchase Limit** to enter the setting page.

Step 2 Set the purchased power limit value based on actual needs.

Step 3 Tap **Save** to complete the settings.



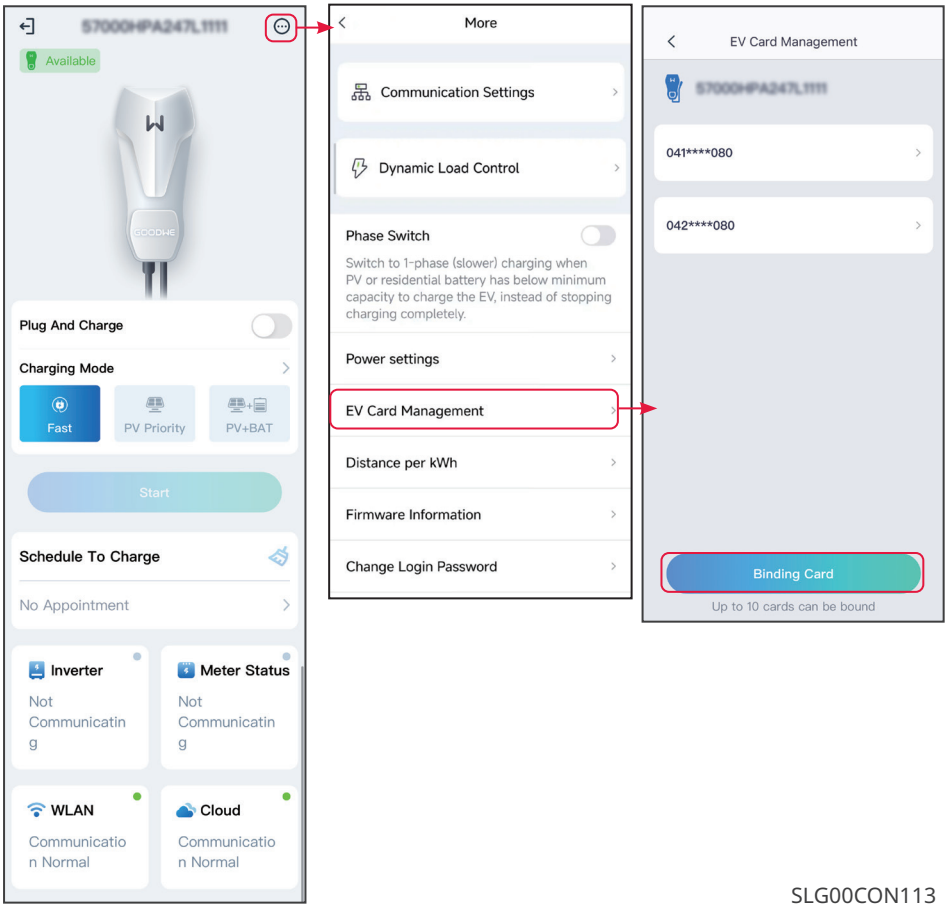
6.4.6 Managing the EV Card

NOTICE

- RFID cards can be added and deleted, and each charger can bound up to 10 cards.
- After binding the card, tap the card to start charging the EV.

Step 1 Tap ⋯ **> EV Card Management** to enter the setting page.

Step 2 Add or delete cards based on actual needs.



SLG00CON113

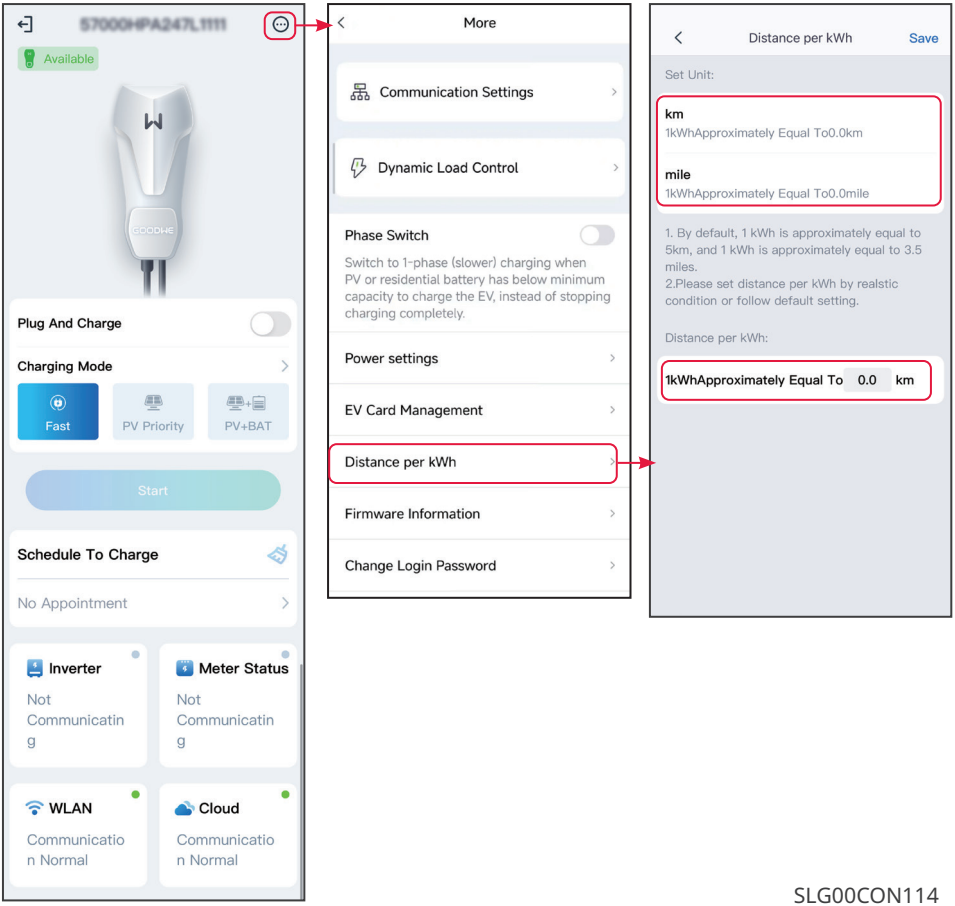
6.4.7 Setting the Distance per kWh

Set the unit or keep the default setting.

Step 1 Tap ⋯ > **Distance per kWh** to enter the setting page.

Step 2 Set the unit to km or mile based on actual needs.

Step 3 Tap **Save** to complete the settings



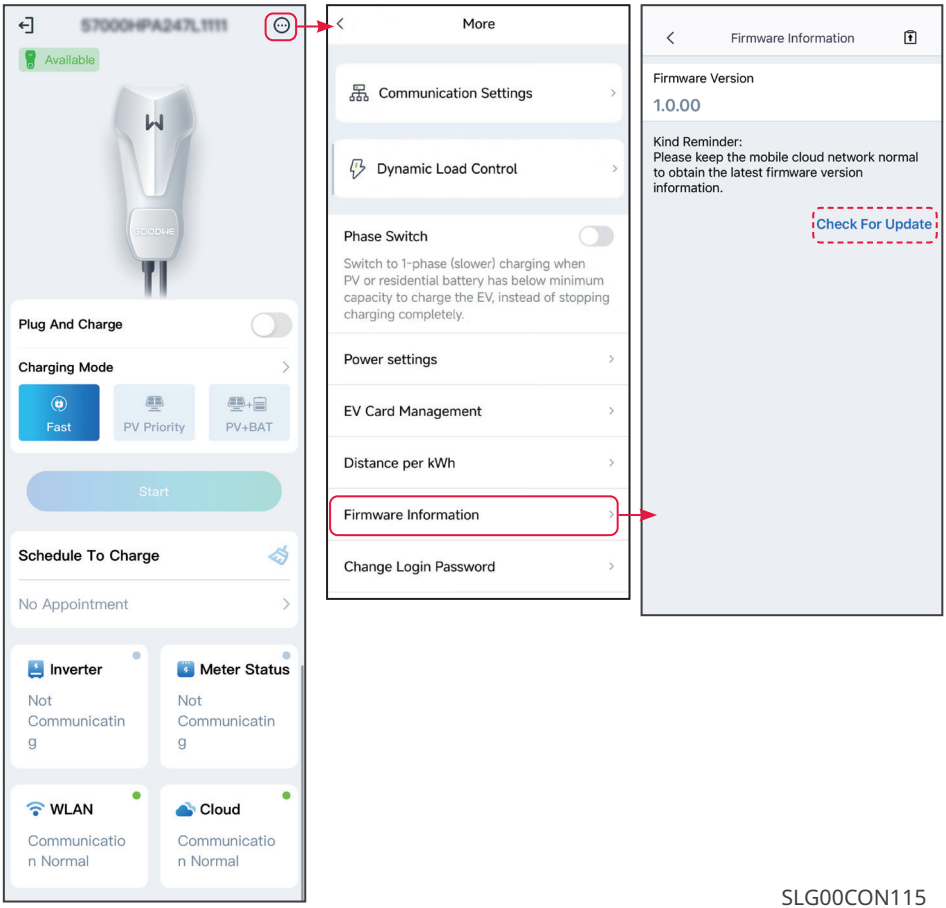
SLG00CON114

6.4.8 Checking Firmware Information/Upgrading Firmware Version

Check or upgrade the firmware version of the charger.

Step 1 Tap ⋯ > **Firmware Version** to enter the setting page.

Step 2 (optional) Tap Check For Update to confirm whether the latest firmware version is available for updating. If so, follow the prompts to complete the update.



SLG00CON115

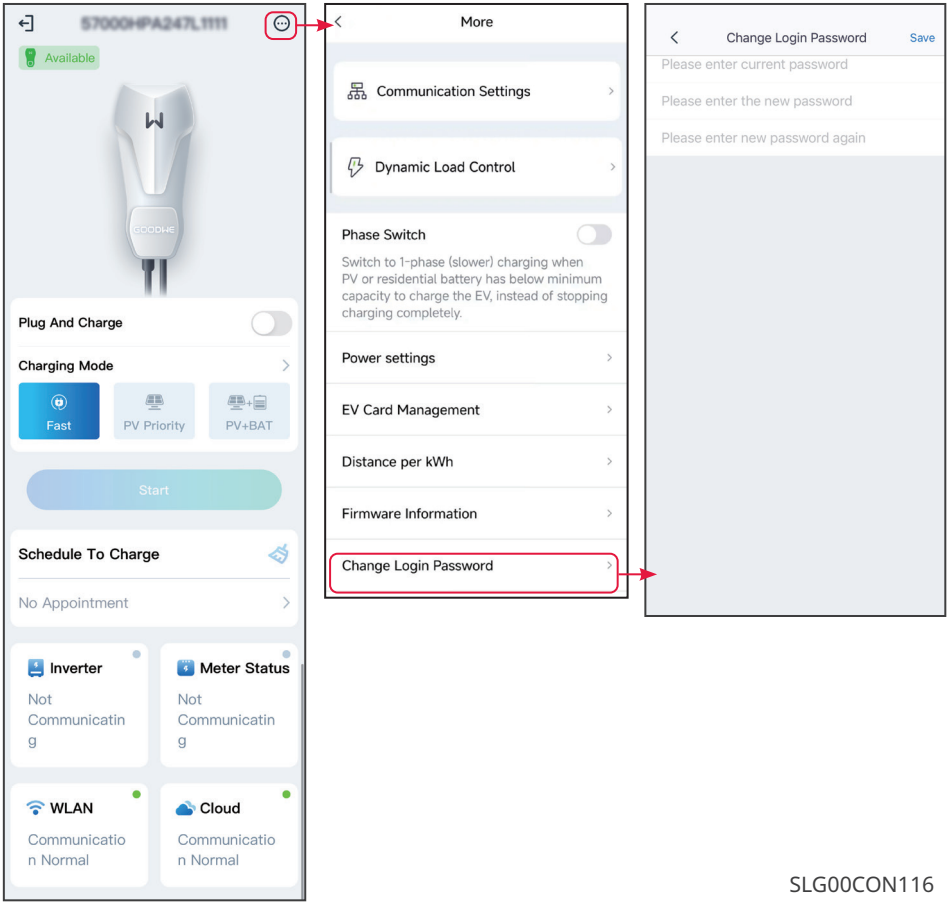
6.4.9 Changing the Password

To ensure account security, you are advised to change the password periodically and keep the new password in mind.

Step 1 Tap ⋯ > **Change Login Password** to set the password.

Step 2 Enter the current password and new password. Tap **Save** to complete the settings.

Step 3 Tap **Save** to complete the settings.



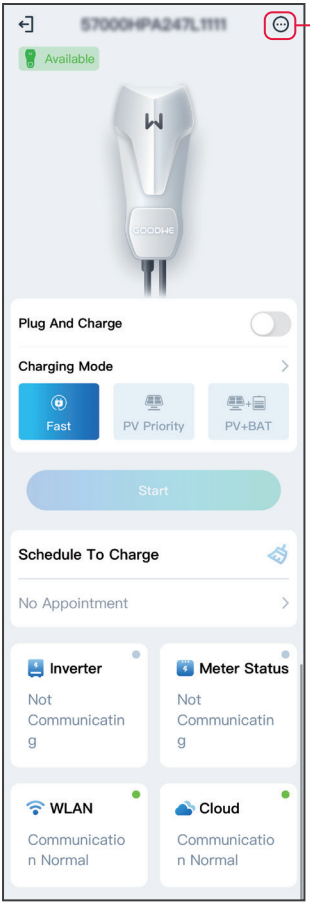
SLG00CON116

6.4.10 Restoring Factory Defaults

Follow the steps below to restore the factory default settings of the charger.

Step 1 Tap ⋯ > **Restore Factory Defaults**.

Step 2 Restore factory settings as prompted.



SLG00CON117

7 Troubleshooting

7.1 App Troubleshooting

No.	Fault	Cause	Solutions
1	Cannot install the app	1. The smart phone operating system version is too low. 2. The smart phone prevents installing the app.	1. Upgrade the phone operating system. 2. Select Setting > Security > Install apps from external sources on your smart phone.
2	Communication failure	The communication distance between the smart phone and the inverter is out of range.	Place the smart phone near the inverter and reconnect the WiFi module.
3	Fail to obtain the data during operation or the connection between the inverter and WiFi is interrupted.	The communication between the inverter and Solar-WiFi or bluetooth is interrupted.	
4	The WiFi signal is not included in the app device list.	The app is not connected to the WiFi signal.	1. Make sure that the WiFi module works normally. 2. Refresh the device list. If the signal is still missing, restart the app.

7.2 Inverter Alarms

No.	Alarm	Causes	Solutions
1	SPI Fail	1. The exception is caused by an external fault. 2. Control board of the inverter cannot work properly.	1. Restart the inverter. If the inverter recovers, the problem is accidental and does not affect system working. 2. If the problem persists, contact the after-sales service.
2	EEPROM R/W Fail	1. The exception is caused by an external fault. 2. Control board of the inverter cannot work properly.	1. Restart the inverter. If the inverter recovers, the problem is accidental and does not affect system working. 2. If the problem persists, contact the after-sales service.
3	Fac Fail	1. Wrong safety code. 2. Unstable grid frequency.	1. Check the safety code. 2. Check whether the AC frequency(Fac) is within the normal range. 3. If the problem occurs occasionally, the utility grid may be abnormal temporarily.
4	AFCI Fault	1. The PV string cables are in poor contact. 2. The insulation between the PV string and ground is abnormal.	1. Check whether the PV cables are connected poorly. 2. Contact after-sales service if the problem persists.If the problem persists, contact the after-sales service.
5	Night SPS Fault	The equipment cannot work properly.	1. Restart the equipment. 2. Upgrade the software version to solve the problem.
6	L-PE Fail	The live wire of the inverter output terminal is connected improperly.	1. Check the wiring of the grid. 2. If the problem persists, contact the after-sales service.
7	Relay Chk Fail	1. The relay is abnormal or short-circuited. 2. The control circuit is abnormal. 3. The AC cable is connected improperly, like a virtual connection or short circuit.	1. Measure the voltage between N and PE cable on AC side. If the voltage is higher than 10V, it means the cables are connected improperly. 2. Restart the equipment.

No.	Alarm	Causes	Solutions
8	N-PE Fail	1. The N and PE cables are connected improperly. 2. The N wire of the inverter output terminal is connected improperly.	1. Make sure that the N and PE cables are connected correctly. 2. Make sure that the output cable is connected correctly. 3. If the problem persists, contact the after-sales service.
9	ARC Fail-HW	The power limit function is abnormal. (For Australia)	1. Make sure that the grid and smart meter are connected correctly. 2. If the problem persists, contact the after-sales service.
10	PV Reverse Fault	The PV strings are connected reversely.	1. Make sure that the PV strings are connected correctly. 2. If the problem persists, contact the after-sales service.
11	String OverCurr	The current of one PV string is too high.	Check the PV string connection.
12	LCD Comm Fail	The LCD connection is not firm.	Contact the after-sales service.
13	DCI High	DC component exceeds the allowed range.	1. Restart the inverter. If the inverter recovers, the problem is accidental and does not affect system working. 2. If the problem persists, contact the after-sales service.
14	Isolation Fail	1. The PV panels are connected improperly. 2. The DC cable is broken. 3. The N and PE cables are connected improperly. 4. The system is in a moist environment like rainy days, early morning or sunset.	1. Disconnect and connect the PV strings in turn to find the one caused error. 2. Check whether the DC cable is broken. 3. Measure the voltage between N and PE cable on AC side. If the voltage is higher than 10V, it means the cables are connected improperly. 4. Make sure that the PV modules are grounded properly.
15	Vac Fail	1. Wrong safety code. 2. Unstable grid frequency. 3. Improper AC cable specifications, like too long or too thin. 4. The AC cable is connected improperly.	1. Check the safety code. 2. Make sure that the voltage of each phase (Between L1&N, L2&N, L3&N) is within a normal range. 3. Make sure the grid voltage is stable.

No.	Alarm	Causes	Solutions
16	EFan Fail	1. The external fan is blocked. 2. or connected improperly.	Clear the external fan to remove the blocks.
17	PV Over Voltage	Excess PV modules are connected, and the open circuit voltage is higher than the max DC input voltage of the inverter.	1. Measure whether the open circuit voltage of the PV string is higher than the max DC input voltage of the inverter. 2. If the voltage is high, remove some panels connected to make sure that the open circuit voltage meets the requirement.
18	Overtemp.	1. The ambient temperature is too high. 2. The inverter is installed in a place with poor ventilation.	1. Cool down the ambient temperature. 2. Make sure that the installation meets the environment requirements listed in the inverter user manual. 3. Power off the inverter and restart 15 minutes later.
19	IFan Fail	1. The internal fan is blocked. 2. or connected improperly.	1. Restart the inverter. If the inverter recovers, the problem is accidental and does not affect system working. 2. If the problem persists, contact the after-sales service.
20	DC Bus High	1. The PV voltage is too high. 2. Control board of the inverter cannot work properly.	1. Measure whether the open circuit voltage of the PV string is higher than the max DC input voltage of the inverter. 2. Reduce the number of PV panels per string if the DC voltag is too high.
21	Ground I Fail	1. The AC PE cable is not connected well. 2. The system is in a moist environment like rainy days, early morning or sunset.	Detect the voltage between the enclosure and the ground. The PE cable is connected improperly if any voltage detected.

No.	Alarm	Causes	Solutions
22	Utility Loss	1. Utility grid power fails. 2. The AC cable is disconnected. 3. or the AC breaker is off. 4. AC breaker fails.	1. Ensure that the utility grid is available. 2. Measure the AC voltage using a multimeter. 3. Check whether the breaker is broken. 4. Check whether the AC cable is connected properly. 5. Ensure that the grid is connected and AC breaker turned ON. 6. Disconnect the AC output switch and DC input switch, then connect them 5 minutes later.
23	AC HCT Fail	1. The exception is caused by an external fault. 2. Control board of the inverter cannot work properly.	1. Restart the inverter. If the inverter recovers, the problem is accidental and does not affect system working. 2. If the problem persists, contact the after-sales service.
24	Relay Dev Fail	1. The exception is caused by an external fault. 2. Control board of the inverter cannot work properly.	1. Restart the inverter. If the inverter recovers, the problem is accidental and does not affect system working. 2. If the problem persists, contact the after-sales service.
25	GFCI Fail	1. The exception is caused by an external fault. 2. Control board of the inverter cannot work properly.	1. Restart the inverter. If the inverter recovers, the problem is accidental and does not affect system working. 2. If the problem persists, contact the after-sales service.
26	DC SPD Fail	Lighting strike	1. Improve the lightning protection facilities around the inverter 2. Replace the inverter with a new one if it cannot work anymore.
27	DC Switch Fail	The DC trip switch is used exceeds the service life time.	Contact the after-sales service.
28	Ref 1.5V Fail	1. The exception is caused by an external fault. 2. Control board of the inverter cannot work properly.	1. Restart the inverter. If the inverter recovers, the problem is accidental and does not affect system working. 2. If the problem persists, contact the after-sales service.

No.	Alarm	Causes	Solutions
29	AC HCT Chk Fail	The sampling of the AC HCT is abnormal.	1. Restart the inverter. If the inverter recovers, the problem is accidental and does not affect system working. 2. If the problem persists, contact the after-sales service.
30	GFCI Chk Fail	The sampling of the GFCI HCT is abnormal.	1. Restart the inverter. If the inverter recovers, the problem is accidental and does not affect system working. 2. If the problem persists, contact the after-sales service.

7.3 Battery Alarms

No.	Alarm	Troubleshooting
1	High battery temperature	The ambient temperature is too low to run the battery.
2	Low battery temperature	
3	Battery cell voltage differences	If the problem persists, contact the after-sales service.
4	Battery over total voltage	
5	Battery discharge overcurrent	
6	Battery charge over current	
7	Battery under SOC	If the PV works properly but the problem persists, contact the after-sales service.
8	Battery under total voltageBattery over total voltage	
9	Battery communication failure	Check the electrical connections by professionals.
10	Battery output shortage	
11	Battery SOC too high	If the problem persists, contact the after-sales service.
12	BMS module fault	
13	BMS system fault	
14	BMS internal fault	
15	High battery charge temperature	
16	High battery discharge temperature	The battery is overloaded. You are recommended to reduce loads. If the problem persists, contact the after-sales service.
17	Low battery charge temperature	The ambient temperature is too low to run the battery.
18	Low battery discharge temperature	

8 Appendix

8.1 Safety Country

No.	Safety Code	No.	Safety Code
Europe			
1	AT-A	33	GR
2	AT-B	34	HU
3	BE	35	IE EirGrid
4	GB G98	36	IE ESB
5	GB G99-A	37	IE-16/25A
6	GB G99-B	38	IE-72A
7	GB G99-C	39	IT CEI 0-16
8	GB G99-D	40	IT CEI 0-21
9	BG	41	NL 16/20A
10	CY	42	NL-A
11	CZ-A1	43	NL-B
12	CZ-A1-09	44	NL-C
13	CZ-A2	45	NL-D
14	CZ-A2-09	46	G98/NI
15	CZ-B1	47	NR
16	CZ-B1-09	48	PL-A
17	CZ-B2	49	PL-B
18	CZ-C	50	PL-D
19	CZ-D	51	PT-D
20	DK1	52	RO-A
21	DK2	53	RO-D
22	EE	54	SK
23	FI-A	55	ES island
24	FI-B	56	ES-A
25	FI-C	57	ES-B
26	FI-D	58	ES-D
27	FR island 50Hz	59	SE LV
28	FR island 60Hz	60	SE MV
29	FR mainland	61	CH
30	DE LV with PV	62	EN 50549-1

No.	Safety Code	No.	Safety Code
31	DE LV without PV	63	EN 50549-2
32	DE MV		
Global			
1	50Hz 127Vac Default	5	IEC61727 50Hz
2	50Hz Default	6	IEC61727 60Hz
3	60Hz 127Vac Default	7	Warehouse
4	60Hz Default		
North America			
1	PR 208Vac	20	US HI 208Vac
2	PR 208Vac-3P	21	US HI 208Vac-3P
3	PR 220Vac-3P	22	US HI 220Vac-3P
4	PR 240Vac	23	US HI 240Vac
5	PR 240Vac-3P	24	US HI 240Vac-3P
6	PR 480 Vac	25	US HI 480Vac
7	US 208Vac Default	26	US ISO-NE 208Vac
8	US 208Vac Default-3P	27	US ISO-NE 208Vac-3P
9	US 220Vac Default-3P	28	US ISO-NE 220Vac-3P
10	US 240Vac Default	29	US ISO-NE 240Vac
11	US 240Vac Default-3P	30	US ISO-NE 240Vac-3P
12	US 480Vac Default	31	US ISO-NE 480Vac
13	US CA 208Vac	32	US Kauai 208Vac
14	US CA 208Vac-3P	33	US Kauai 208Vac-3P
15	US CA 220Vac-3P	34	US Kauai 220Vac-3P
16	US CA 240Vac	35	US Kauai 240Vac
17	US CA 240Vac-3P	36	US Kauai 240Vac-3P
18	US CA 480Vac	37	US Kauai 480Vac
19	Mexico 220Vac Default	38	Mexico 440Vac Default
South America			
1	Argentina	9	Brazil ONS
2	Barbados	10	Cayman
3	Brazil 127Vac	11	Chile BT
4	Brazil 208Vac	12	Chile MT-A

No.	Safety Code	No.	Safety Code
5	Brazil 220Vac	13	Chile MT-B
6	Brazil 230Vac	14	Colombia
7	Brazil 240Vac	15	Mexico 220Vac Default
8	Brazil 254Vac	16	Mexico 440Vac Default
Oceania			
1	Australia A	4	Newzealand
2	Australia B	5	Newzealand:2015
3	Australia C	6	NZ GreenGrid
Asia			
1	India	16	Thailand PEA
2	India CEA	17	DEWA LV
3	Israel HV	18	DEWA MV
4	Israel LV	19	Vietnam
5	Israel MV	20	臺灣
6	Israel OG	21	香港
7	JP 50Hz	22	中国-242-河北
8	JP 60Hz	23	中国-242-山东
9	Korea	24	中国-A
10	Malaysia LV	25	中国-B
11	Malaysia MV	26	中国-PCS
12	Mauritius	27	中国电站
13	Philippines	28	中国较高压
14	Sri Lanka	29	中国最高压
15	Thailand MEA	30	India Higher
Africa			
1	Ghana	3	South Africa MV-B
2	South Africa LV	4	South Africa MV-C

8.2 Australia Safety Regulations

For the Australian market, to comply with AS/NZS 4777.2:2020, please select from Australia A, Australia B, Australia C, or New Zealand. Please contact your local electricity grid operator on which Region to select.

Selecting a Region B should then automatically load all region B setpoints for volt-watt, volt-var, underfrequency, overfrequency, etc.

Volt–var response set-point values

Region	Default value	U1	U2	U3	U4
Australia A	Voltage	207V	220V	240V	258V
	Inverter reactive power level (Q) % of Srated	44 % supplying	0%	0%	60 % absorbing
Australia B	Voltage	205V	220V	235V	255V
	Inverter reactive power level (Q) % of Srated	30 % supplying	0%	0%	40 % absorbing
Australia C	Voltage	215V	230V	240V	255V
	Inverter reactive power level (Q) % of Srated	44 % supplying	0%	0%	60 % absorbing
New Zealand	Voltage	207V	220V	235 V	244 V
	Inverter reactive power level (Q) % of Srated	60 % supplying	0%	0%	60 % absorbing
Allowed range	Voltage	180 to 230 V	180 to 230 V	230 to 265 V	230 to 265 V
	Inverter reactive power level (Q) % of Srated	30 to 60 % supplying	0%	0%	30 to 60 % absorbing

NOTE 1 Inverters may operate at a reactive power level with a range up to 100 % supplying or absorbing.

NOTE 2 Australia C parameter set is intended for application in isolated or remote power systems.

Volt–watt response default set-point values

Region	Default value	U3	U4
Australia A	Voltage	253V	260V
	Inverter maximum active power output level (P) % of S_{rated}	100%	20%
Australia B	Voltage	250V	260V
	Inverter maximum active power output level (P) % of S_{rated}	100%	20%
Australia C	Voltage	253V	260V
	Inverter maximum active power output level (P) % of S_{rated}	100%	20%
New Zealand	Voltage	242 V	250V
	Inverter maximum active power output level (P) % of S_{rated}	100%	20%
Allowed range	Voltage	235 to 255 V	240 to 265 V
	Inverter maximum active power output level (P) % of S_{rated}	100%	0 % to 20 %

NOTE: Australia C parameter set is intended for application in isolated or remote power systems.

Passive anti-islanding voltage limit values

Protective function	Protective function limit	Trip delay time	Maximum disconnection time
Undervoltage 2 (V < <)	70 V	1 s	2 s
Undervoltage 1 (V <)	180 V	10 s	11 s
Overvoltage 1 (V >)	265 V	1 s	2 s
Overvoltage 2 (V > >)	275V	-	0.2 s

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