

# SolarGo App

## User Manual

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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.



## 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](http://www.goodwe.com).

## 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.

## 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.

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# 1 Product Introduction

## NOTICE

- All the user interface (UI) screenshots or words in this document are based on **SolarGo app V6.6.0**. 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.

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

- Check the operating data, software version, alarms of the inverter, etc.
- Set grid parameters and communication parameters of the inverter.
- Set charging mode of the charger.
- Maintain the equipment.

## 1.1 Supporting Products

SolarGo app applies to GoodWe inverters and chargers.

## 1.2 Downloading and Installing the App

Make sure that the mobile phone meets the following requirements:

- Mobile phone operating system: Android 5.0 or later, iOS 13.0 or later.
- The mobile phone can access the Internet.
- The mobile phone supports WLAN or Bluetooth.

### NOTICE

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

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



SolarGo App  
SLG00CON0135

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



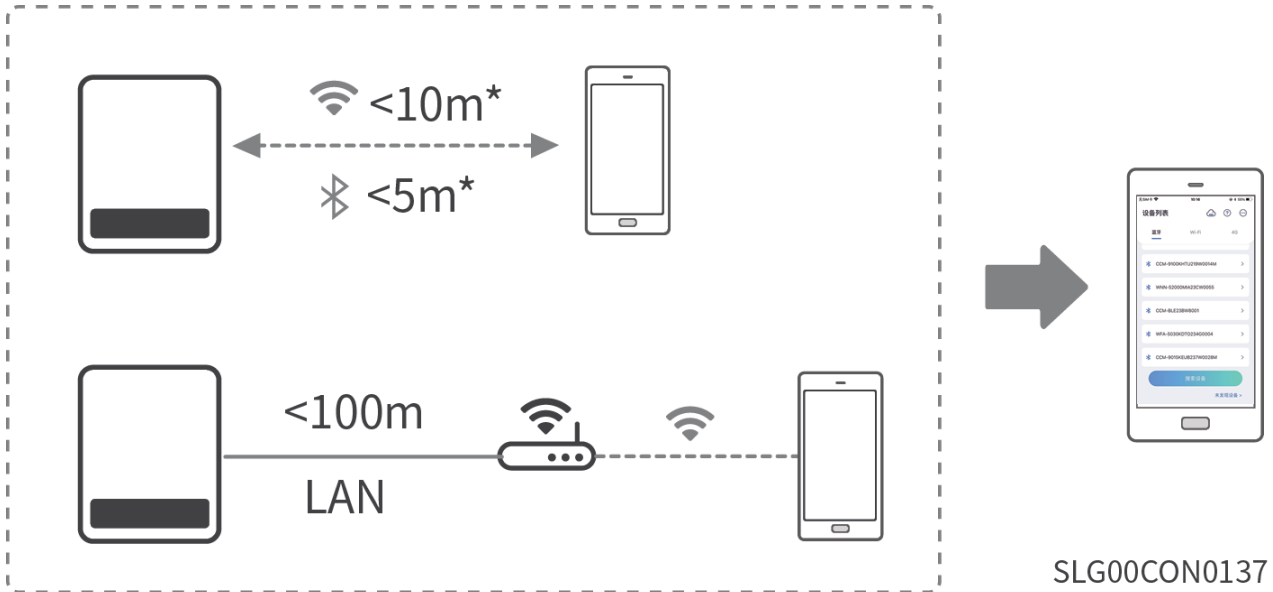
SolarGo App  
SLG00CON0136

## 1.3 App Connection

Connect as the following shows after powering on the equipment.


### NOTICE




The connection distance varies depending on smart dongles. Refer to the actual used smart dongles.



## 1.4 GUI Introductions to Login Page



No.	Name/Icon	Description
1		Tap the icon to open the page downloading the SEMS Portal app.

No.	Name/Icon	Description
2		Tap to read the connection guide.
	Not found	
3		<ul style="list-style-type: none"> <li>• Check information such as app version, local contacts, etc.</li> <li>• Other settings, such as update date, switch language, set temperature unit, etc.</li> </ul>
4	Bluetooth/WiFi/4G	Select based on actual communication method. If you have any problems, tap  or <b>NOT Found</b> to read the connection guides.
5	Device List	<ul style="list-style-type: none"> <li>• The list of all devices. The last digits of the device name are normally the serial number of the device.</li> <li>• Select the device by checking the serial number of the master inverter when multi inverters are parallel connected.</li> <li>• The device name varies depending on the inverter model or smart dongle model: <ul style="list-style-type: none"> <li>◦ Wi-Fi/LAN Kit, Wi-Fi Kit, Wi-Fi Box: Solar-WiFi***</li> <li>◦ External or integrated bluetooth module: Solar-BLE***</li> <li>◦ WiFi/LAN Kit-20: WLA-***</li> <li>◦ WiFi Kit-20: WFA-***</li> <li>◦ Ezlink3000: CCM-BLE***; CCM-***; ***</li> <li>◦ 4G Kit-CN-G20/4G Kit-CN-G21: GSA-***; GSB-***</li> <li>◦ 4G Kit-G20: GSC-***</li> <li>◦ Micro inverter: WNN***</li> <li>◦ AC Charger: ***</li> </ul> </li> </ul>
6	Search Device	Tap <b>Search Device</b> if the device is not found.

## 2 Parameter Settings for Grid-Tied PV Inverters

### 2.1 Connecting Grid-Tied PV Inverters

#### 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.

#### 2.1.1 Connecting Grid-Tied PV Inverters (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.

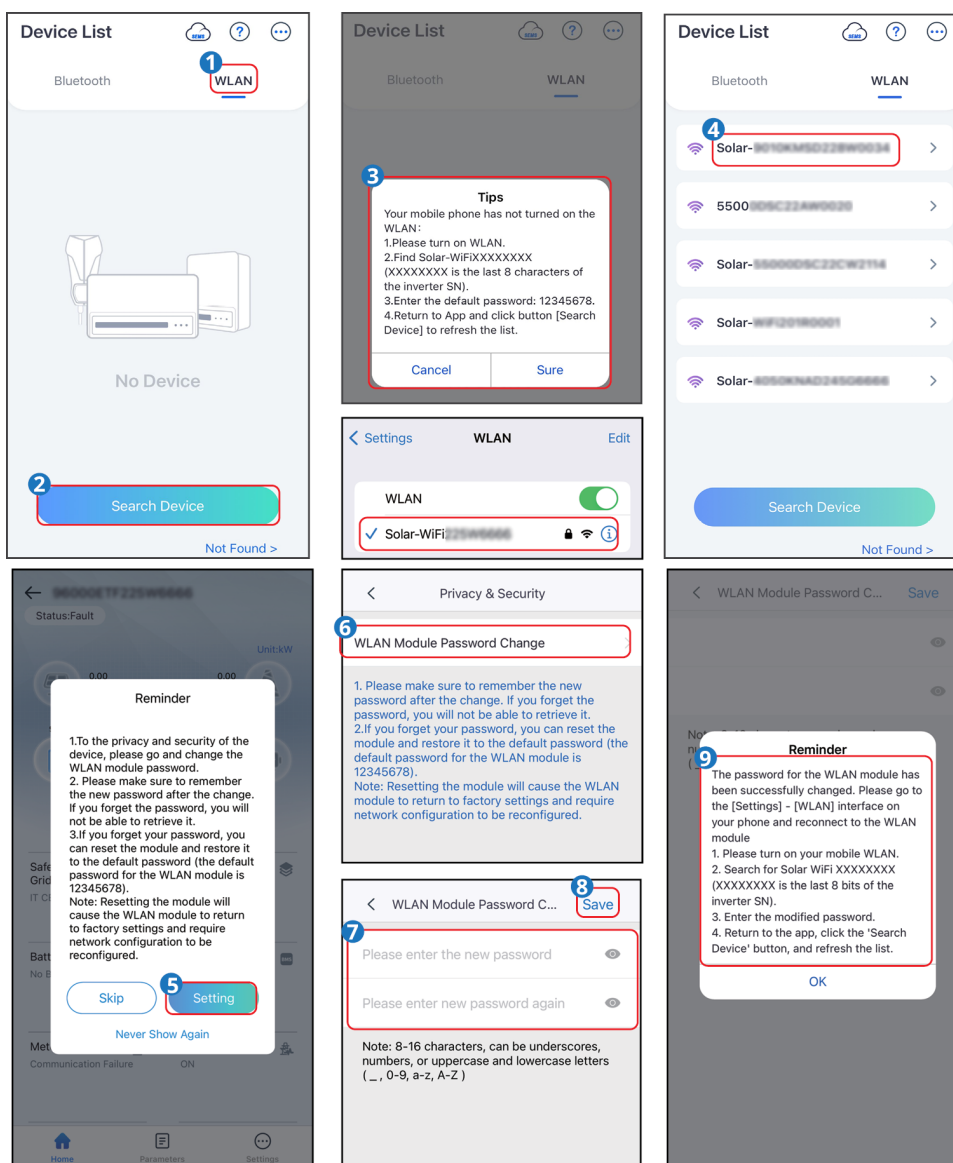
**Step 1:** Ensure that the inverter is power on, both the inverter and the communication module are working properly.

**Step 2:** Select **WLAN** tab on the SolarGo app homepage.

**Step 3:** Open the WiFi setting on the phone 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 into the **Home** page.

**Step 5:** Modify the initial WiFi password following the prompts. After changing the password, log in again and enter the device details page.



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## 2.1.2 Connecting Grid-Tied PV Inverters (Bluetooth)

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

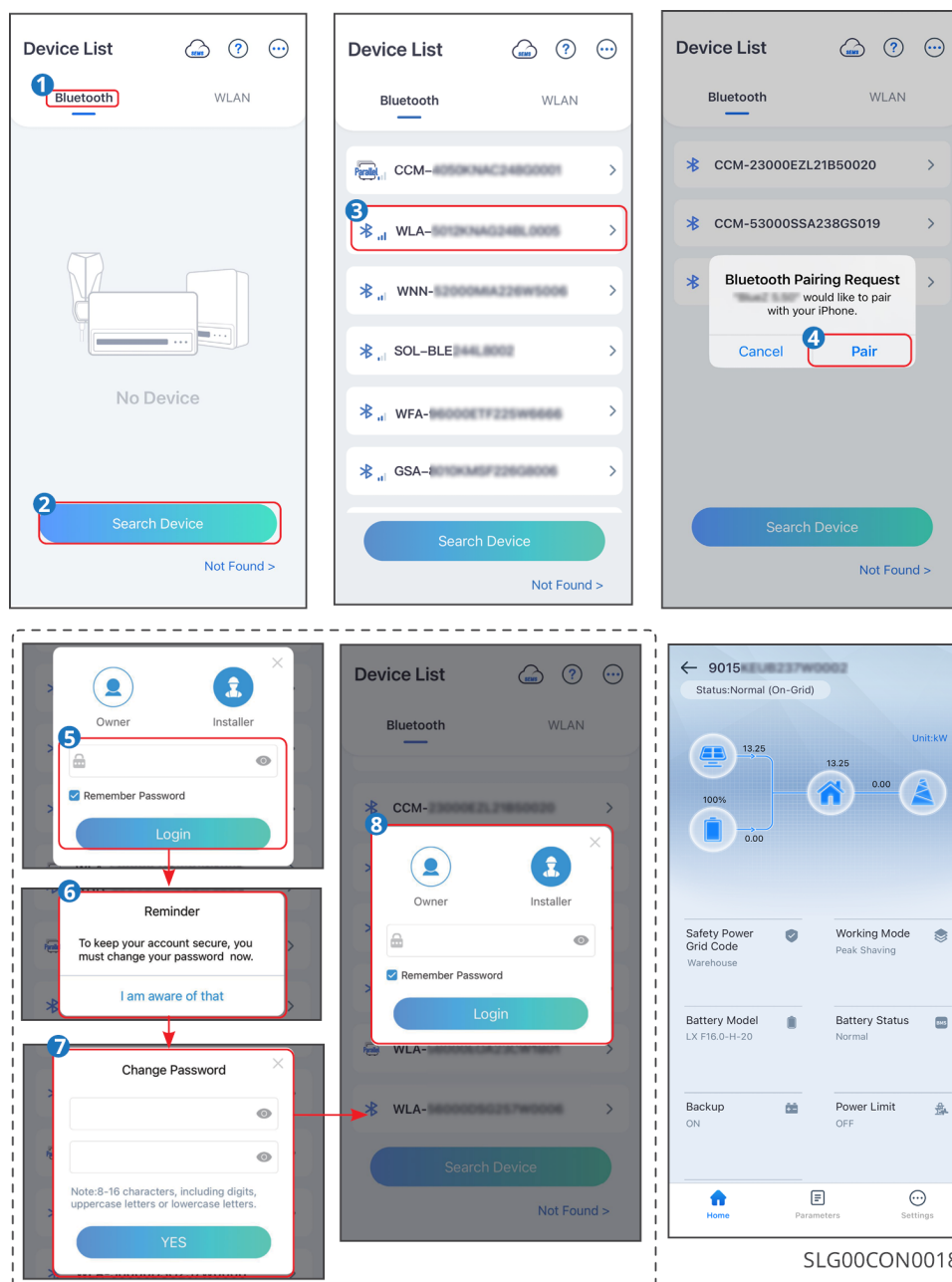
**Step 2:** Select **Bluetooth** tab on the SolarGo app homepage.

**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. Select the device by checking the serial number of the master inverter when multi inverters are parallel connected.

**Step 4:** For first connection with the equipment 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, modify the initial login password following the prompts. Initial password: 1234. After changing the password, log in again and enter the device details page.

**Step 6 (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.



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## 2.1.3 Connecting Grid-Tied PV Inverters (4G)




## NOTICE

- Scan the inverter QR code to automatically fill in the inverter S/N number, verification code and login password.
- If scanning the QR code to add an inverter fails, you can manually enter the inverter S/N number. Please consult after-sales to obtain the verification code and login password.
- To ensure account security, you are advised to change the password periodically and keep the new password in mind.

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

**Step 2:** Select **4G** tab on the SolarGo app homepage.

**Step 3:** Tap **Add Device** to enter the Add the Inverter page.

**Step 4:** Tap  to scan the QR code on the inverter body.

**Step 5:** Tap Submit and return to the inverter list to view the newly added 4G communication device.

**Step 6:** Tap the inverter name to enter the inverter details page.

### 2.1.4 Connecting the Smart Dongle

If the SolarGo app cannot detect the inverter's signal during connection, the device list will still display the smart dongle connected to the inverter.

Supports:

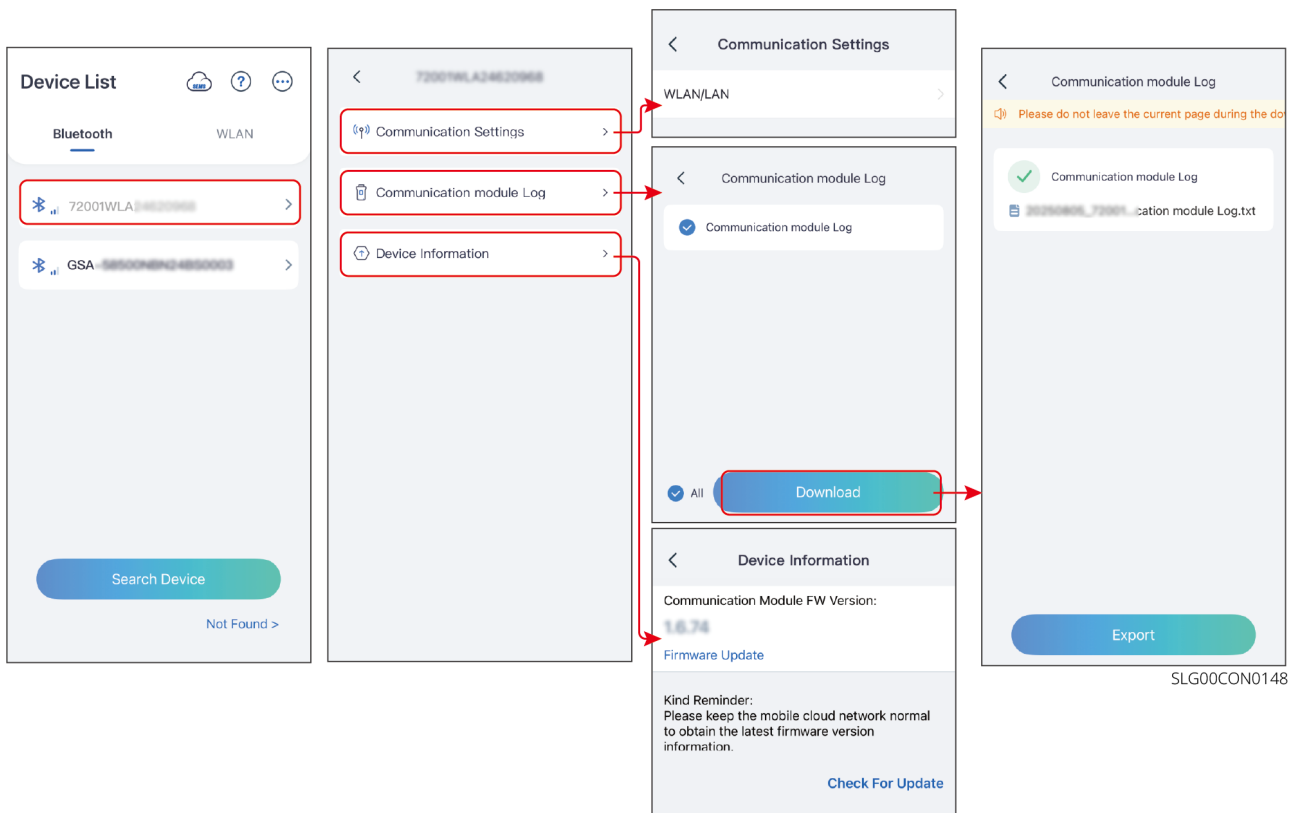
- WiFi/LAN Kit-20
- Ezlink3000
- 4G Kit-CN-G20, 4G Kit-CN-G21, 4G Kit-G20

**Step 1:** On the SolarGo App homepage, find the grayed-out serial number of the smart dongle and tap to enter the settings interface.

**Step 2:** Configure or check parameter information as needed.

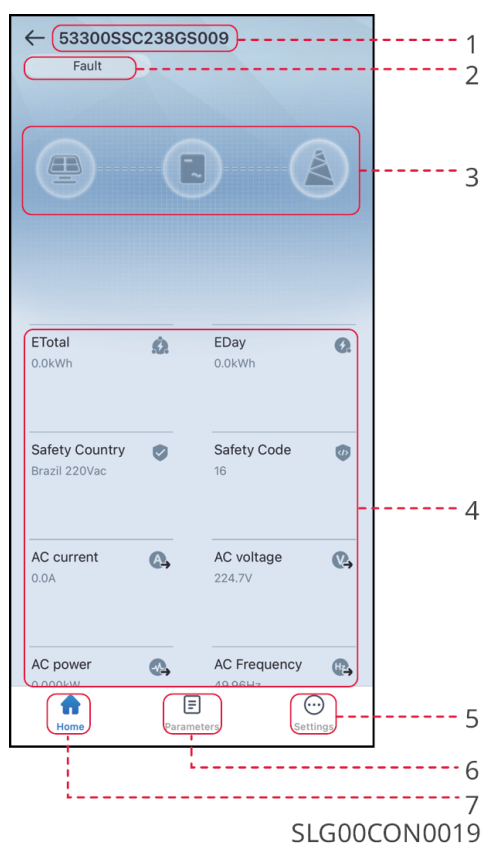
- Communication Settings: Tap to set WLAN/LAN parameters and connect the dongle to a router.
- Communication Module Log: Tap to access the log download interface.




- Device Information: Tap to view the firmware version of the smart dongle. If an update is available, follow the instructions to complete the upgrade.



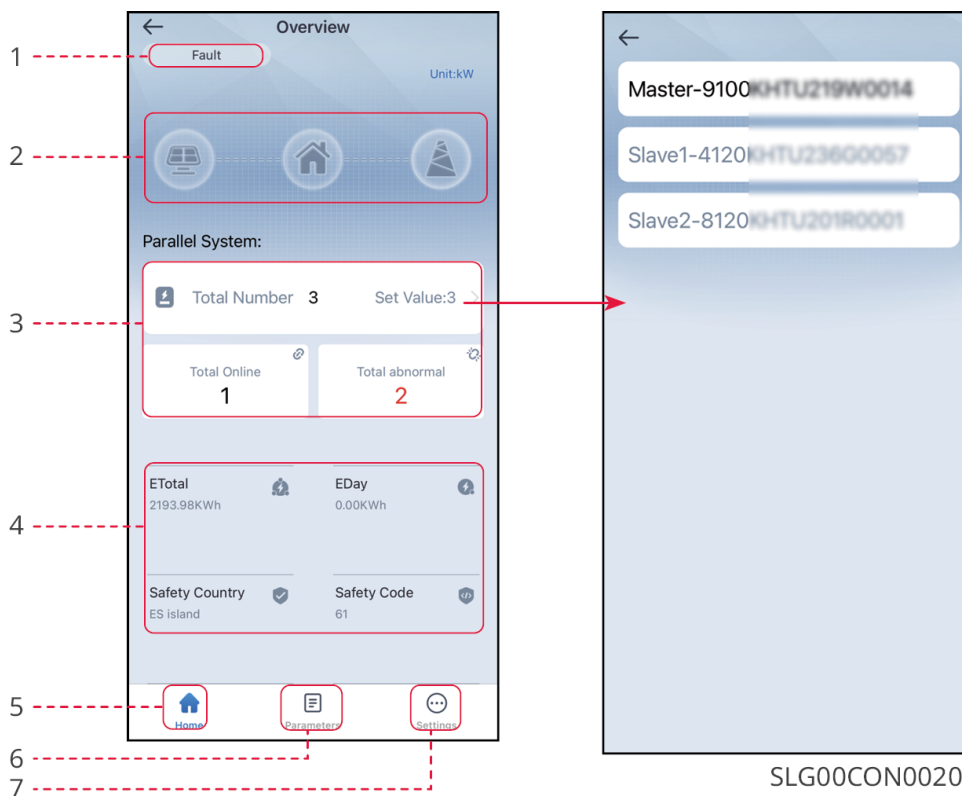
## 2.2 GUI Introductions to Grid-Tied PV Inverters


### Single Inverter





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 ETot, 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 to check the inverter Data, or check Alarminformation.
7		Settings. Tap Settings to set parameters like Safety Code,Communication Settings, Power Limit, Firmware Update,AFCI Detection, Grid Switch, etc.

## Parallel Connected Inverters



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	<ul style="list-style-type: none"> <li>Total Number: total number of inverters in the parallel system</li> <li>Total Online: online inverters in the parallel system.</li> <li>Total abnormal: offline inverters in the parallel system.</li> <li>Tap Total Number to check serial numbers of all the inverters. Tap the serial number to enter the setting page of the single inverter.</li> </ul>
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.

No.	Name/Icon	Description
6		Parameters. Tap Parameters to check the model or status of both master and slave inverters in the system, or check FWVersion, AC Current, AC Frequency, etc. of the master inverter. Or check Alarm like Utility Loss, Undervoltage, etc.
7		<ul style="list-style-type: none"> <li>• Settings Tap to set Quantity, Safety Code, Equipment Power Supply, DRED, etc.</li> <li>• The settings are effect to all the inverters in the parallel system.</li> </ul>

## 2.3 Configuring Communication Parameters

### NOTICE

The communication configuration page varies depending on the communication method.

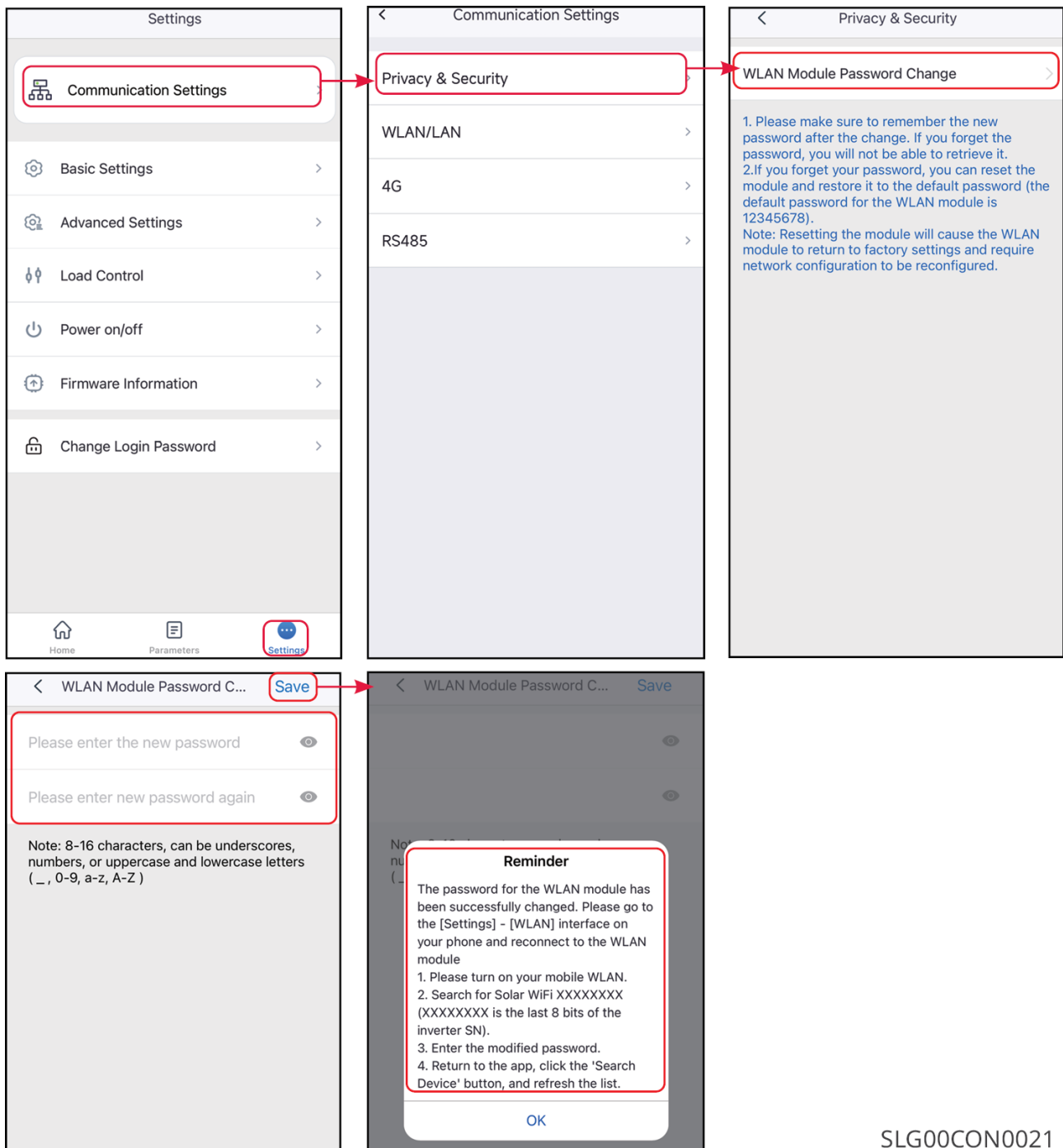
### 2.3.1 Setting Privacy and Security

#### Type I

**Step 1 :** Tap **Home > Settings > Communication Setting > Privacy & Security>WLAN Module Password Change** 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 with the new password.

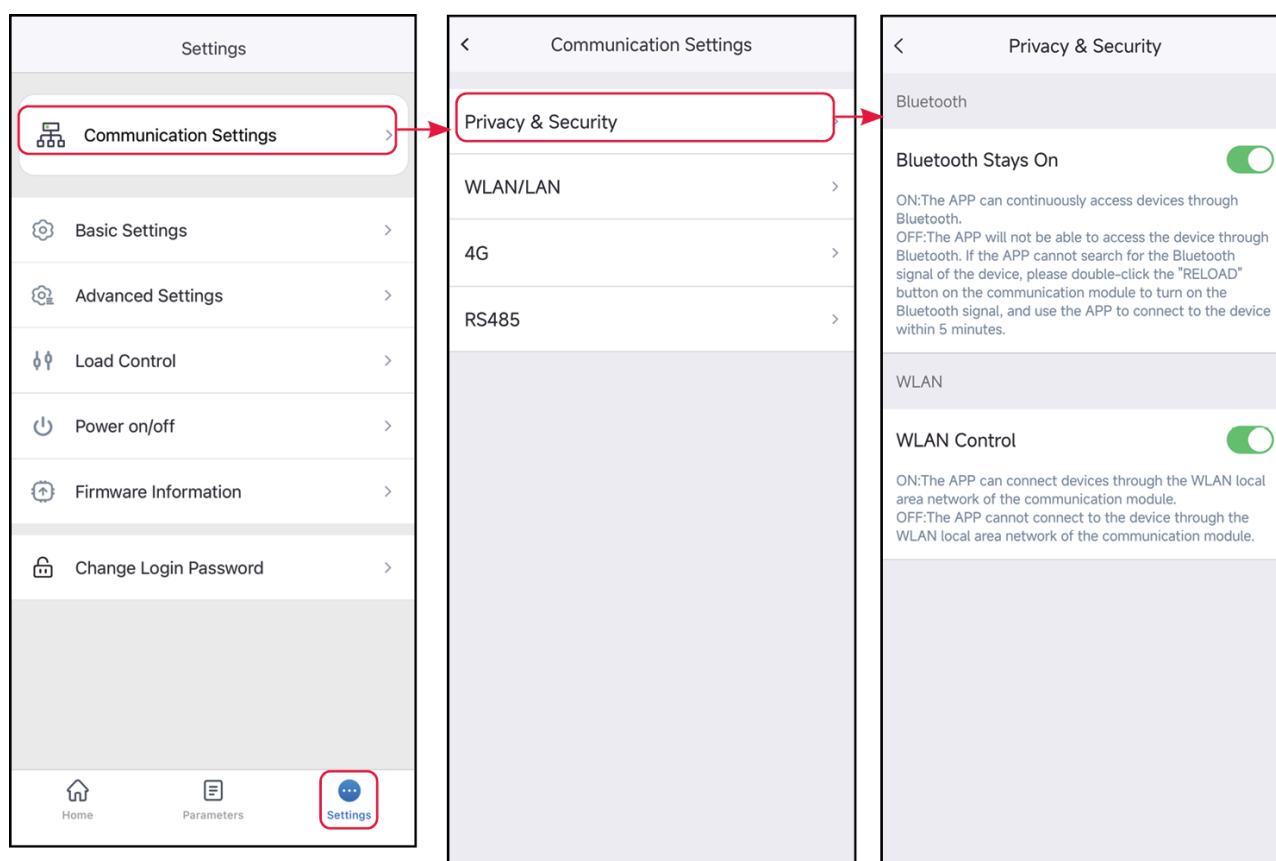


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## Type II

**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.



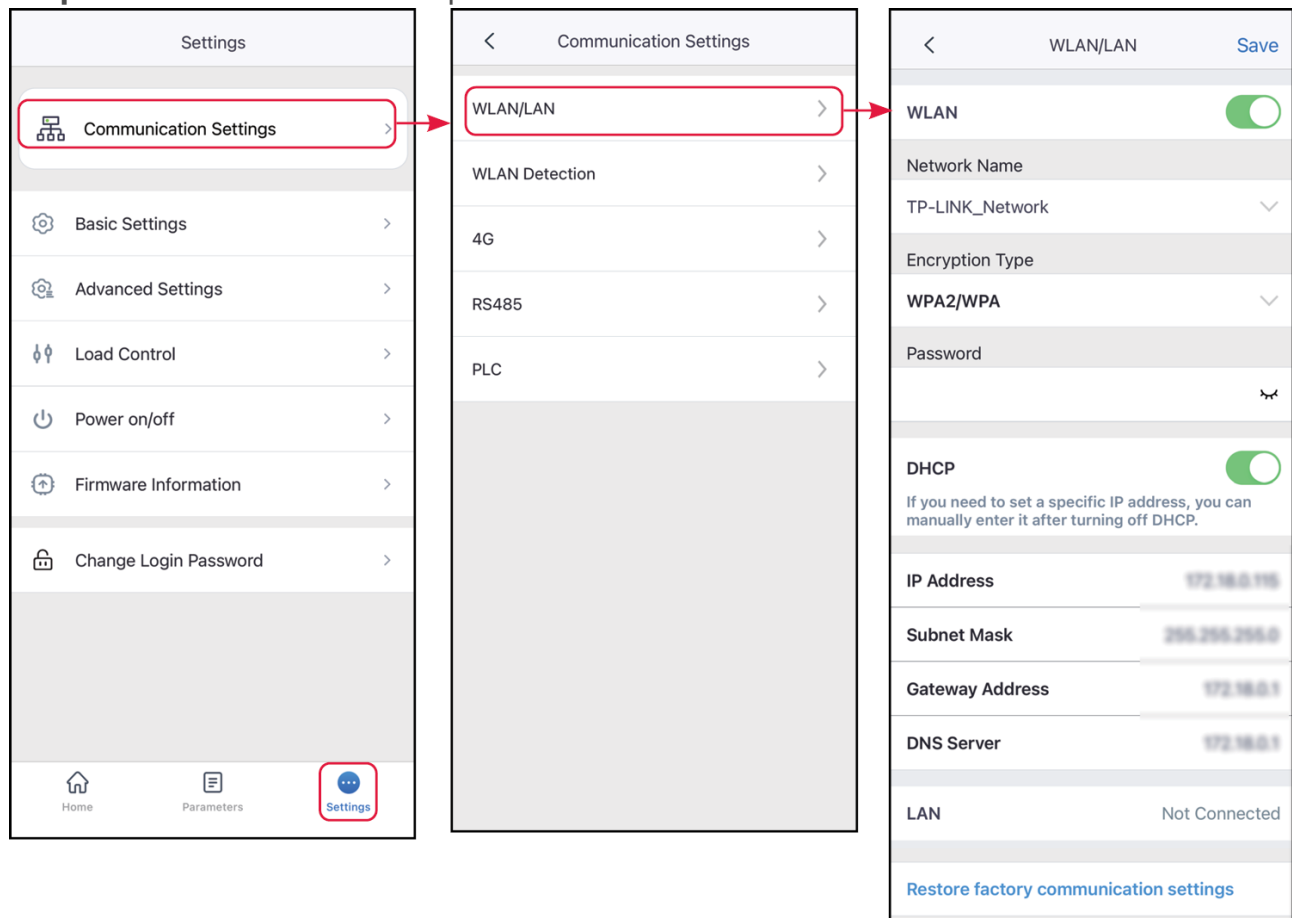
SLG00CON0022

No.	Parameters	Description
1	Bluetooth Stays On	Disabled by default Enable the function, the bluetooth of the device will be continuous 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.
3	Modbus-TCP	Enable the function, the third party monitoring platform can access inverter through Modbus-TCP communication protocol.

## 2.3.2 Configuring WLAN/LAN Parameters

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

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



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No.	Parameters	Description
1	Network Name	Only for WiFi. Select WiFi based on the actual connecting.
2	Password	Only for WiFi. 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	
5	Subnet Mask	



No.	Parameters	Description
6	Gateway Address	Do not configure the parameters when DHCP is enabled. Configure the parameters according to the router or switch information when DHCP is disabled.
7	DNS Server	

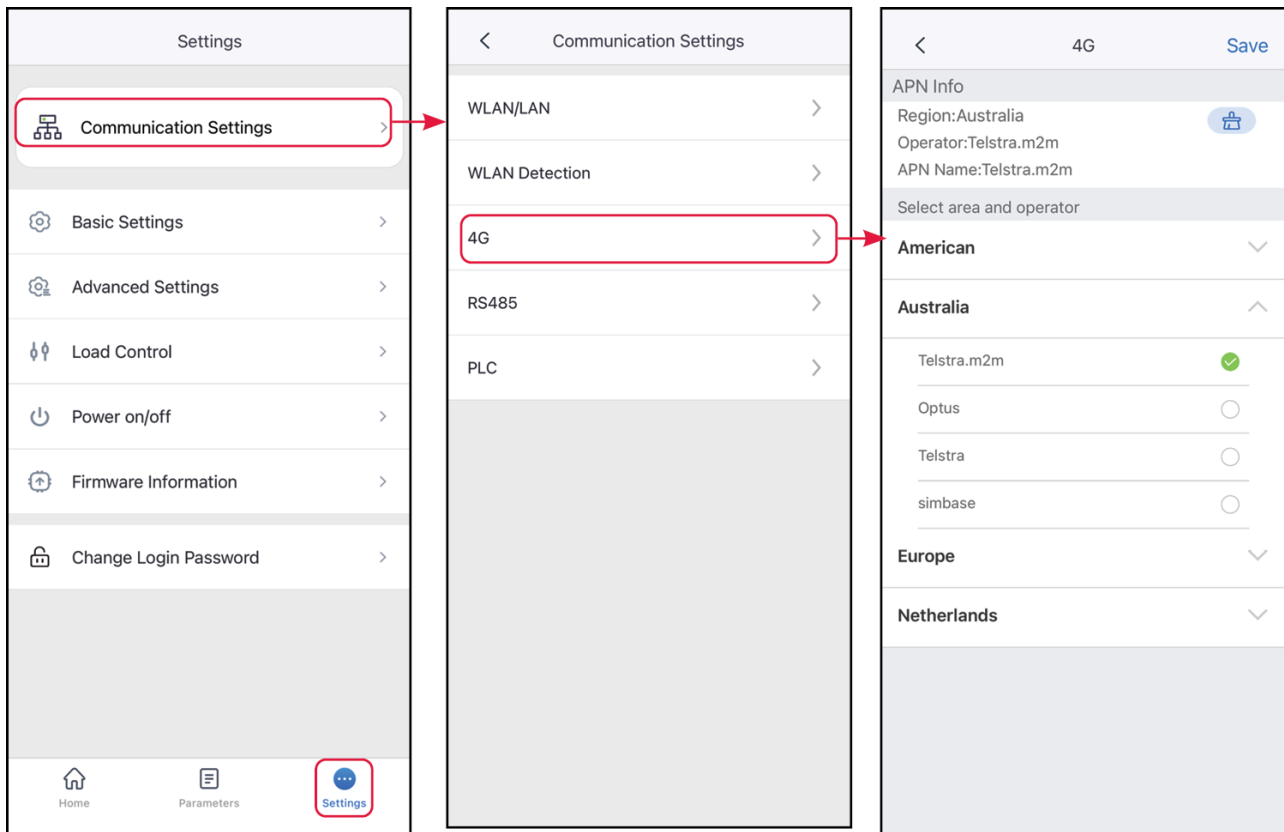
### 2.3.3 Configuring APN Parameters

#### NOTICE

- Configure the SIM card information of 4G communication device.
- If the 4G module does not offer bluetooth signal, please configure the APN parameters through the Bluetooth module or WiFi module first to achieve 4G communication.
- There is no need to configure APN parameters in China.

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

**Step 2 :** Configure APN information according to actual conditions.



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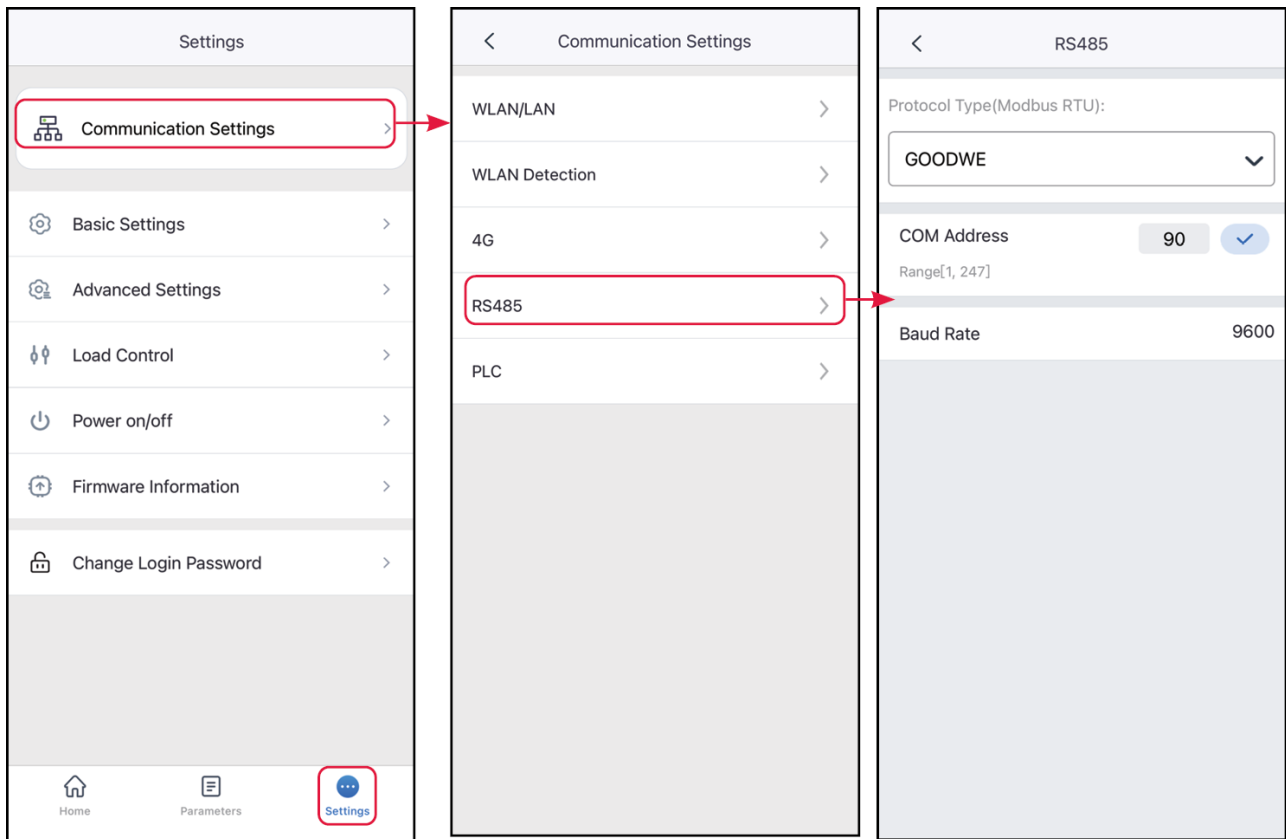
## 2.3.4 Configuring RS485 Parameters

### 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.



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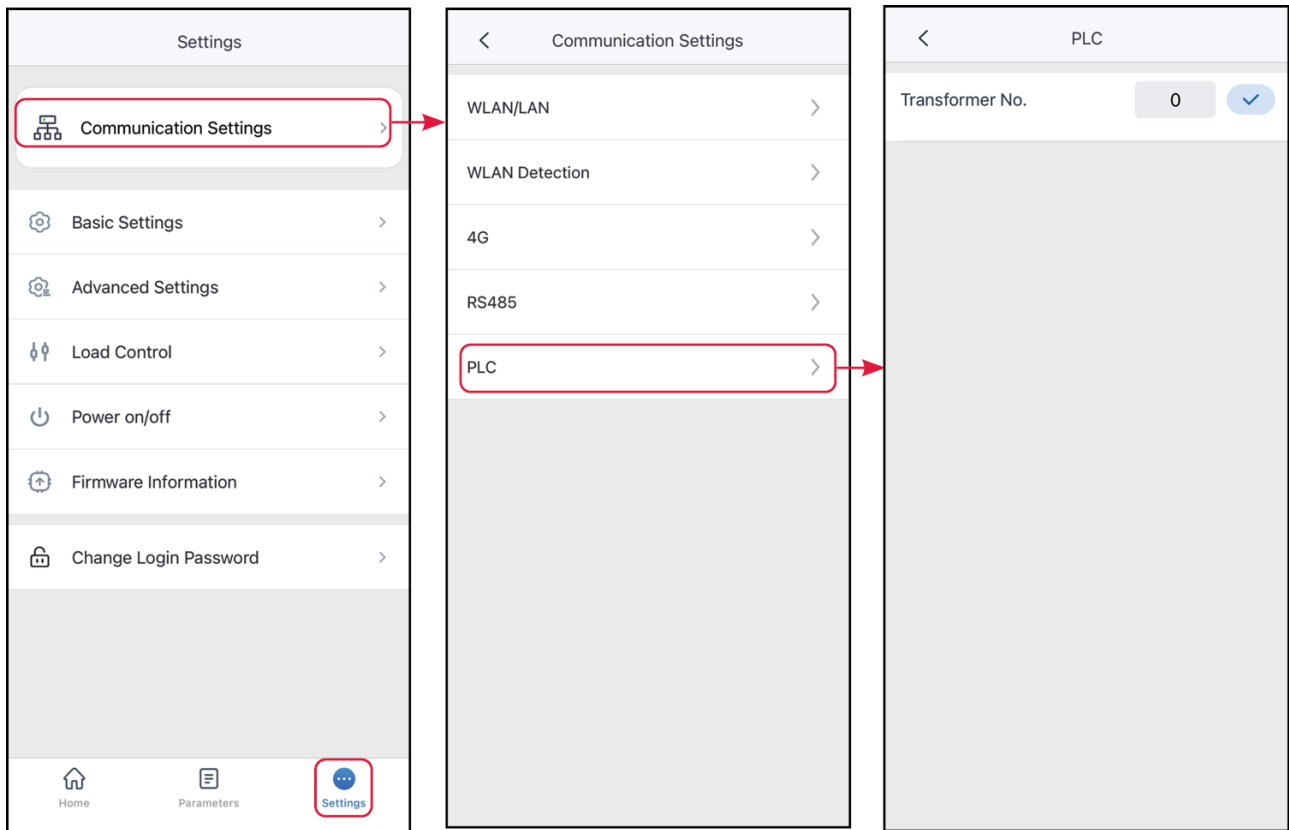
## 2.3.5 Configuring PLC Parameters

### NOTICE

Only for PLC communication. Set parameters based on actual connection.

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

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

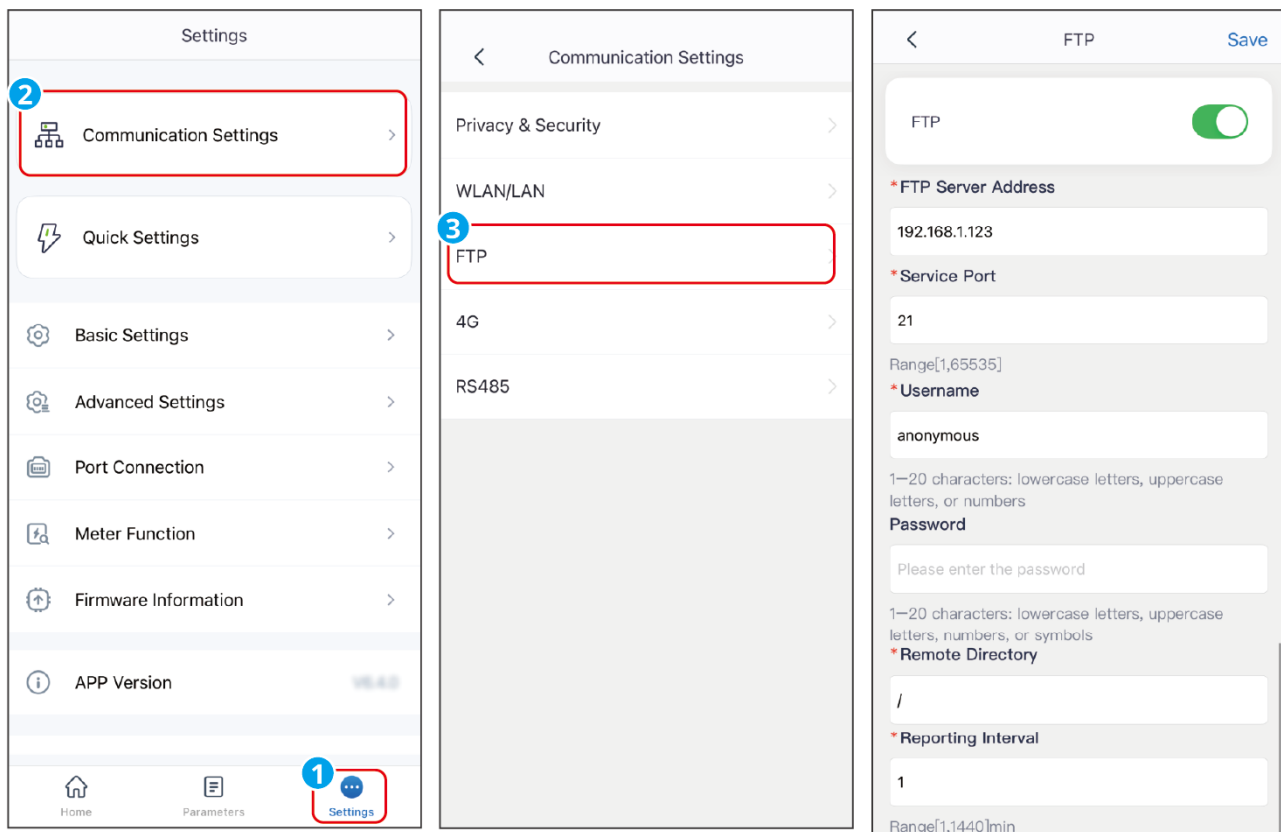


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## 2.3.6 Configuring FTP Parameters

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

**Step 2:** Set the parameters based on actual needs.



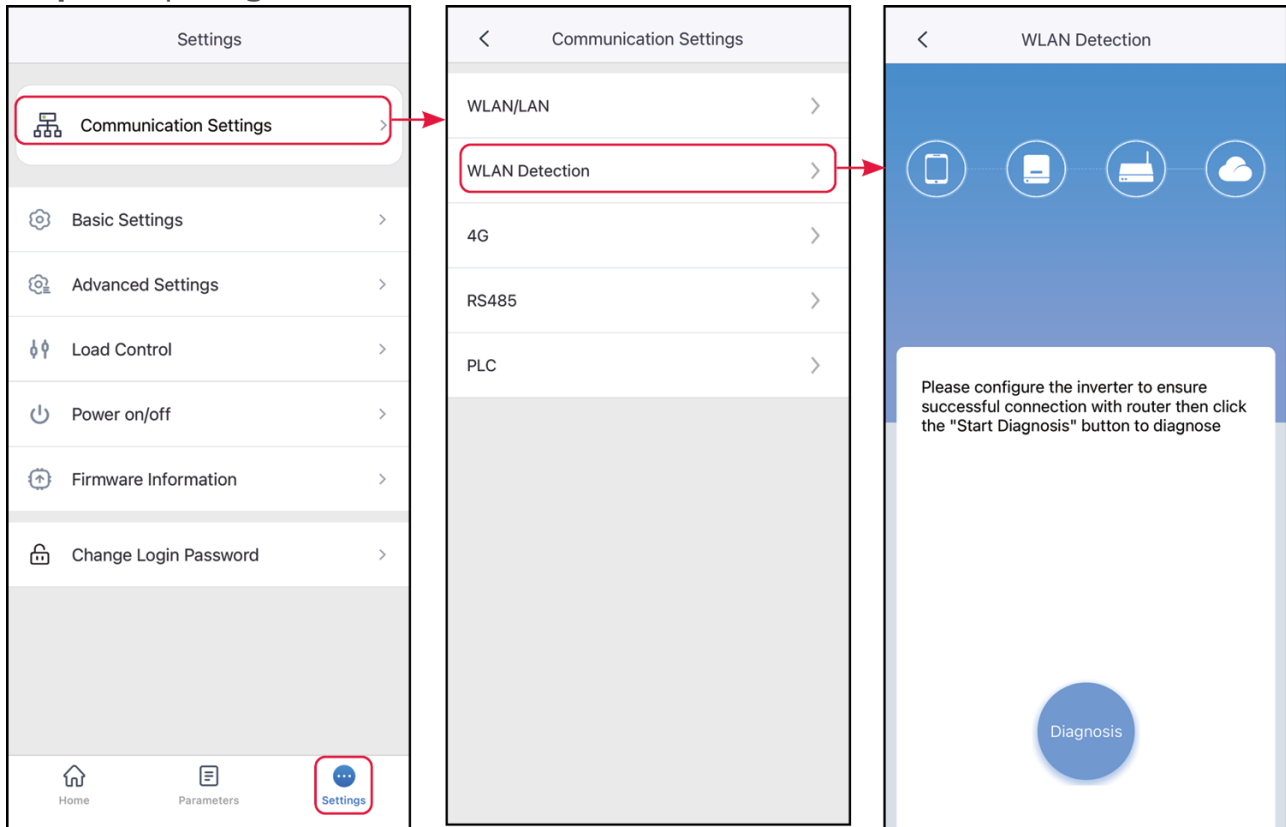
SLG00CON0147

No.	Parameters	Description
1	FTP	After enabling FTP, system operation data can be uploaded to the specified server via the FTP protocol to implement the remote monitoring function.
2	FTP Server Address	Set the domain name or IP address of the FTP server.
3	Service Port	Set the service port of the FTP server.
4	Username	Set the user name to log into the FTP server.
5	Password	Set the password to log into the FTP server.
6	Remote Directory	Create a subdirectory with the same name under the default directory specified by the FTP server, where the data will be uploaded.
7	Reporting Interval	Set the time interval for data uploading.

## 2.3.7 WLAN Detection

**Step 1 :** Tap **Home > Settings > Communication Settings > WLAN Detection** to set the parameters.

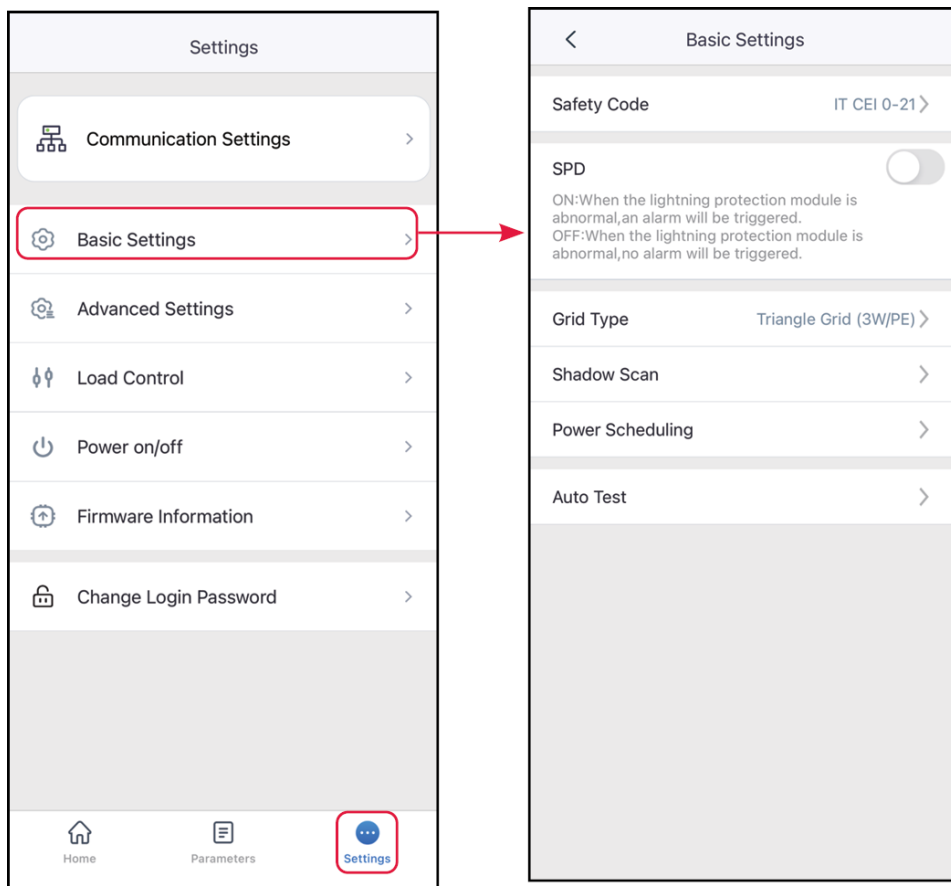
**Step 2 :** Tap **Diagnosis** to check the network connection status.



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## 2.4 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.



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No.	Parameters	Description
1	Safety Code	<ul style="list-style-type: none"> <li>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.</li> <li>Tap Safety Code &gt; Export to export the default value of some parameters.</li> <li>Contact the supplier or after sales service for changing safety parameters. Password for professional technicians only.</li> </ul>
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.

No.	Parameters	Description
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 Trip Function	Enable the DC tripping function to disconnect the DC switch automatically when the inverter fails.
6	Power Scheduling	Set the output power of the inverter.
7	AUTO TEST	Enable AUTO TEST to set auto test for grid tying in compliance with local grid standards and requirements.

## 2.5 Setting Advanced Parameters

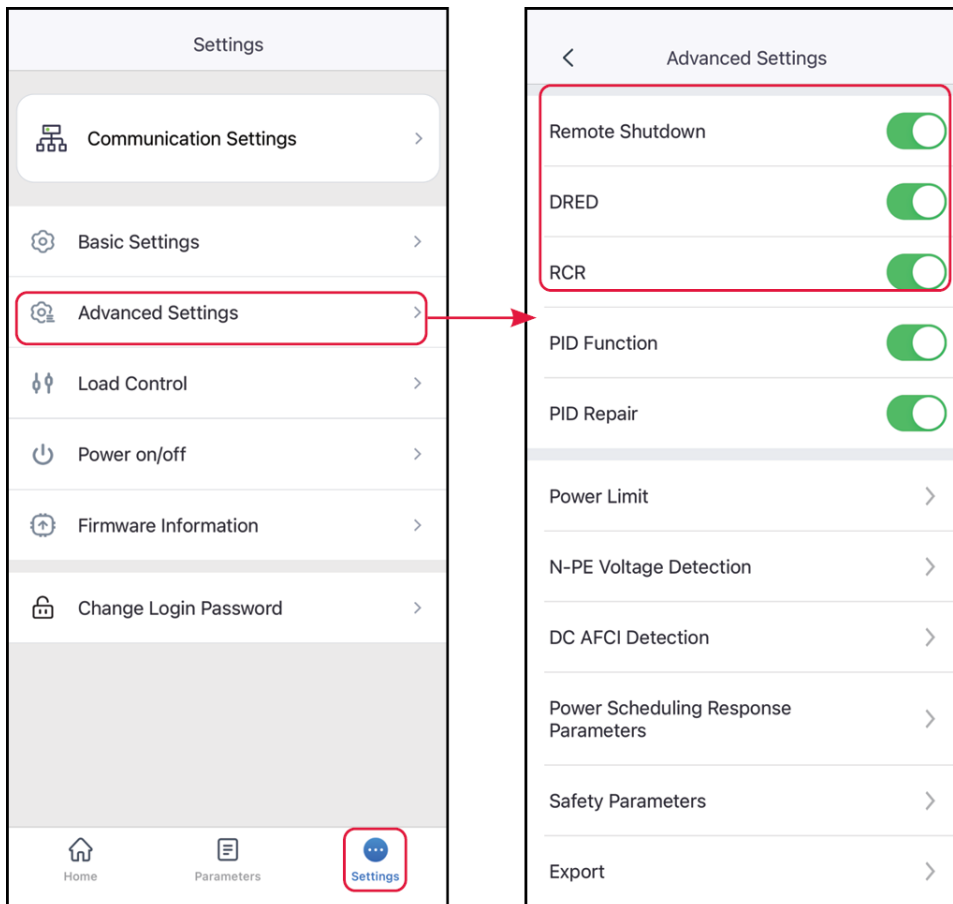
### 2.5.1 Setting Remote Shutdown/DRED/RCR

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

## 2.5.2 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.

<

Other Setting

Range[-60,60]%Pn

Soft Ramp Up

ON:Slow increase in output power

Soft Ramp Up Gradient

0.0

0.0

✓

Range[5,100]% /min

Initial Self-Check Time

60

60

✓

Range[30,5000]s

Reconnection Gradient

0.0

0.0

✓

Range[5,100]% /min

Reconnect Self-Check Time

60

60

✓

Range[30,5000]s

ISO

50

50

✓

Range[0,1000]kOhm

LVRT

HVRT

DRED

Remote Shutdown

EPO

SLG00CON0030

### 2.5.3 Setting PID Repair

#### NOTICE

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

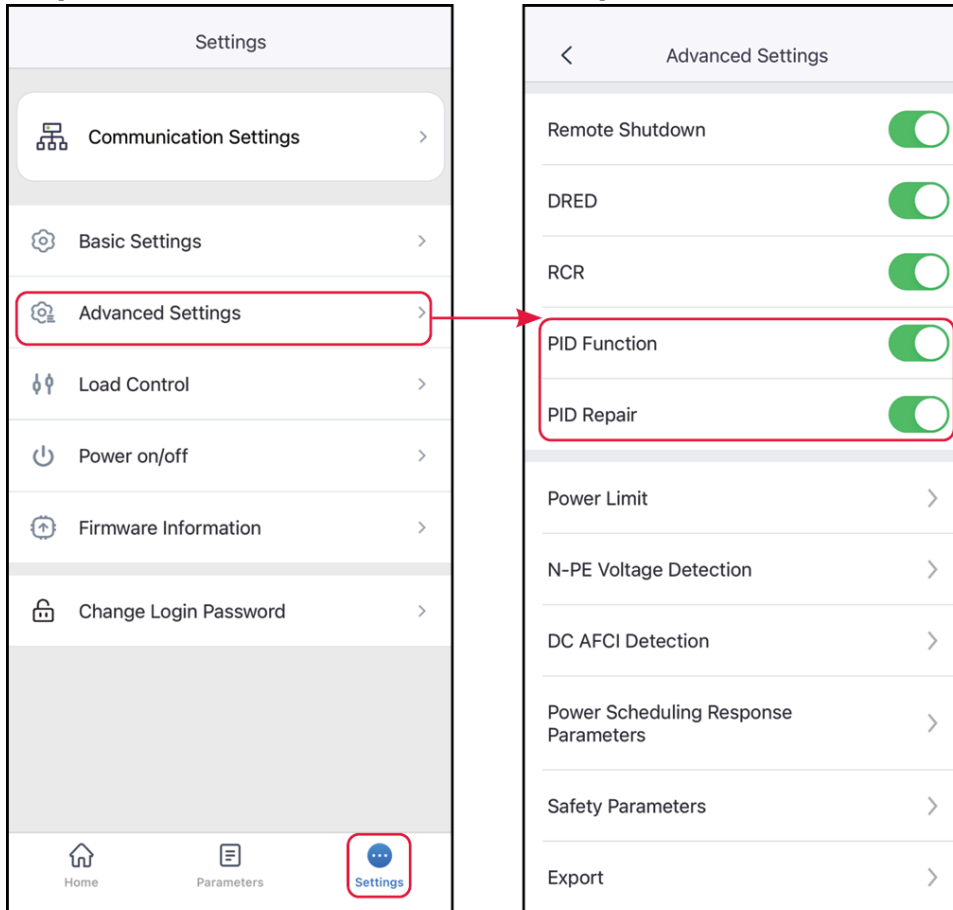
When a photovoltaic panel is working, the potential difference between the output electrode and the grounded frame of the panel can cause a long-term reduction in the power generation efficiency of the panel, which is the Potential Induced Degradation (PID) effect.

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

## 2.5.4 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.

### 2.5.4.1 Setting the Power Limit Parameters (General)

<

Power Limit

Power Limit

Select Mode:

Split Phase Power

▼

Total Power: Limit the total power of three phases.

Split Phase Power: Limit the power of each phase separately.

Export Power

✓

Unit:W

199

199

Corresponding Percentage:1%

External CT Ratio

0

0

✓

Range[10,5000]

1. If the current of the primary side and secondary side of the selected CT is 3000A:5A, please enter the CT ratio value of 600, and so on.

2. The secondary current of the external CT should be ≤5A.

SLG00CON0032

No.	Parameters	Description
1	Power Limit	Enable Power Limit when power limiting is required by local grid standards and requirements.
2	Select Mode	<ul style="list-style-type: none"> <li>Select power limit mode for some inverters. Supports: Split-Phase Power and Total Power.</li> <li>Limit the power per phase when Split-Phase Power is selected, and limit total power of the three phases when Total Power is selected.</li> </ul>

No.	Parameters	Description
3	Export Power	<ul style="list-style-type: none"> <li>• Set the value based on the actual maximum power feed into the utility grid.</li> <li>• Support setting a fixed power value or percentage. The set percentage represents the percentage of the limiting power relative to the rated power of the inverter.</li> <li>• After setting a fixed value, the percentage will automatically change; after setting the percentage, the fixed value will automatically change as well.</li> </ul>
4	External Meter CTRatio	Set the ratio of the primary current to the secondary current of the externalCT.

#### 2.5.4.2 Setting the Power Limit Parameters (Australia)

SLG00CON013338

No.	Parameters	Description
3	Limit Setting	<ul style="list-style-type: none"> <li>• Set the value based on the actual maximum power feed into the utility grid.</li> <li>• Support setting a fixed power value or percentage. The set percentage represents the percentage of the limiting power relative to the rated power of the inverter.</li> <li>• After setting a fixed value, the percentage will automatically change; after setting the percentage, the fixed value will automatically change as well.</li> </ul>
4	Hardware Power Limit	After enabling this function, if the electricity fed into the grid exceeds the limit value, the inverter will automatically disconnect from the grid.
5	External Meter CTRatio	Set the ratio of the primary current to the secondary current of the externalCT.

#### 2.5.4.3 Setting the Power Limit Parameters (Britain)

<

Power Limit

Power Limit

Select Mode:

Single Phase Current

▼

Single Phase Current:Limit each phase current.

3-Phase Total Current:Limit 3-phase average current (3-phase meter only).

Current Limit

0.43

0.43

✓

Range[0,500]A

CLS Status

Occasionally Overrun

External CT Ratio

0

0

✓

Range[10,5000]

1. If the current of the primary side and secondary side of the selected CT is 3000A:5A, please enter the CT ratio value of 600, and so on.

2. The secondary current of the external CT should be ≤5A.

SLG00CON0134

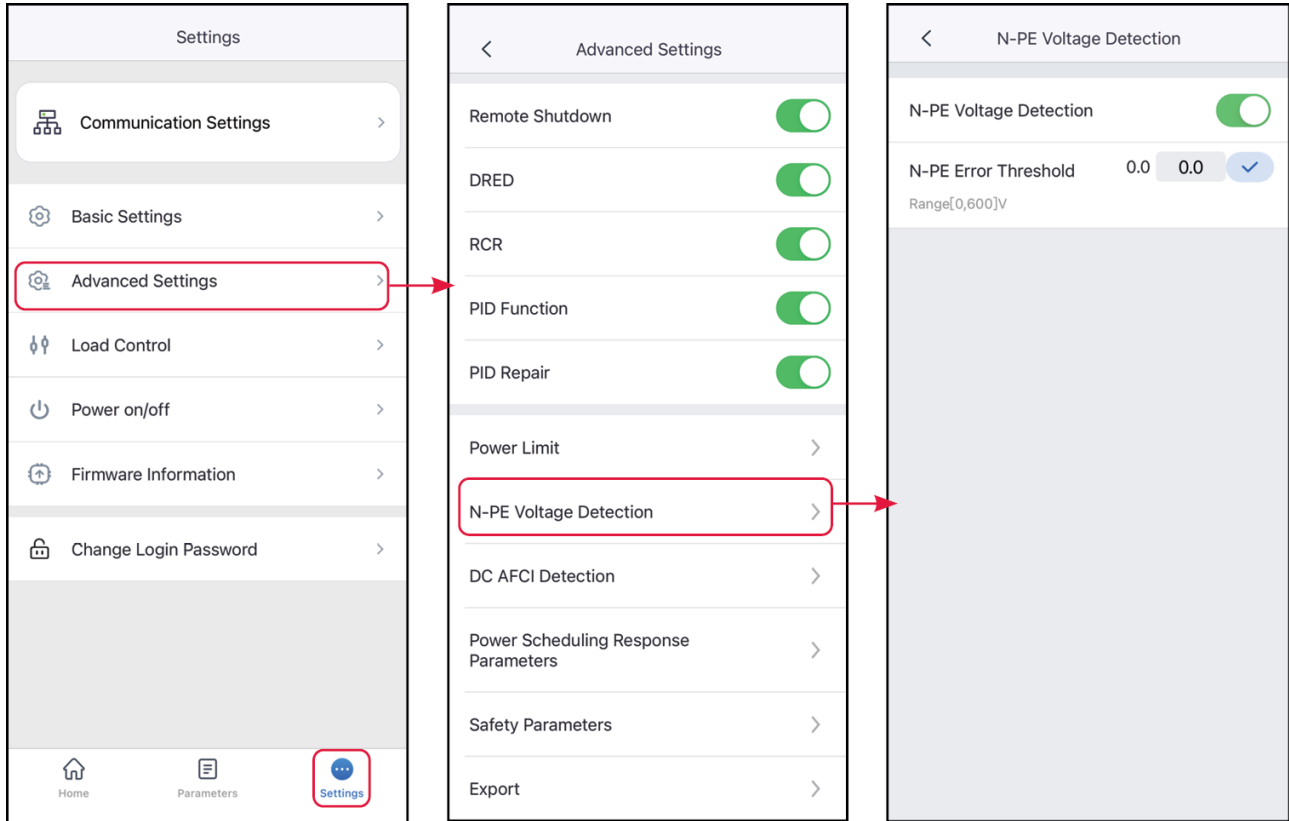
No.	Parameters	Description
1	Power limit	Turn on this function when output power needs to be limited according to grid standards in some countries or regions.
2	Select Mode	<ul style="list-style-type: none"> <li>Current limit mode needs to be selected for some models. Support: split-phase current, total current.</li> <li>When set to split-phase current, limit the current of each phase; when set to total current, limit the total current of three phases.</li> </ul>
3	Current limit	Set according to the maximum current that can be actually input to the grid.
4	External CT ratio	Set the ratio of the primary current to the secondary current of the external CT.

## 2.5.5 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

## 2.5.6 Setting the AFCI Detection Parameters (Installer)

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

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.

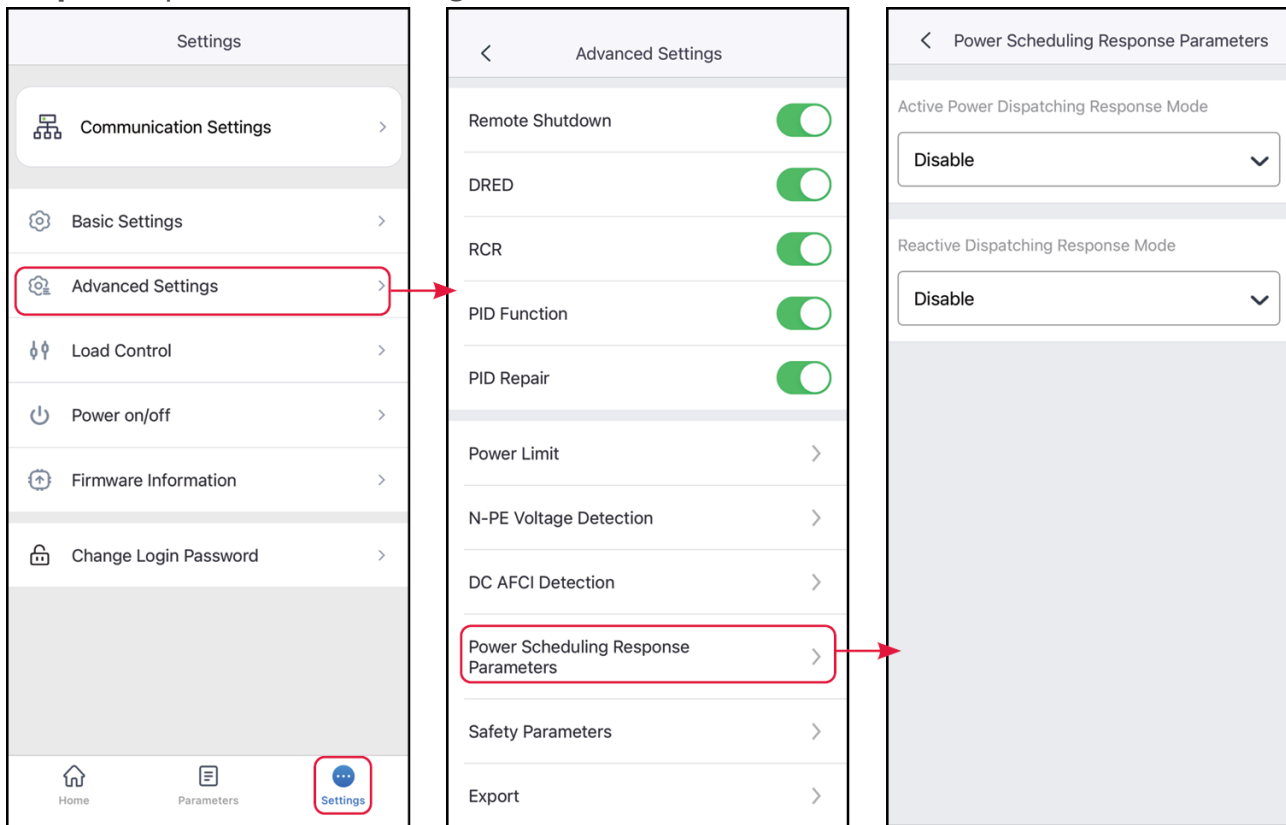
## 2.5.7 Setting the Power Scheduling Response Parameters

**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

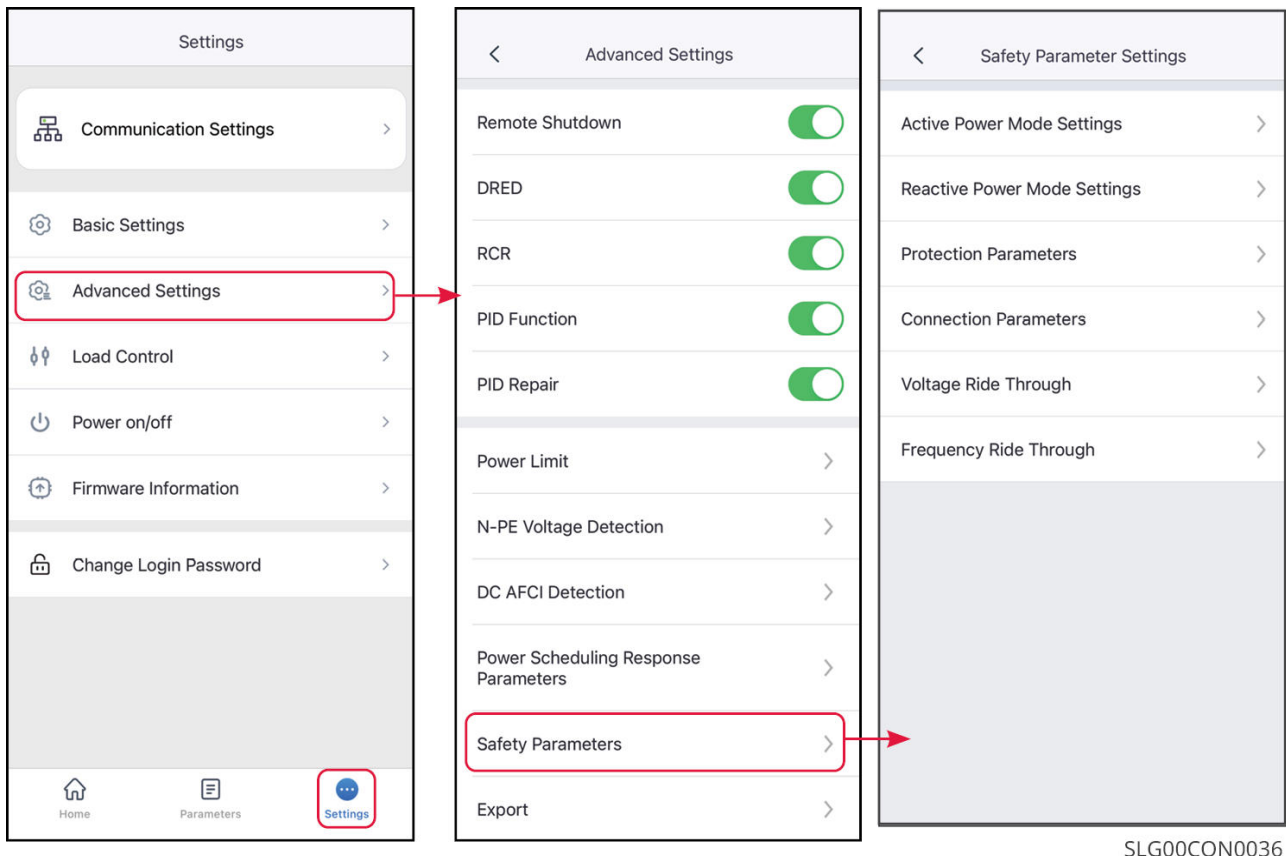
No.	Parameters	Description
	Active Power Dispatching Response Mode	

No.	Parameters	Description
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.

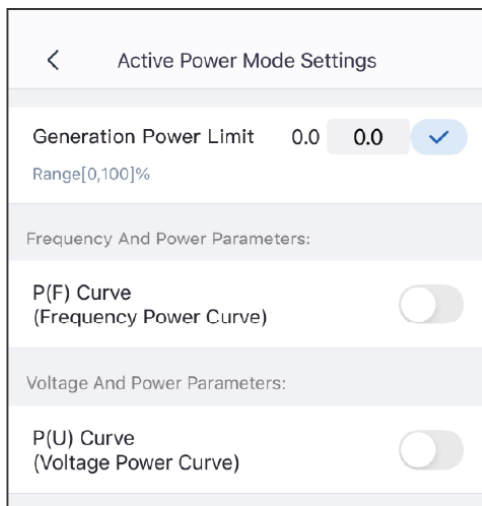
## 2.5.8 Setting Safety Parameters (Installer)

### NOTICE

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



### 2.5.8.1 Setting the Active Power Mode

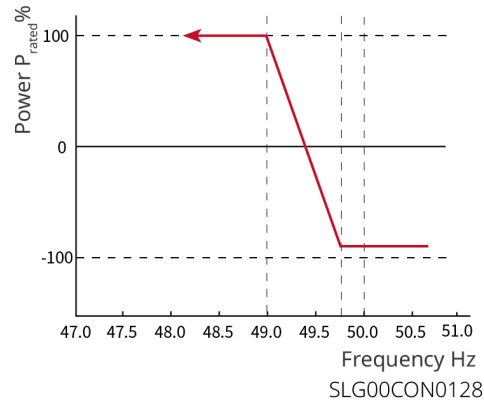
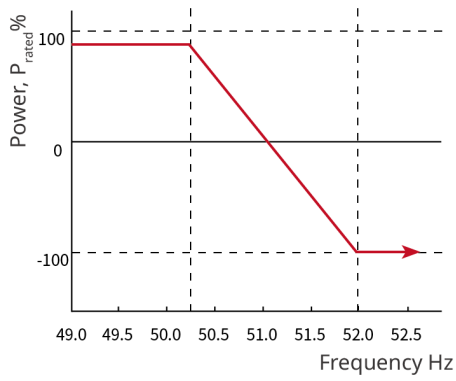


SLG00CON0149

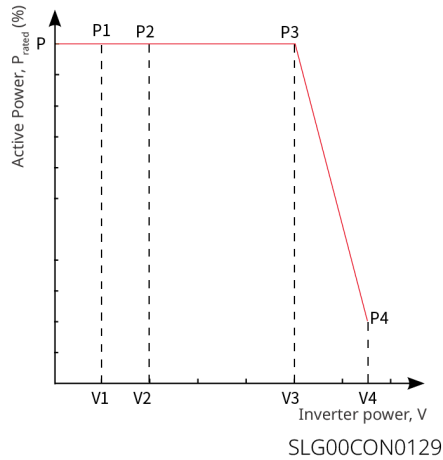
**Step 1:** Tap **Home > Settings > Advanced Settings > Safety Parameter Settings > Active Power Mode Settings** to set the parameters.

**Step 2:** Set the parameters based on actual needs.

#### P(F) Curve



### P(U) Curve



No.	Parameters	Explanation
1	Generation Power Limit	Set the change slope when the active output power increases or decreases.
2	Power Gradient	Set the active power change slope.
Overfrequency Unloading		
1	P(F) Curve	Enable P(F) Curve when it is required by local grid standards and requirements.

No.	Parameters	Explanation
2	Over-Frequency Load Shedding Mode	Set the overfrequency unloading mode based on actual needs. <ul style="list-style-type: none"> <li>• Slope mode: adjusts power based on the over frequency point and load reduction slope.</li> <li>• Stop mode: adjusts the power based on the over-frequency start point and over-frequency end point.</li> </ul>
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 <b>Overfrequency Threshold</b> .
4	Import/Export Electricity Conversion Frequency	When the set frequency value is reached, the system switches from selling electricity to buying electricity.
5	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 <b>Overfrequency Endpoint</b> .
6	Over-Frequency Power Slope Reference Power	Adjust the inverter output power based on Apparent Active Power, Rated Active Power, Momentary Active Power, Or Max. Active Power.
7	Power response to overfrequency gradient	The inverter output active power will increase when the utility grid frequency is too high. Indicates the slope when the inverter output power decreases.
8	Intentional Delay Ta	Indicates the delayed response time when the inverter output power is higher than the <b>Overfrequency Threshold</b> .

No.	Parameters	Explanation
9	Hysteretic Function	Enable the hysteretic function.
10	Frequency Hysteresis Point	During over-frequency load reduction, if the frequency decreases, the power output is based on the lowest point of the load reduction power until the frequency is less than the hysteresis point and the power is restored.
11	Hysteresis Waiting Time	For over-frequency load reduction and frequency decrease, when the frequency is less than the hysteresis point, the power recovery waiting time, that is, it takes a certain amount of time to recover the power.
12	Hysteresis Power Recovery Slope Reference Power	For over-frequency load reduction and frequency decrease, when the frequency is less than the hysteresis point, the power recovery benchmark, that is, the power recovery is based on the recovery slope * the rate of change of the reference power. Support: P <sub>n</sub> rated power, P <sub>s</sub> apparent power, P <sub>m</sub> current power, P <sub>max</sub> maximum power, power difference ( $\Delta P$ ).
13	Hysteretic Power Recovery Slope	For over-frequency load reduction and frequency reduction, when the frequency is less than the hysteresis point, the power change slope when the power is restored.
Underfrequency Loading		
1	P(F) Curve	Enable P(F) Curve when it is required by local grid standards and requirements.
2	Underfrequency Load Mode	<p>Set the underfrequency unloading mode based on actual needs.</p> <ul style="list-style-type: none"> <li>• Slope mode: adjusts power based on the underfrequency point and load increase slope.</li> <li>• Stop mode: adjusts the power based on the underfrequency start point and underfrequency end point.</li> </ul>

No.	Parameters	Explanation
3	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 <b>Underfrequency Threshold</b> .
4	Import/Export Electricity Conversion Frequency	When the set frequency value is reached, the system switches from selling electricity to buying electricity.
5	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 <b>Underfrequency Endpoint</b> .
6	Over-Frequency Power Slope Reference Power	Adjust the inverter output power based on Apparent Active Power, Rated Active Power, Momentary Active Power, Or Max. Active Power.
7	Under-Frequency Power Slope	The inverter output active power will increase when the utility grid frequency is too low. The slope of the inverter output power when it rises.
8	Intentional Delay $T_a$	Indicates the delayed response time when the inverter output power is lower than the <b>Underfrequency Threshold</b> .
9	Hysteretic Function	Enable the hysteretic function.
10	Frequency Hysteresis Point	During underfrequency loading, if the frequency increases, the power is output according to the lowest point of the loaded power until the frequency is higher than the hysteresis point and the power is restored.



No.	Parameters	Explanation
11	Hysteresis Waiting Time	For underfrequency loading, the frequency increases, when the frequency is higher than the hysteresis point, the waiting time for power recovery, that is, it takes a certain amount of time to recover the power.
12	Hysteresis Power Recovery Slope Reference Power	For underfrequency loading, the frequency increases, when the frequency is higher than the hysteresis point, the benchmark for power recovery, that is, the power recovery is carried out according to the recovery slope * the rate of change of the benchmark power. Support: P <sub>n</sub> rated power, P <sub>s</sub> apparent power, P <sub>m</sub> current power, P <sub>max</sub> maximum power, power difference ( $\Delta P$ ).
13	Hysteretic Power Recovery Slope	For under-frequency loading, frequency increase, when the frequency is higher than the hysteresis point, the power change slope when power is restored.
14	P(U) Curve	Enable P(U) Curve when it is required by local grid standards and requirements.
15	V <sub>n</sub> Voltage	The percentage of actual voltage to the rated voltage at V <sub>n</sub> point, n= 1, 2, 3, 4. For example, setting V <sub>n</sub> Voltage to 90 means V/V <sub>rated</sub> %=90%.
16	V <sub>n</sub> Active Power	The percentage of the output active power to the apparent power at V <sub>n</sub> point, (n= 1, 2, 3, 4). For example, setting <b>V<sub>n</sub> Reactive Power</b> to 48.5 means P/P <sub>rated</sub> %=48.5%.
17	Output Response Mode	Set the active power output response mode. Supports: <ul style="list-style-type: none"> <li>• PT-1 Behavior, realize active scheduling based on the first-order LPF curve within the response time constant.</li> <li>• Gradient Control, realize active scheduling based on the power change slope.</li> </ul>

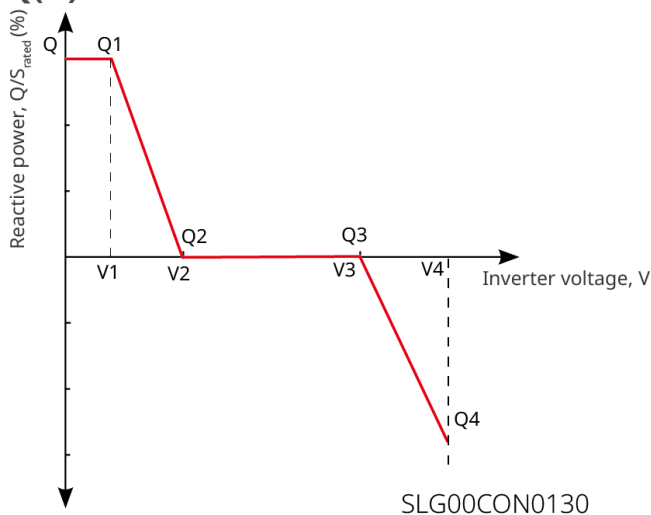
No.	Parameters	Explanation
18	Power Gradient	When the output response mode is set to Gradient Control, active power scheduling is achieved according to the power change gradient.
19	First-order Low-pass Filter Time Parameter	Set the time constant within which the active power changes based on the first order LPF curve when the Output Response Mode is set to be First-order Low-pass Filter Time Parameter.
20	Overload Function Switch	When enabled, the maximum active power output is 1.1 times the rated power; otherwise, the maximum active power output is consistent with the rated power value.

### 2.5.8.2 Setting the Reactive Power Mode

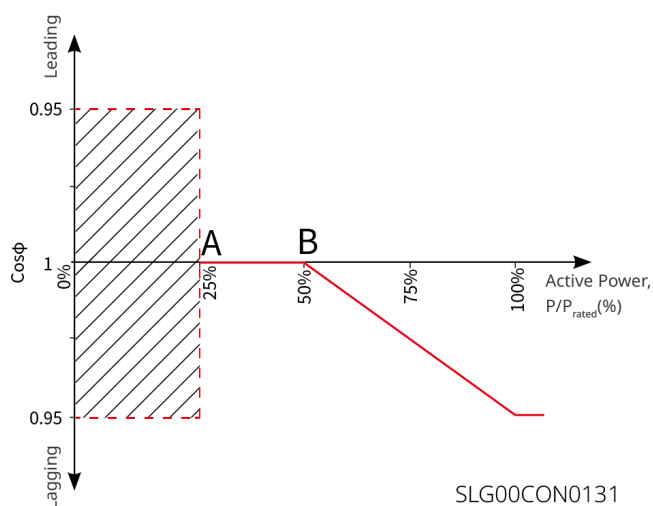
**Step 1 :** Tap **Home > Settings > Advanced Settings > Safety Parameter Setting > Reactive Power Mode Settings** to set the parameters.

**Step 2 :** Set the parameters based on actual needs.

#### Q(U) Curve



#### Cosφ Curve



No.	Parameters	Description
Fix PF		
1	Fix PF	Enable Fix PF when it is required by local grid standards and requirements. After the parameters are set successfully, the power factor remains unchanged during the operation of the inverter.
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.
Fix Q		
1	Fix Q	Enable Fix Q when it is required by local grid standards and requirements.
2	Over-excited/Under-excited	Set the reactive power as inductive or capacitive reactive power based on actual needs and local grid standards and requirements.
3	Reactive Power	Set the ratio of reactive power to apparent power.
Q(U) Curve		
1	Q(U) Curve	Enable Q(U) Curve when it is required by local grid standards and requirements.

No.	Parameters	Description
2	Mode Selection	Set Q(U) curve mode, supporting basic mode and slope mode.
3	Vn Voltage	The percentage of actual voltage to the rated voltage at Vn point, n=1, 2, 3, 4. When set to 90, it means: $V/V_{rated}\% = 90\%$ .
4	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 <b>Vn Reactive Power</b> to 48.5 means $Q/S_{rated}\%=48.5\%$ .
5	Voltage Deadband Width	When Q(U) curve mode is set to slope mode, this parameter defines the voltage deadband range where no reactive power output is required.
6	Over-excitation Slope	(In Q(U) slope mode) Sets the positive or negative slope for reactive power variation during over-voltage conditions.
7	Under-excitation Slope	
8	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 <b>Vn Reactive Power</b> to 48.5 means $Q/S_{rated}\%=48.5\%$ .
9	Q(U) Curve Response Time Constant	The reactive power must reach 95% of the target value within 3 time constants, following a first-order low-pass filter curve.
10	Extended Function	Enable the extended function and configure the corresponding parameters.
11	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.
12	Lock-out Power	
Cosφ(P) Curve		

No.	Parameters	Description
1	Cosφ(P) Curve	Enable Cosφ Curve when it is required by local grid standards and requirements.
2	Mode Selection	Set cosφ(P) Curve Mode and support basic mode and slope mode configurations.
3	N-point Power	The percentage of inverter output active power relative to rated power at the N-point. N=A, B, C, D, E.
4	N-point cosφ Value	N-point Power Factor N=A, B, C, D, E.
5	Over-excitation Slope	When cosφ(P) curve mode is set to slope mode, configures the power variation slope as either positive or negative.
6	Under-excitation Slope	
7	N-point Power	The percentage of inverter output active power relative to rated power at the N-point. N=A, B, C.
8	N-point cosφ Value	N-point Power Factor N=A, B, C.
9	cosφ(P) Curve Response Time Constant	The reactive power must reach 95% of the target value within 3 time constants, following a first-order low-pass filter curve.
10	Extended Function	Enable the extended function and configure the corresponding parameters.
11	Lock-in Voltage	When the grid voltage is between Lock-in Voltage and Lock-out Voltage, the voltage meets Cosφ curve requirements.
12	Lock-out Voltage	
Q(P) Curve		
1	Q(P) Curve Function	Enable Q(P) Curve when it is required by local grid standards and requirements.
2	Mode Selection	Set Q(P) curve mode, supporting basic mode and slope mode.

No.	Parameters	Description
3	Pn-point 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 to 90 means $Q/Prated\%=90\%$ .
4	Pn-point Reactive Power	The percentage of the output active power to the rated power at Pn point, n=1, 2, 3, 4, 5, 6. For example, When set to 90, it means: $P/Prated\% = 90\%$ .
5	Over-excitation Slope	When the Q(P) curve mode is set to slope mode, configure the power variation slope as either a positive or negative value.
6	Under-excitation Slope	
7	Pn-point Power	Ratio of reactive power to rated power at Pn points (n=1, 2, 3). For example, setting to 90 means $Q/Prated\%=90\%$ .
8	Pn-point Reactive Power	Ratio of active power to rated power at Pn points (n=1, 2, 3). For example, When set to 90, it means: $P/Prated\% = 90\%$ .
9	Time Constant	The reactive power must reach 95% of the target value within 3 time constants, following a first-order low-pass filter curve.

### 2.5.8.3 Setting Protection Parameters

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

**Step 2:** Set the parameters based on actual needs.

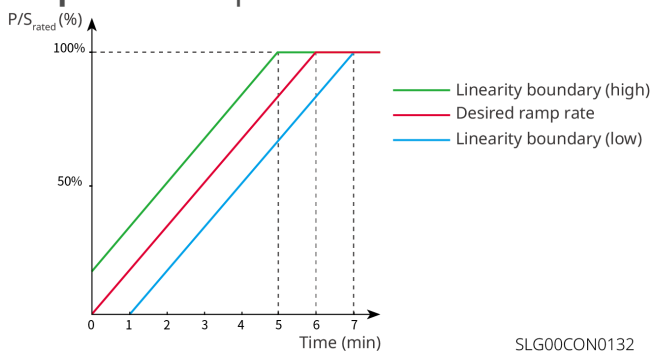
No.	Parameters	Description
1	OV Stage n Trip Value	Set the grid overvoltage protection threshold value, n=1,2,3,4.

No.	Parameters	Description
2	OV Stage n Trip Time	Set the grid overvoltage protection tripping time, n=1,2,3,4.
3	UV Stage n Trip Value	Set the grid undervoltage protection threshold value, n=1,2,3,4.
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.
7	OF Stage n Trip Value	Set the grid overfrequency triggering n-th order protection point, n=1,2,3,4.
8	OF Stage n Trip Time	Set the grid overfrequency trigger n-th order trip time, n=1,2,3,4.
9	UF Stage n Trip Value	Set the grid underfrequency triggering n-th order protection point, n=1,2,3,4.
10	UF Stage n Trip Time	Set the grid underfrequency trigger n-th order trip time, n=1,2,3,4.

#### 2.5.8.4 Setting Connection Parameters

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

**Step 2:** Set the parameters based on actual needs.



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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 <b>Upper Voltage</b> .
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 <b>Lower Voltage</b> .
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 <b>Upper Frequency</b> .
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 <b>Lower Frequency</b> .
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.
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.
Reconnection		
8	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 <b>Upper Voltage</b> .
9	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 <b>Lower Voltage</b> .



No.	Parameters	Description
10	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 <b>Upper Frequency</b> .
11	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 <b>Lower Frequency</b> .
12	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.
13	Reconnection Gradient	Enable the start up power slope.
14	Reconnection 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 Reconnection Gradient to 10 means the reconnect slope is 10%P/Srated/min.

#### 2.5.8.5 Setting Voltage Ride Through Parameters

**Step 1 :** Tap **Home > Settings > Advanced Settings > Safety Parameter Settings > 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. n=1,2,3,4,5,6,7.
2	UVn Time	The ride through time at UVn point during LVRT. n=1,2,3,4,5,6,7

No.	Parameters	Description
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	Slope K2	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		
1	OVn Voltage	The ratio of the ride through voltage to the rated voltage at OVn point during HVRT. $n=1,2,3,4,5,6,7$ .
2	OVn Time	The ride through time at OVn point during HVRT. $n=1,2,3,4,5,6,7$ .
3	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.
4	Exit High Crossing Threshold	
5	Slope K2	K-factor for reactive power during HVRT.
6	Zero Current Mode	The system outputs zero current during HVRT.
7	Entry Threshold	Set the entry threshold of zero current mode.

### 2.5.8.6 Setting Frequency Ride Through Parameters

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

**Step 2 :** Set the parameters based on actual needs.

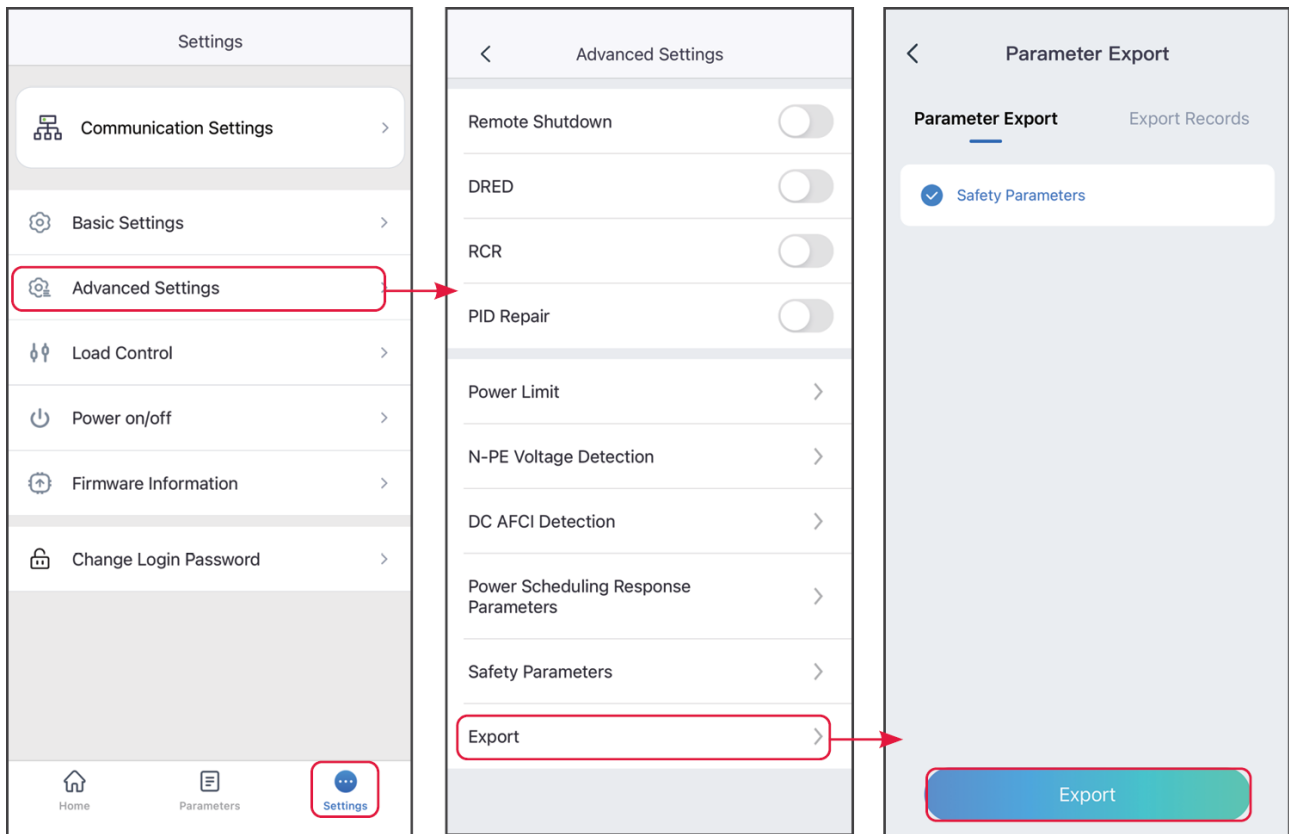
No.	Parameters	Description
1	UFn Frequency	The frequency at the UFn point during frequency ride through.
2	UFn Frequency	The frequency at the UFn point during frequency ride through. n=1,2,3。
3	UFn Time	The ride through duration at the UFn point during frequency ride through. n=1,2,3。
4	OFn Frequency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

### 2.5.9 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:** 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.



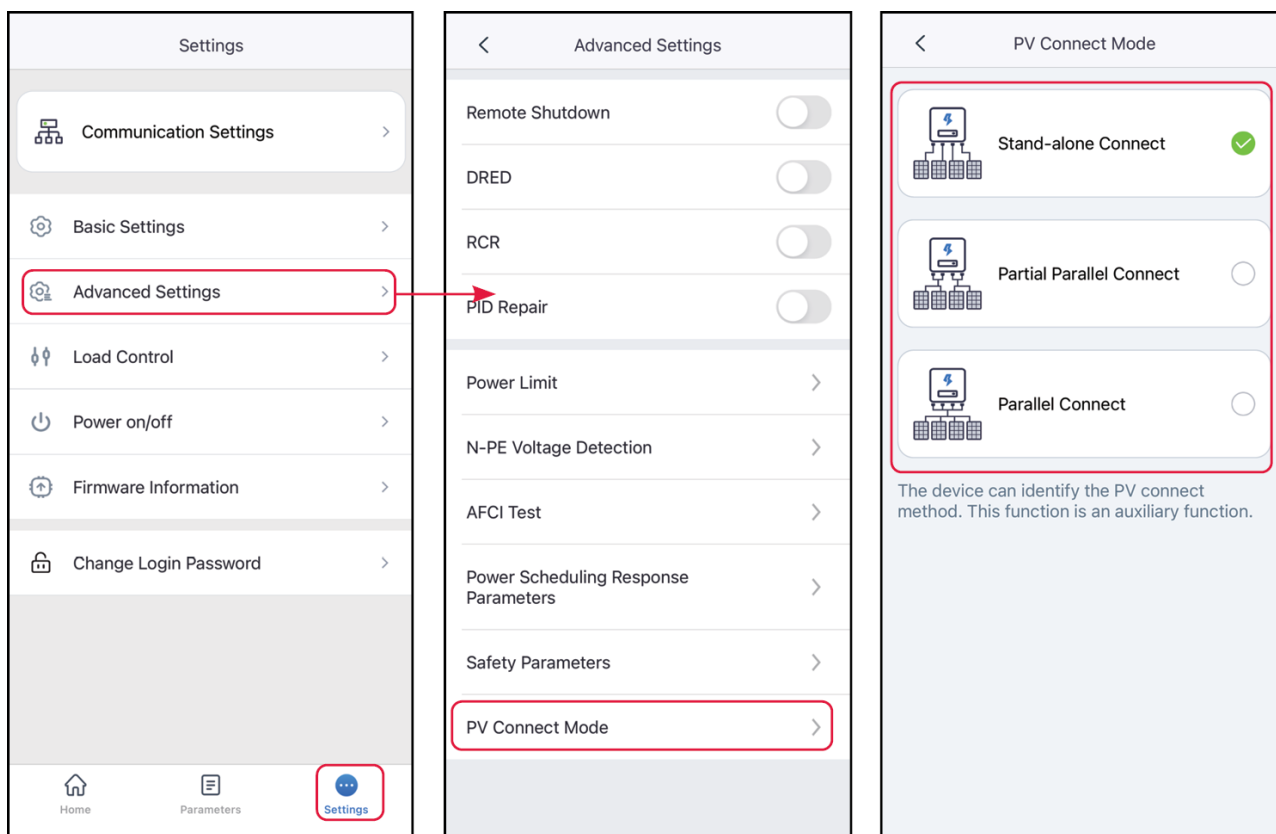
SLG00CON0037

## 2.5.10 Setting PV Connect Mode

Select the PV connect 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 Stand-alone Connect, Partial Parallel Connect or Parallel Connection based on actual connections.



SLG00CON0039

No.	Parameters	Description
1	Stand-alone Connect	The external PV strings are connected to the MPPT terminals of the inverter one-to-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.

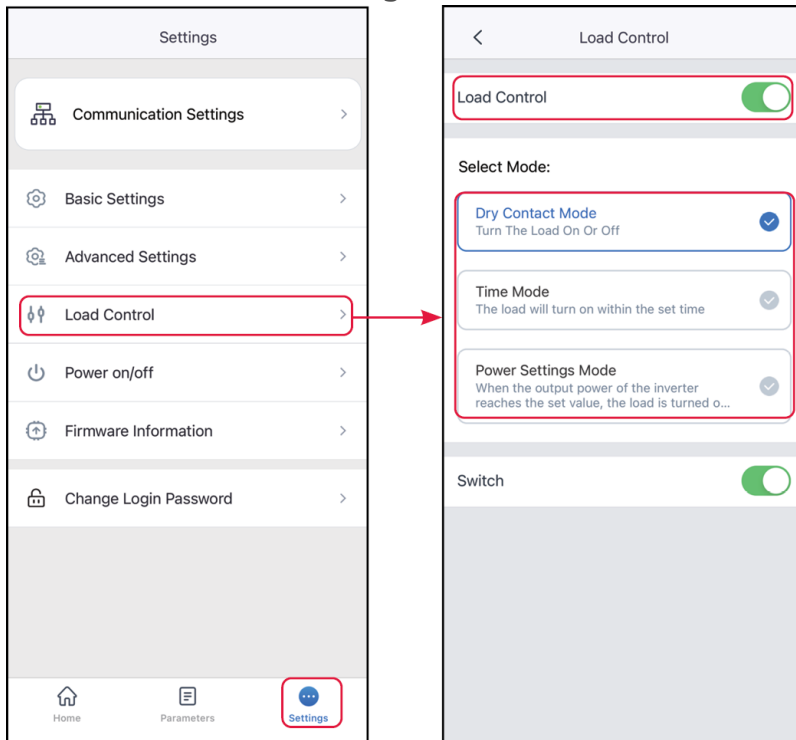
## 2.6 Setttng the Load Control

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 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.

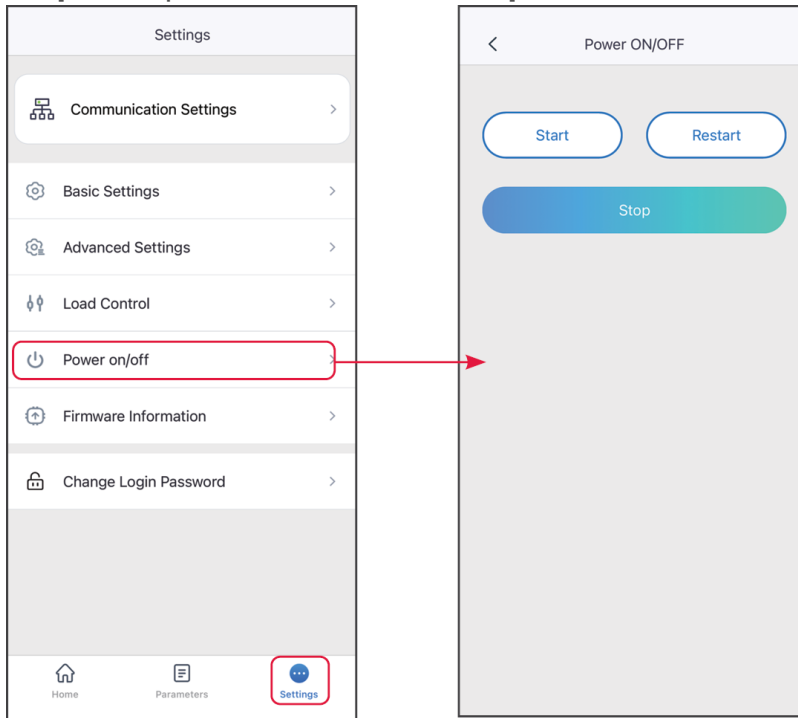
No.	Parameters	Description
1	Start Time	The time mode will be on between the start time and end time.
2	End Time	
3	Repeat	The repeat days.

- 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.

## 2.7 Powering ON/OFF the Inverter

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

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



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## 2.8 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 frmware information page.

### 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 IIII

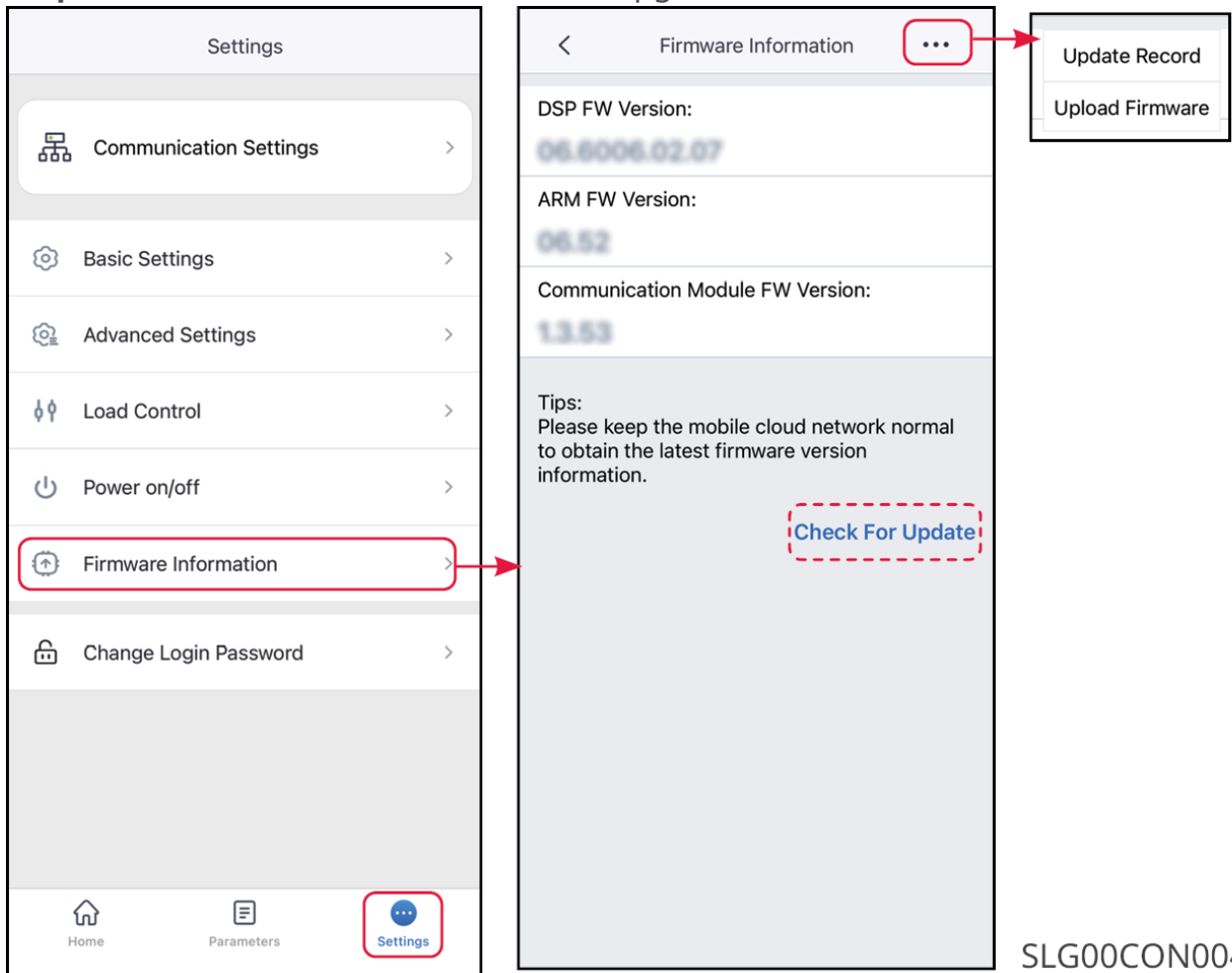
### NOTICE

- 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 :** Enable or disable the Automatic Upgrade.



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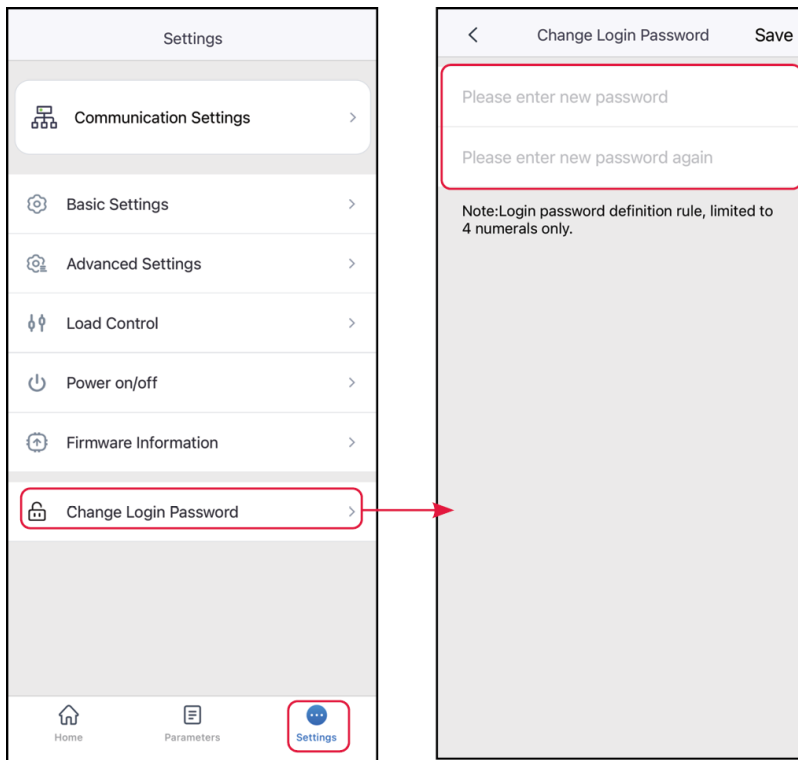
## 2.9 Change the Login Password

### 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.



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## 2.10 Setting the Power-Limited Parameters(Parallel Connected Inverters)

### NOTICE

- 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.

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No.	Parameters	Description
1	Power-Limited Type	<p>Select the output power control mode based on actual situation.</p> <ul style="list-style-type: none"> <li>• Total power: controls the total power at the grid-connection point to limit the power fed to the power grid.</li> <li>• Split-phase power: controls the power of each phase at the grid-connection point to limit the power fed to the power grid.</li> </ul>
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	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Set the maximum duration from the time when detecting excessive output power to the time when output power reaches the limit value.</li> </ul>
7	Handling Protection Exceptions	The following measures can be taken when protection exception, communication exception or meter communication exception occurs:
8	Meter Communication Exception Handling	<ul style="list-style-type: none"> <li>• Shutdown: stop the equipment.</li> <li>• Power Limitation: the equipment continues to work at the percentage of the rated power.</li> </ul>

No.	Parameters	Description
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 .

## 3 Hybrid Inverter Parameters Settings

### 3.1 Connecting the Hybrid Inverter

#### 3.1.1 Connecting the Hybrid Inverter (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.

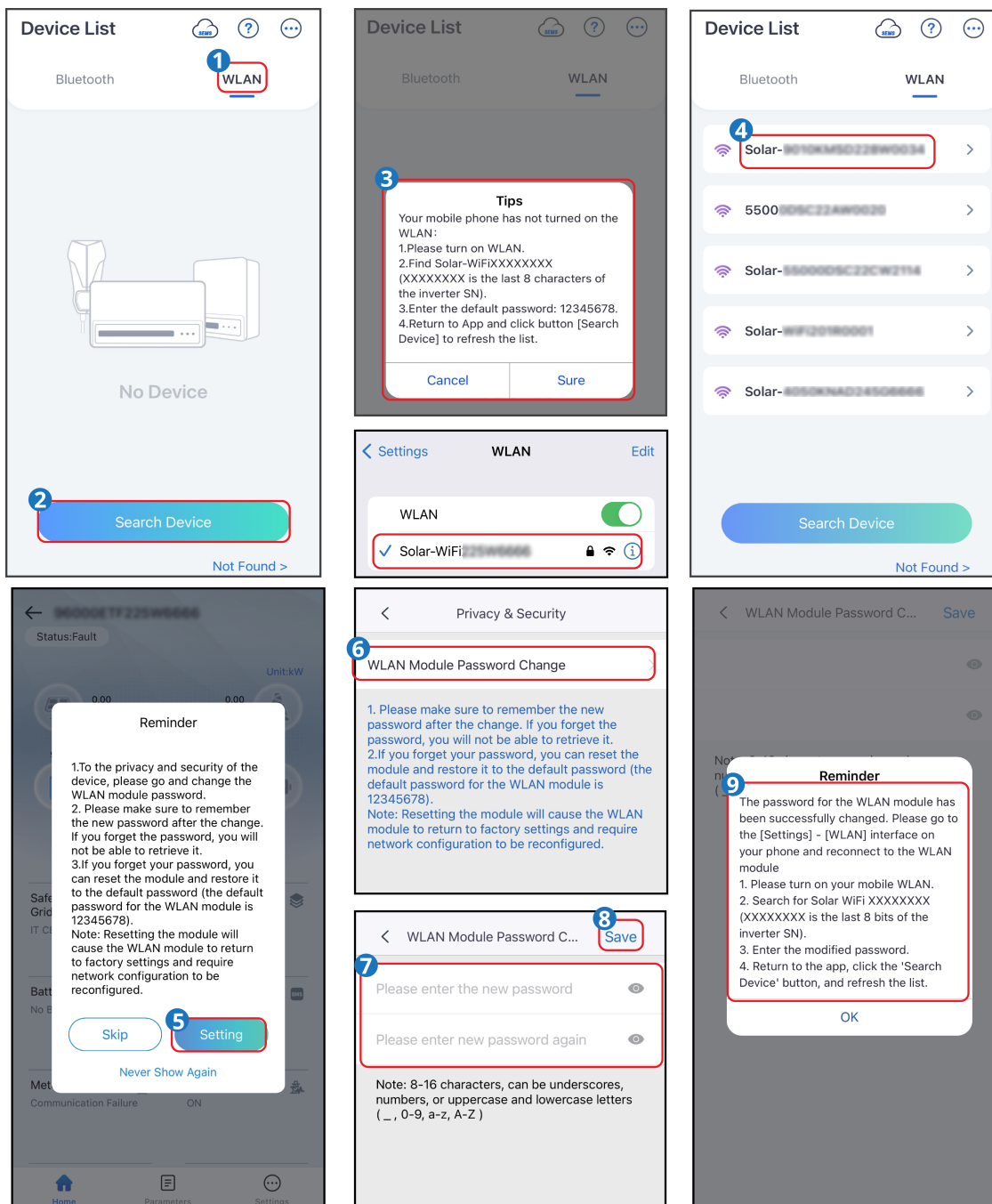
**Step 1** Ensure that the inverter is power on, both the inverter and the communication module are working properly.

**Step 2** Select WLAN tab on the SolarGo app homepage.

**Step 3** Open the WiFi setting on the phone 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 into the **Home** page.

**Step 5:** Modify the initial WiFi password following the prompts. After the password is changed, log in again and enter the device details page. Please refer to the actual prompts on the interface.



### 3.1.2 Connecting the Hybrid Inverter (Bluetooth)

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

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

**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.

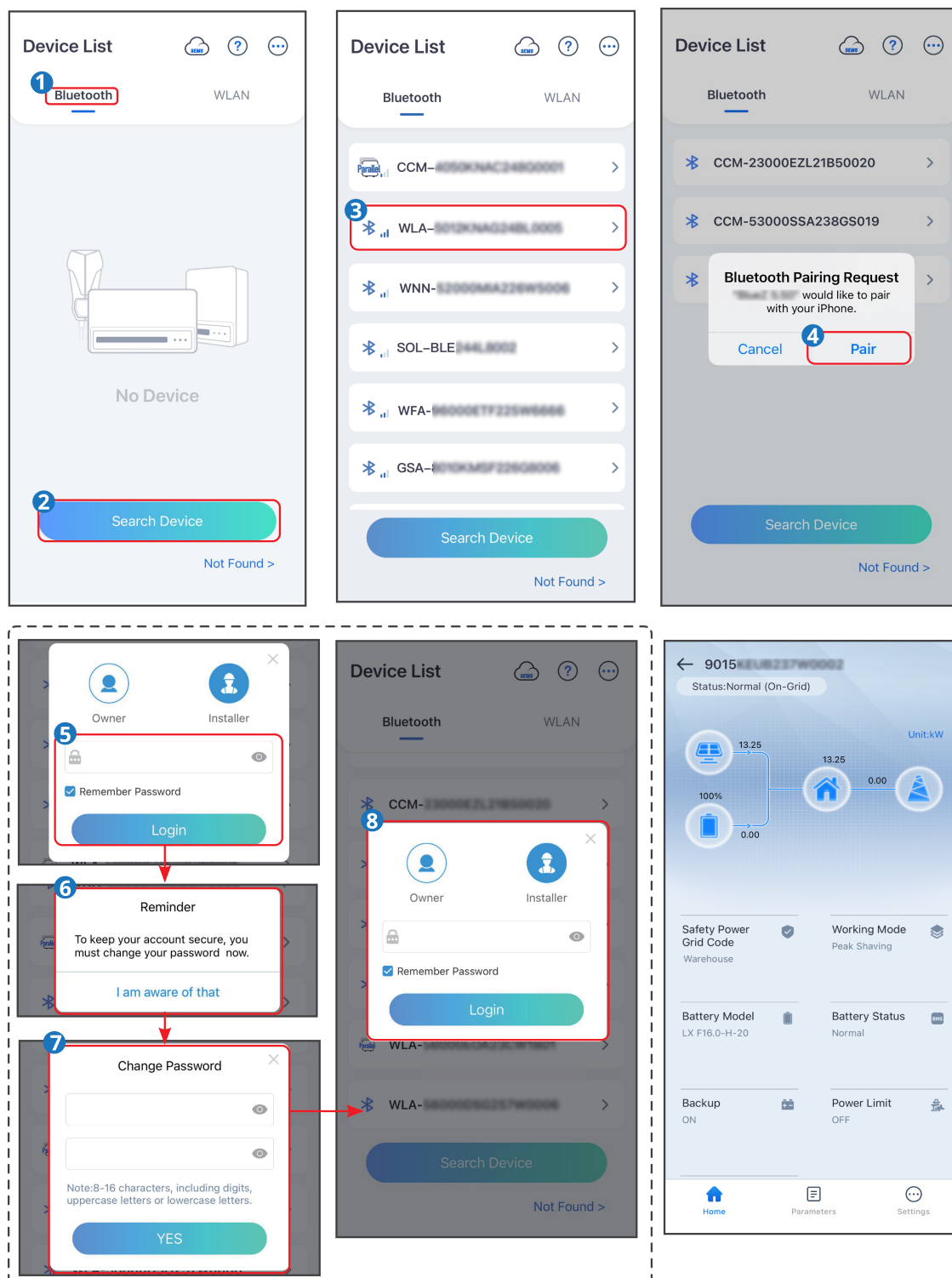
Select the device by checking the serial number of the master inverter when multi

inverters are parallel connected.

**Step 4** For first connection with the equipment 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. Initial password: 1234. Default password: 1234.

**Step 6** (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.





### 3.1.3 Connecting the Smart Dongle

If the SolarGo app cannot detect the inverter's signal during connection, the device list will still display the smart dongle connected to the inverter.

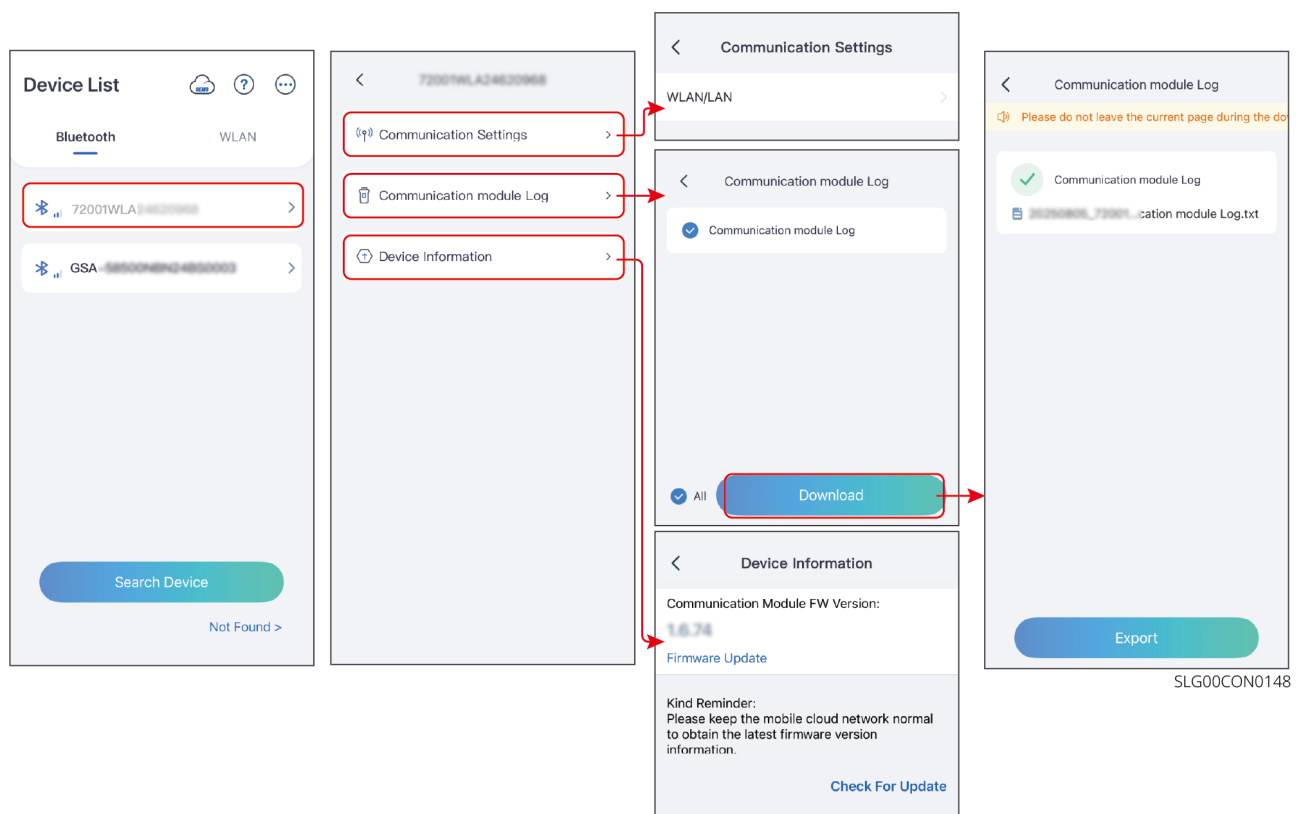
Supports:

- WiFi/LAN Kit-20
- Ezlink3000
- 4G Kit-CN-G20, 4G Kit-CN-G21, 4G Kit-G20

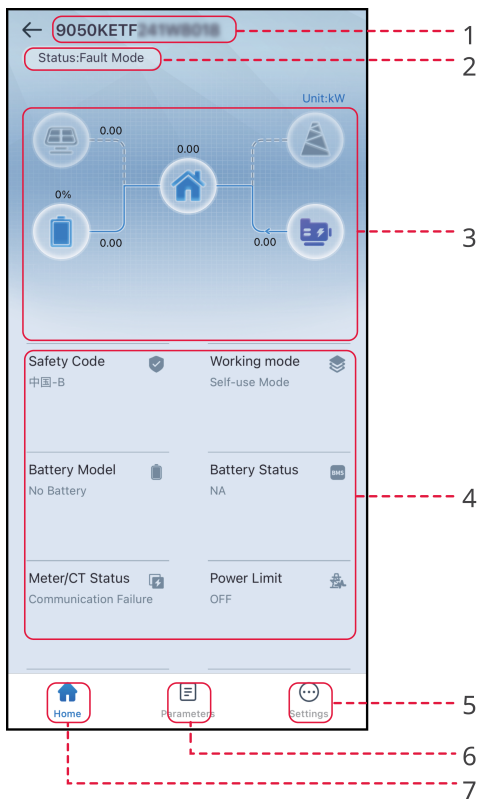
Step 1: On the SolarGo App homepage, find the grayed-out serial number of the smart dongle and tap to enter the settings interface.



Step 2: Configure or check parameter information as needed.


- Communication Settings: Tap to set WLAN/LAN parameters and connect the dongle to a router.
- Communication Module Log: Tap to access the log download interface.
- Device Information: Tap to view the firmware version of the smart dongle. If an update is available, follow the instructions to complete the upgrade.



## 3.2 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 checkSerial Number, Device Status,Energy Flow Chart, System Status, etc.
6		Parameters. Tap Parameters to check the inverter Data.

No.	Name/Icon	Description
7		<ul style="list-style-type: none"> <li>• Settings Tap to perform quick settings, basic settings, advanced settings, etc. on the inverter.</li> <li>• Login required to access Quick Setup and Advanced Setting. Contact the supplier or after sales service. Password for professional technicians only.</li> </ul>

## 3.3 Setting Communication Parameters

### NOTICE

The communication configuration interface may be different if the inverter uses different communication modes or connects different communication modules. Please refer to the actual interface.

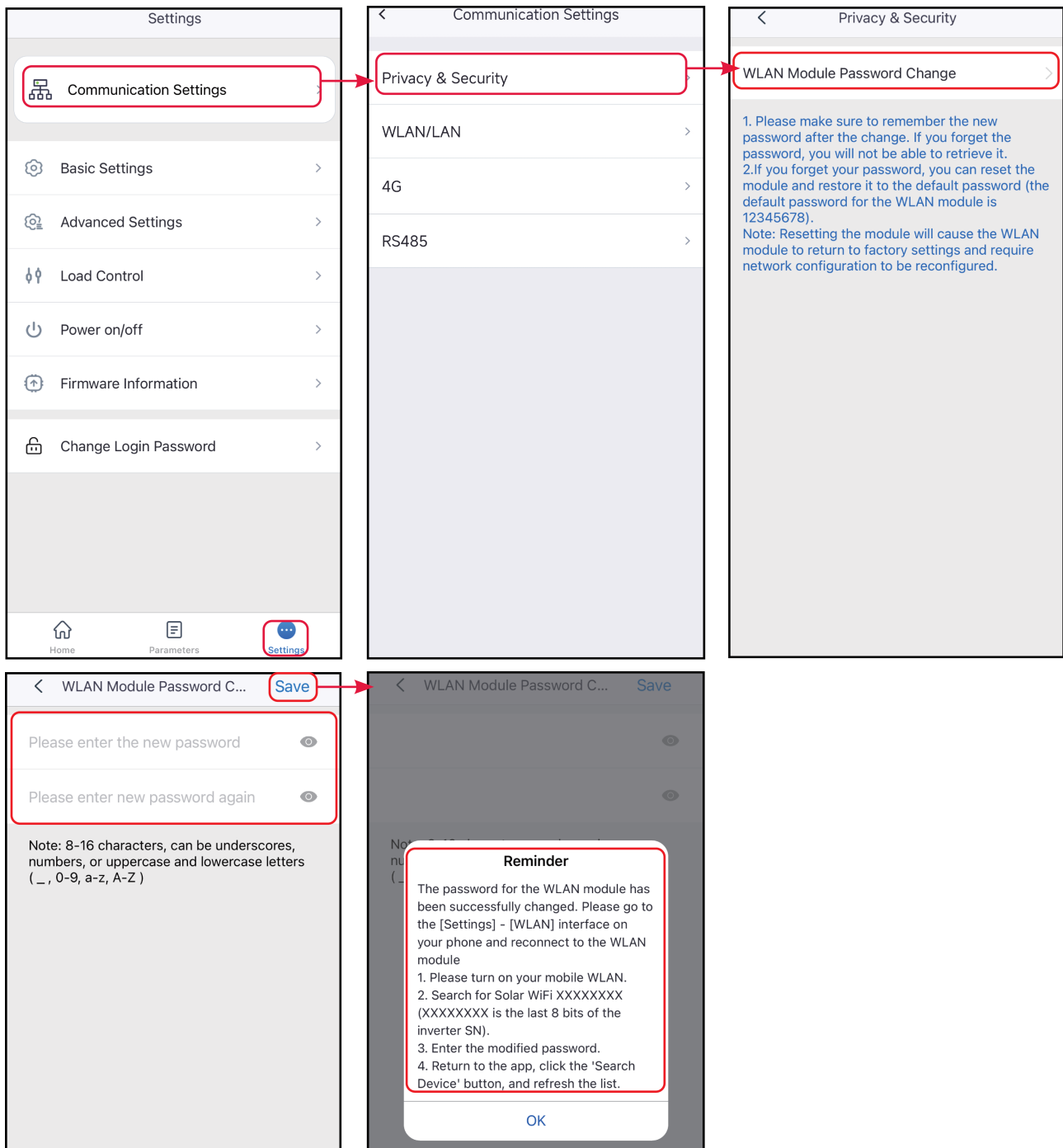
### 3.3.1 Setting Privacy and Security Parameters

#### 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**.

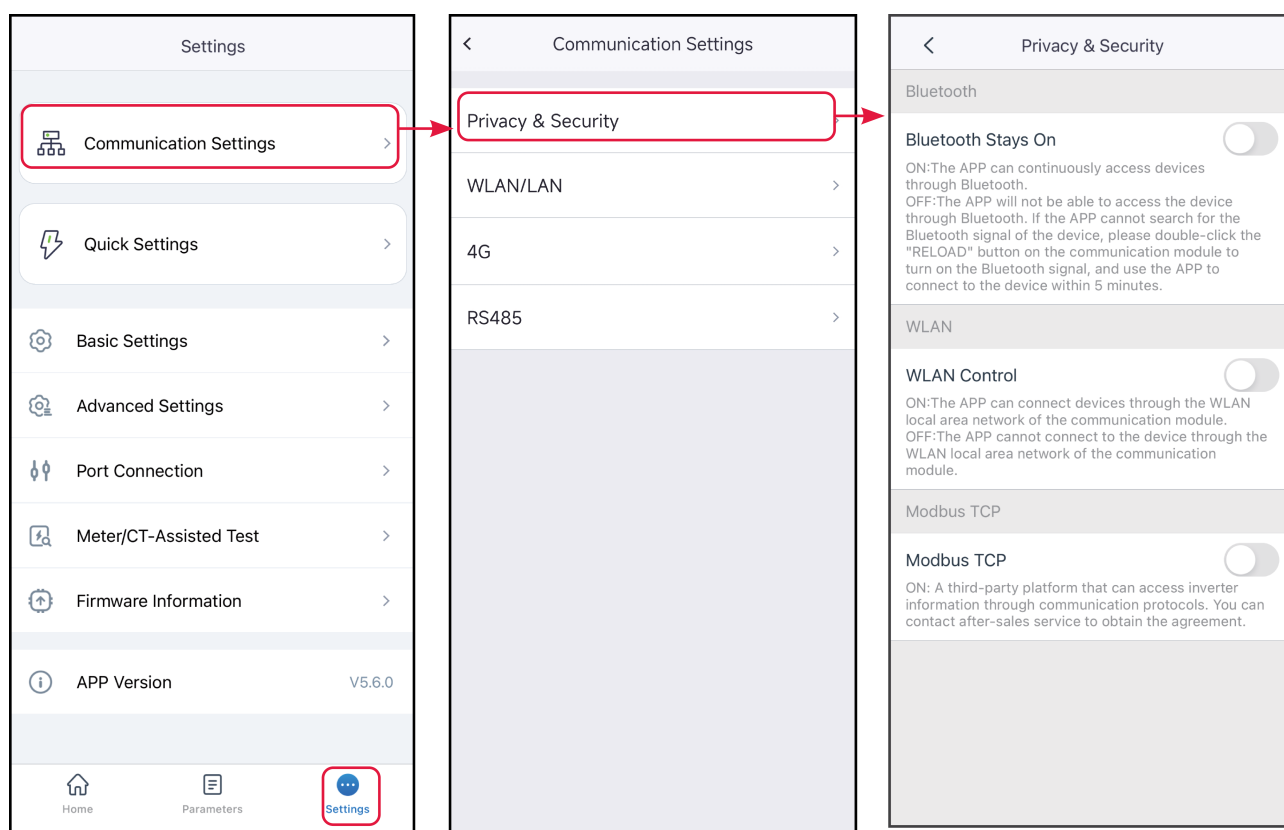
**Step 3** Open the WiFi settings of your phone and connect to the inverter's WiFi signal (Solar WiFi\*\*) with the new password.



## 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.



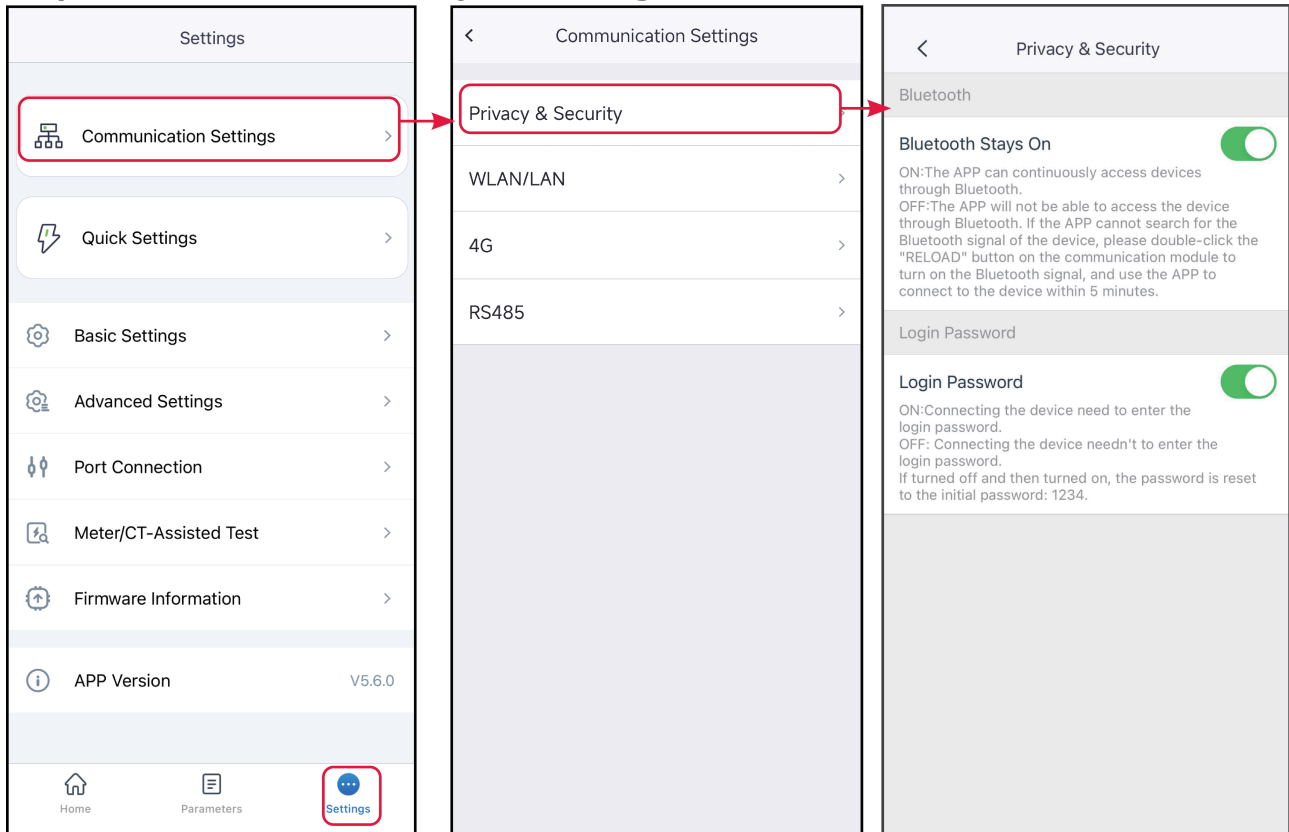
No.	Parameters	Description
1	Bluetooth Stays On	Disabled by default. Enable the function, the bluetooth of the device will be contentious on to keep connected to SolarGo. Otherwise, the bluetooth will be off in 5 minutes, and the device will be disconnected from SolarGo.
2	WLAN Control	Disabled by default. 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.
4	SSH control Ezlink	After enabling this function, third-party platforms can connect to and control EzLink's Linux system.

### 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	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.

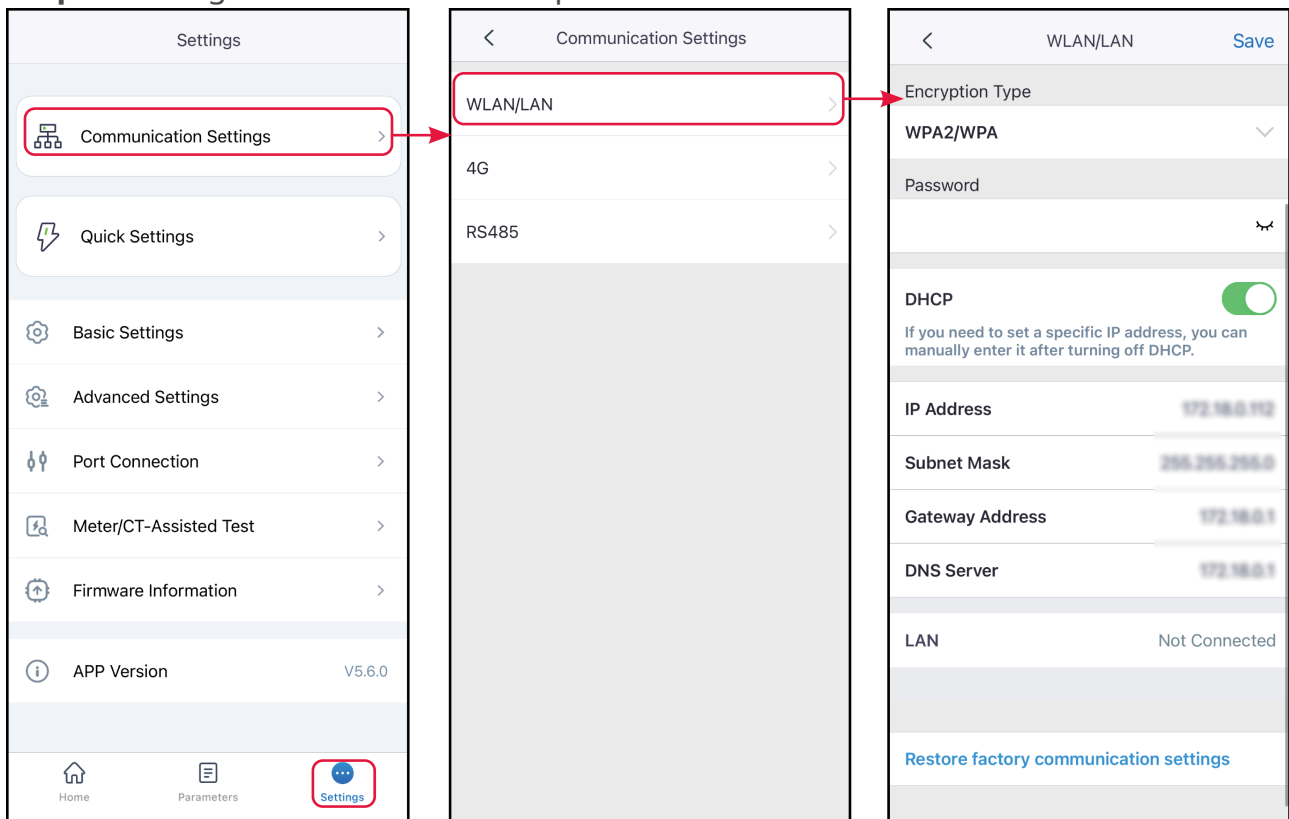
### 3.3.2 Setting WLAN/LAN Parameters

## NOTICE

When the inverter is connected to different communication modules, the communication configuration interface may be different. Please refer to the actual interface.

**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.



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.

No.	Parameters	Description
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	

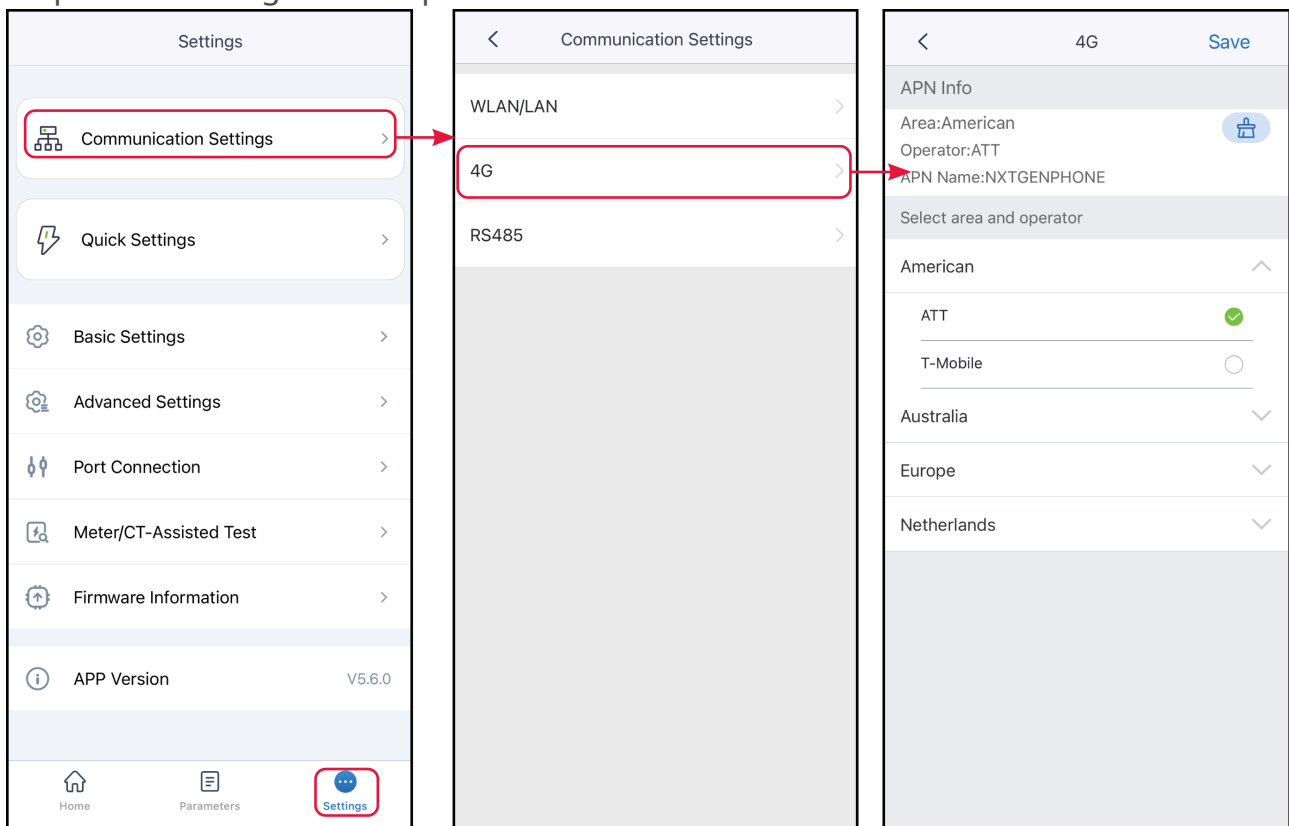
### 3.3.3 Configuring APN Parameters

#### NOTICE

- Configure the SIM card information of 4G communication device.
- If the 4G module does not offer bluetooth signal, please configure the APN parameters through the Bluetooth module or WiFi module first to achieve 4G communication.

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

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





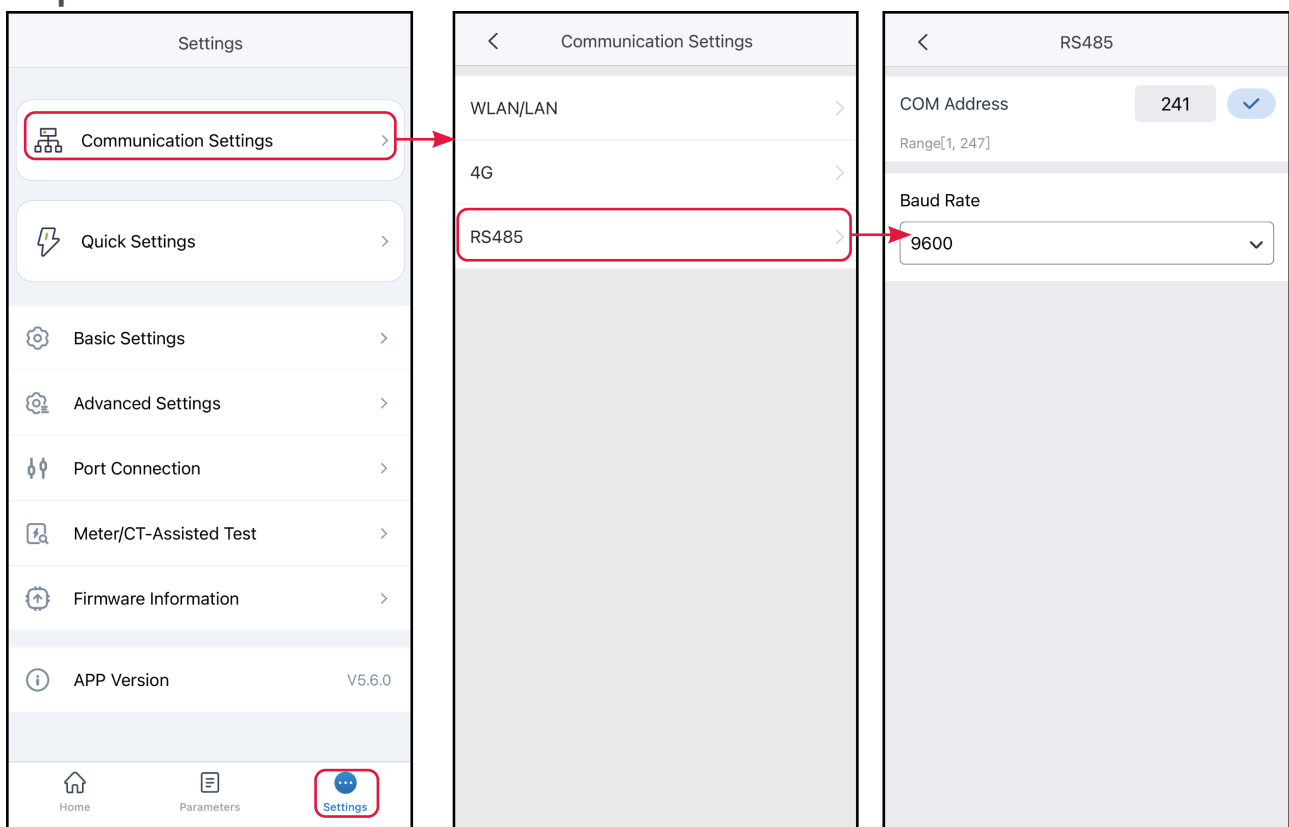
### 3.3.4 Configuring RS485 Parameters

#### 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 Settings > RS485** to set the parameters.

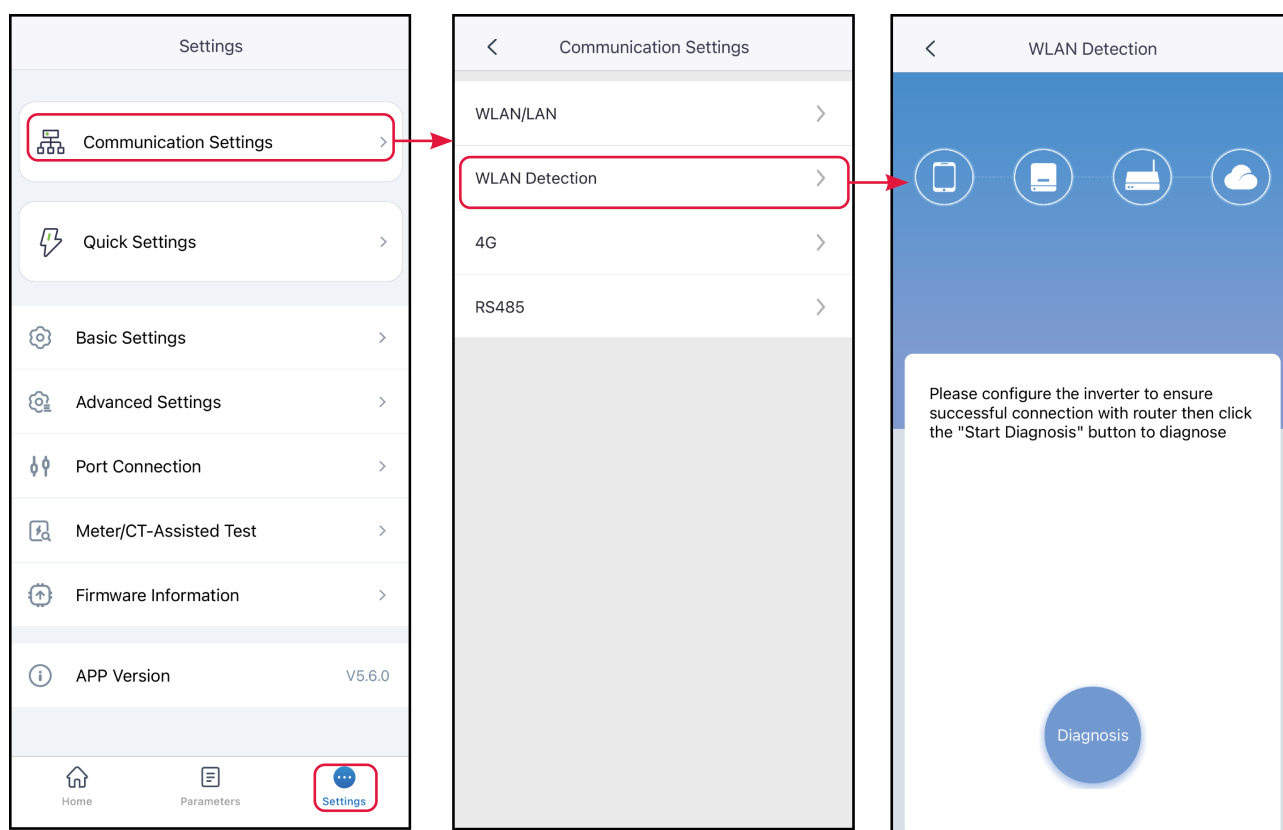
**Step 2 :** Set the Modbus Address And Baud Rate base on actual situation.



### 3.3.5 WLAN Detection

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

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



## 3.4 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 Working**. If the system is a parallel system with multiple inverters, select **Multiple Device Parallel Working**, and set the specific wiring method based on actual needs.

- When the system is both on-grid and off-grid, select **the STS-BACKUP Port Parallel Connect**.
- When the system is a grid-connected parallel system or an off-grid non-parallel system, select **the STS-BACKUP Port Stand-alone Connect**.
- When STS is not connected to the system, select **No STS Box**.

**Step 3 :** Tap **Save** to complete the settings, and click OK in the pop-up window to restart the device.

The first screenshot shows the 'Settings' menu with 'Wiring Method' selected (marked with a blue '2'). The second screenshot shows the 'Wiring Method' screen with 'Multiple Device Parallel Working' selected (marked with a blue '3') and a 'Save' button at the top right (marked with a blue '4'). The third screenshot shows a confirmation dialog with a 'Confirm' button (marked with a blue '5'). Red dashed boxes and arrows highlight the selection of 'STS-Backup Port Parallel Connect' and the 'Confirm' button.

**Wiring Method**

System Mode

Device Stand-Alone Working  
The current device is only for standalone use, select this option

Multiple Device Parallel Working  
The current device has already formed a parallel system or will form a parallel system. Select this option

Please select the communication module of the parallel system

Ezlink3000

SEC3000C

Please select the wiring method for the parallel system

STS-Backup Port Parallel Connect

STS-Backup Port Stand-alone Connect

No STS Box

**Tips**  
After the Wiring Method is successfully set, the device needs to be restarted, and the app will jump to [Device List] to reconnect the device. Are you sure to save?

Cancel Confirm

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.

### 3.5 Quick Setting the Basic Information

## NOTICE

- The setting page varies depending on inverter model.
- 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,  $\cos\phi$  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: The basic working mode of the system. PV power generation is used to supply power to the load first, the excess power is used to charge the battery, and the remaining power is sold to the grid. When PV power generation cannot meet the load's power demand, the battery will supply power to the load; when the battery power also cannot meet the load's power demand, the grid will supply power to the load.
  - 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.
  - Off-grid mode: suitable for areas without power grid. PV and batteries form a pure off-grid system. PV generates electricity to power the load and excess electricity charges the battery. When PV power generation cannot meet the power demand of the load, the battery will supply power to the load.
  - 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.

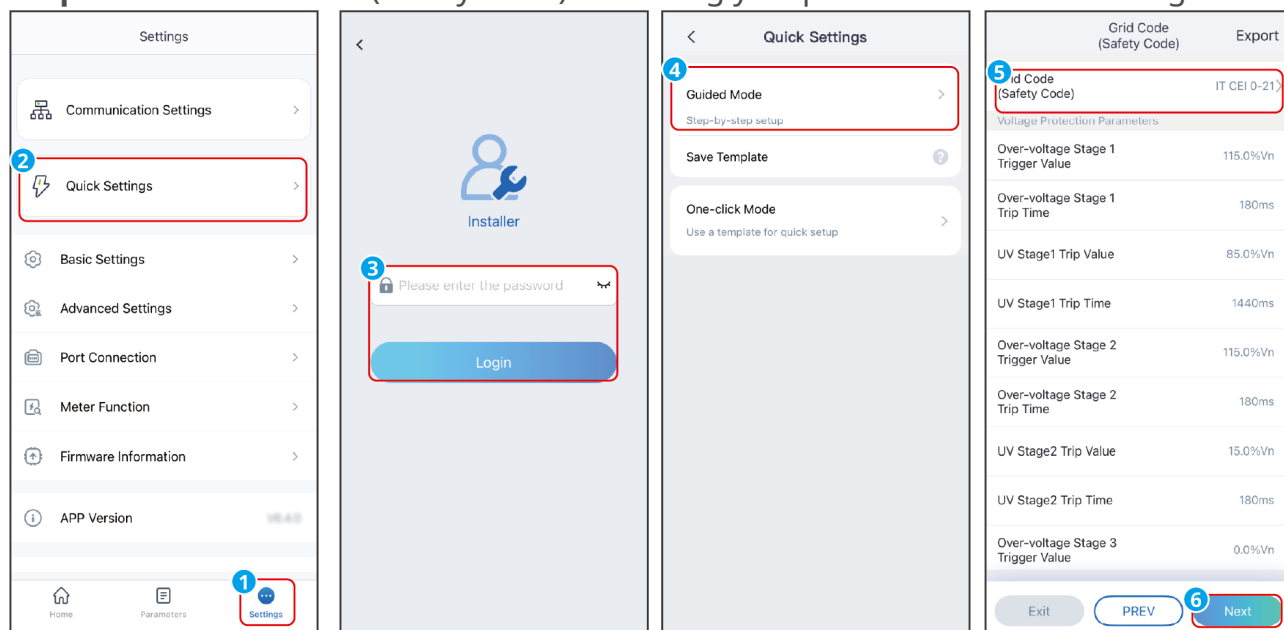
### 3.5.1 Quick Setting the Basic Information(Type I)

**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:** Some models support one-click configuration. Select **Guided Mode** to quickly configure the system.

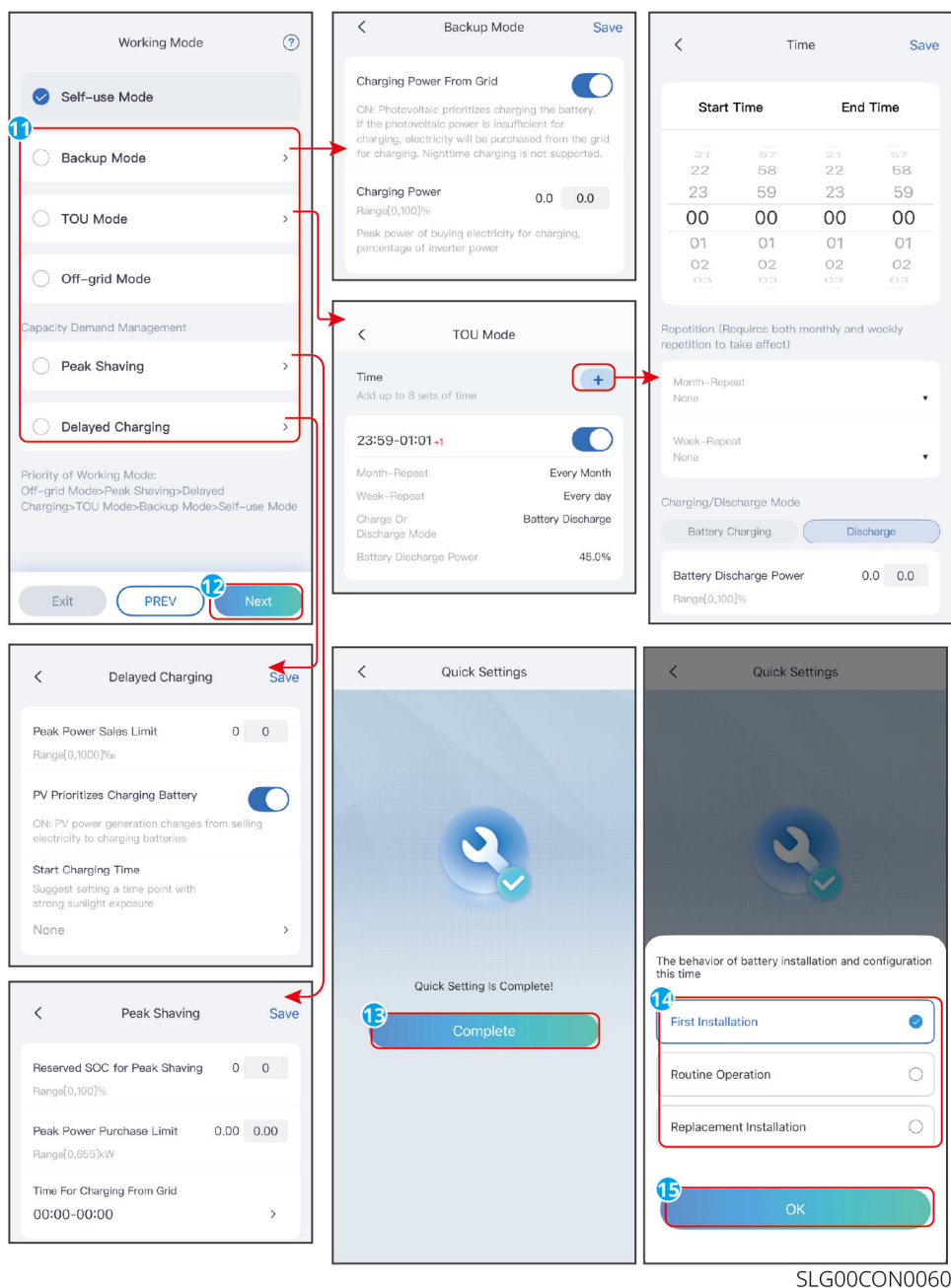
**Step 4:** Select Grid Code(Safety Code) accordingly. Tap **Next** to set the Working Mode.



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**Step 5:** Set the working mode based on actual needs. Tap **Next** to set the Working Mode. For some models, after the working mode configuration is completed, it will automatically enter the CT/meter self-test state. At this time, the inverter will temporarily disconnect from the grid and then automatically reconnect.

**Step 6:** Select the battery based on actual situation whether it is **First Installation**, **Routine Operation** or **Replacement Installation**.



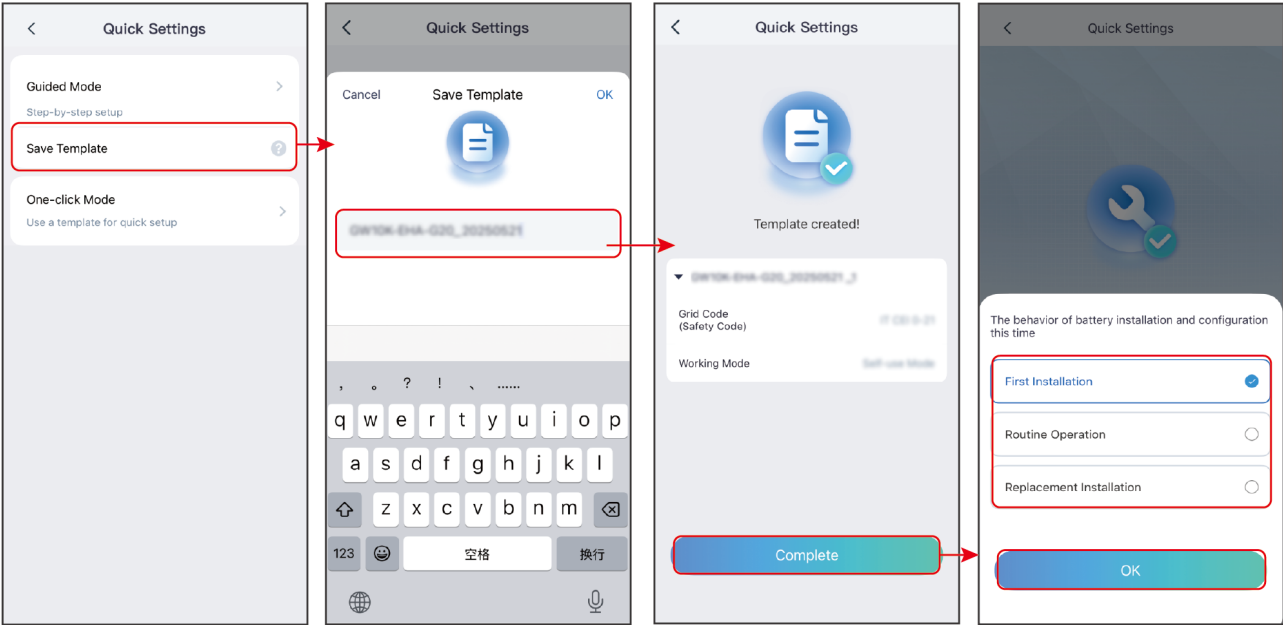
SLG00CON0060

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		

No.	Parameters	Description
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 Discharge Mode	Charge or discharge according to actual needs.
6	Rated Power	The percentage of the charging/discharging power to the rated power of the inverter.
7	Charge Cut-off SOC	The battery stop charging/discharging once the battery SOC reaches Charge Cut-off SOC.
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. Otherwise, only PV power can be used to charge the battery.
Smart charging		
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.

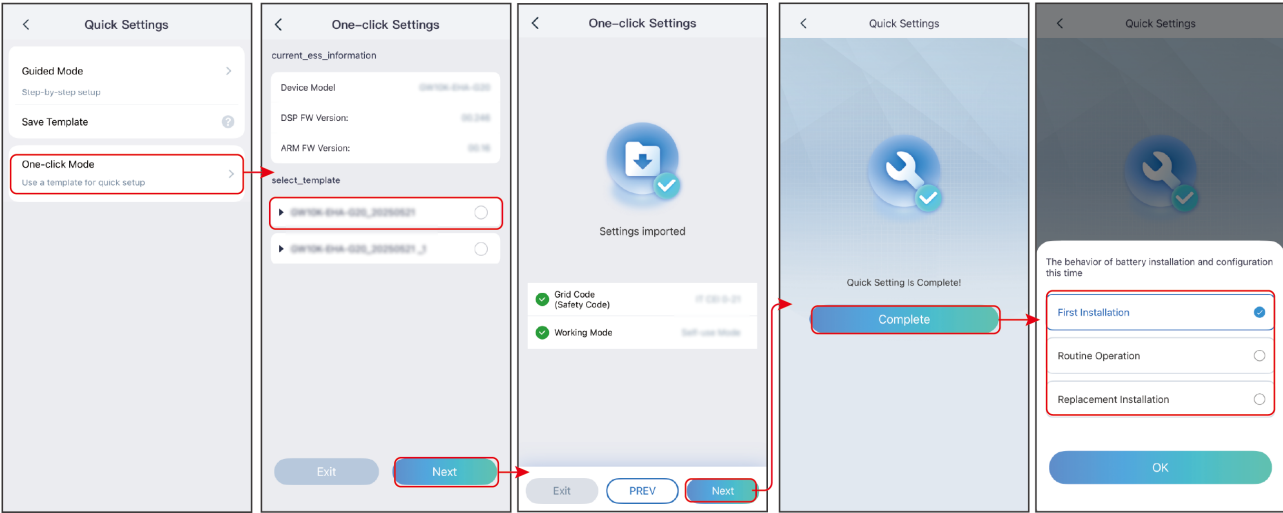
No.	Parameters	Description
13	Start Charging Time	

**Step 7:** For devices that support one-click configuration, a template can be generated based on the completed configuration.



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**Step 8:** If you already have a one-click configuration template, you can use the existing template direct import mode to quickly complete the configuration.



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### 3.5.2 Quick Setting the Basic Information(Type II)

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

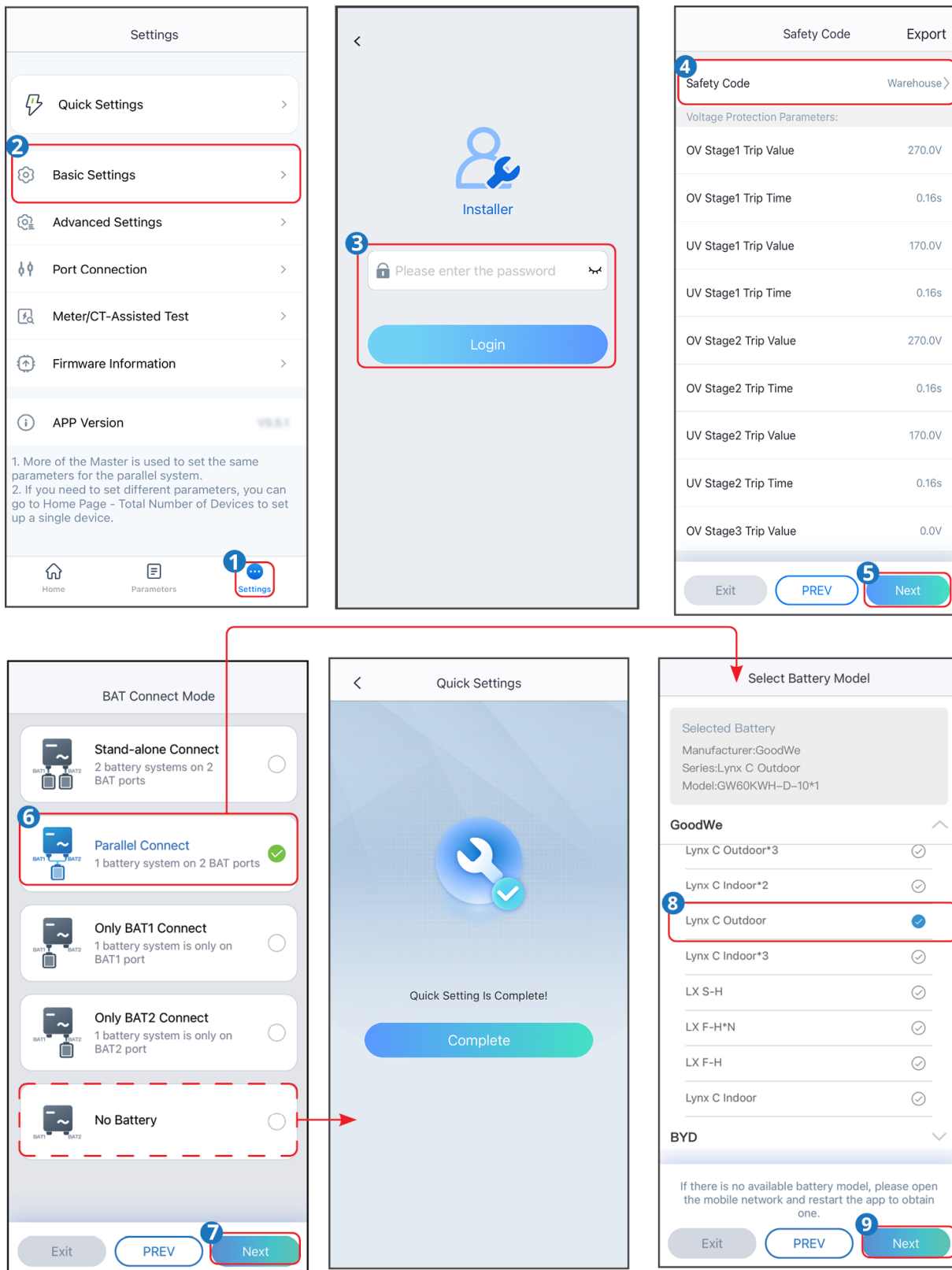
**Step 2:** Enter the password for quick settings. Contact the supplier or after sales service for password. Password for professional technicians only.

**Step 3:** Some models support one-click configuration. Select **Guided Mode** to quickly configure the system.

**Step 4:** Select safety country accordingly. Tap **Next** to set the Battery Connect Mode.

**Step 5:** 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 6:** Select the actual battery model. Tap **Next** to set the Working Mode.

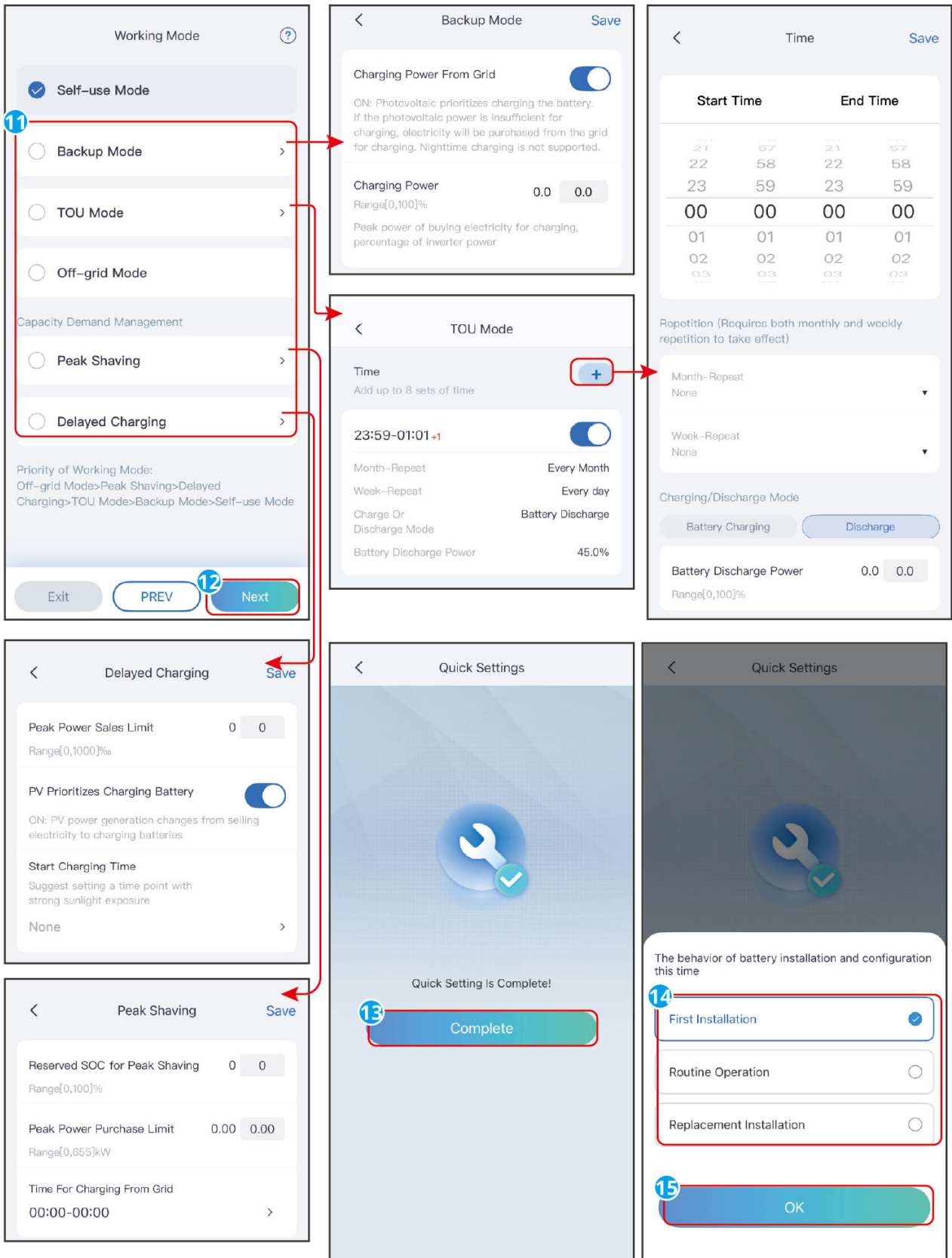


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**Step 7:** Set the working mode based on actual needs. Tap **Next** to set the Working Mode. For some models, after the working mode configuration is completed, it will

automatically enter the CT/meter self-test state. At this time, the inverter will temporarily disconnect from the grid and then automatically reconnect.

**Step 8:** Select the battery based on actual situation whether it is **First Installation**, **Routine Operation** or **Replacement Installation**.



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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 Discharge Mode	Charge or discharge according to actual needs.
6	Rated Power	The percentage of the charging/discharging power to the rated power of the inverter.
7	Charge Cut-off SOC	The battery stop charging/discharging once the battery SOC reaches Charge Cut-off SOC.
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. Otherwise, only PV power can be used to charge the battery.

No.	Parameters	Description
Smart charging		
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 than 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	

### 3.5.3 Quick Setting the Basic Information( Type III)

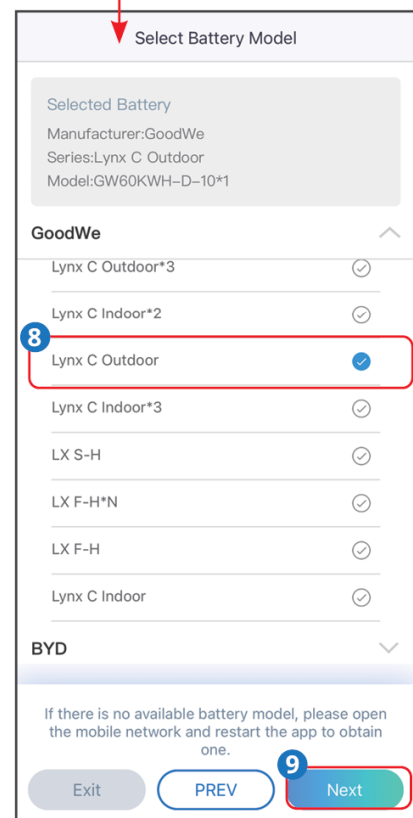
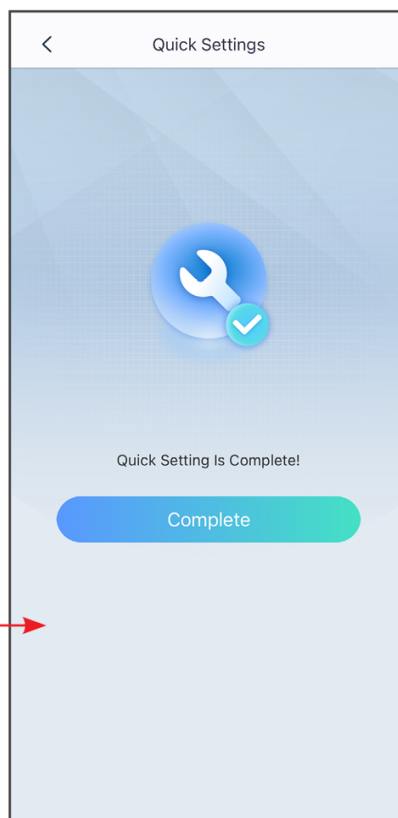
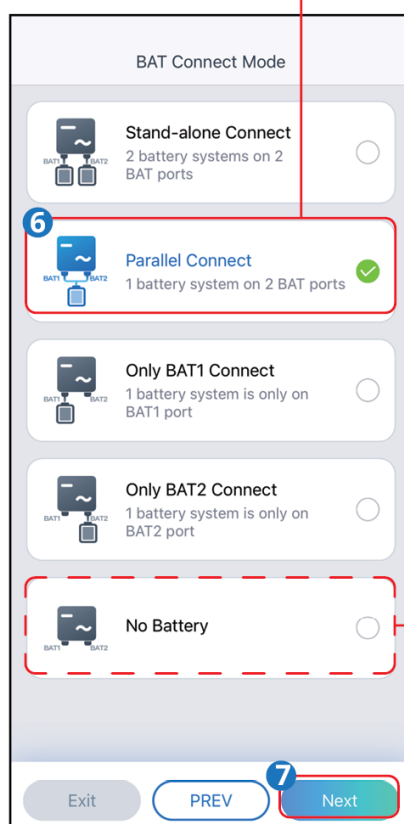
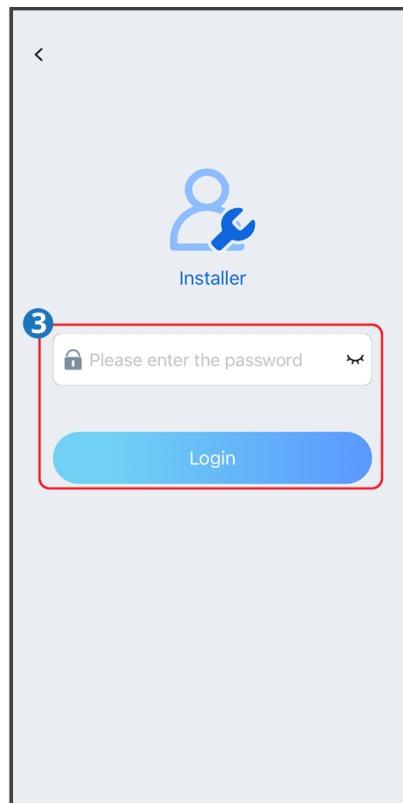
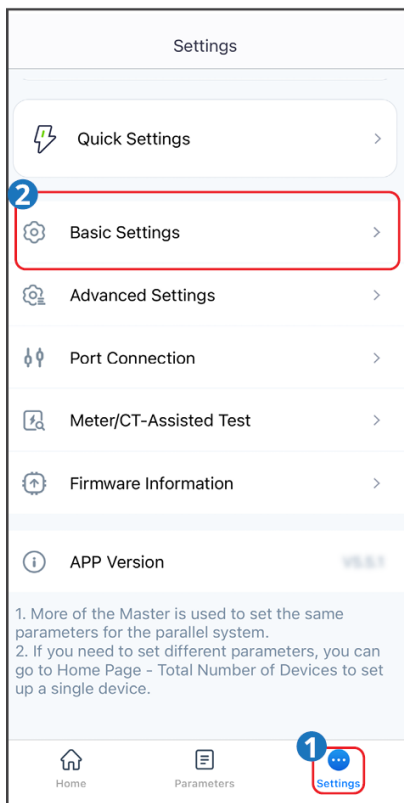
**Step 1:** Tap **Home > Settings > Quick Settings** to set the parameters.

**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.

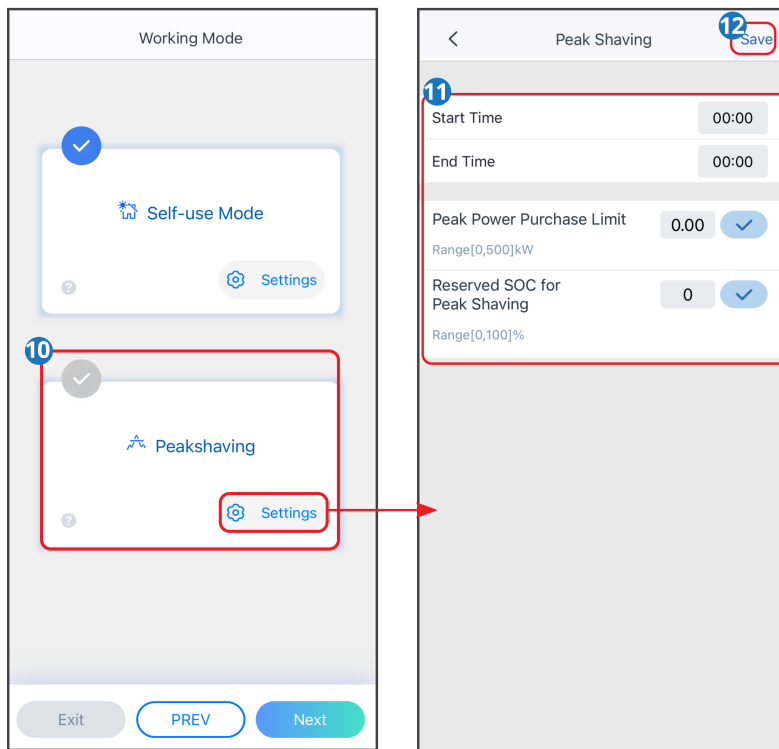


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**Step 6:** Set the working mode based on actual needs. Tap **Next** to conduct System

## Self-Test.

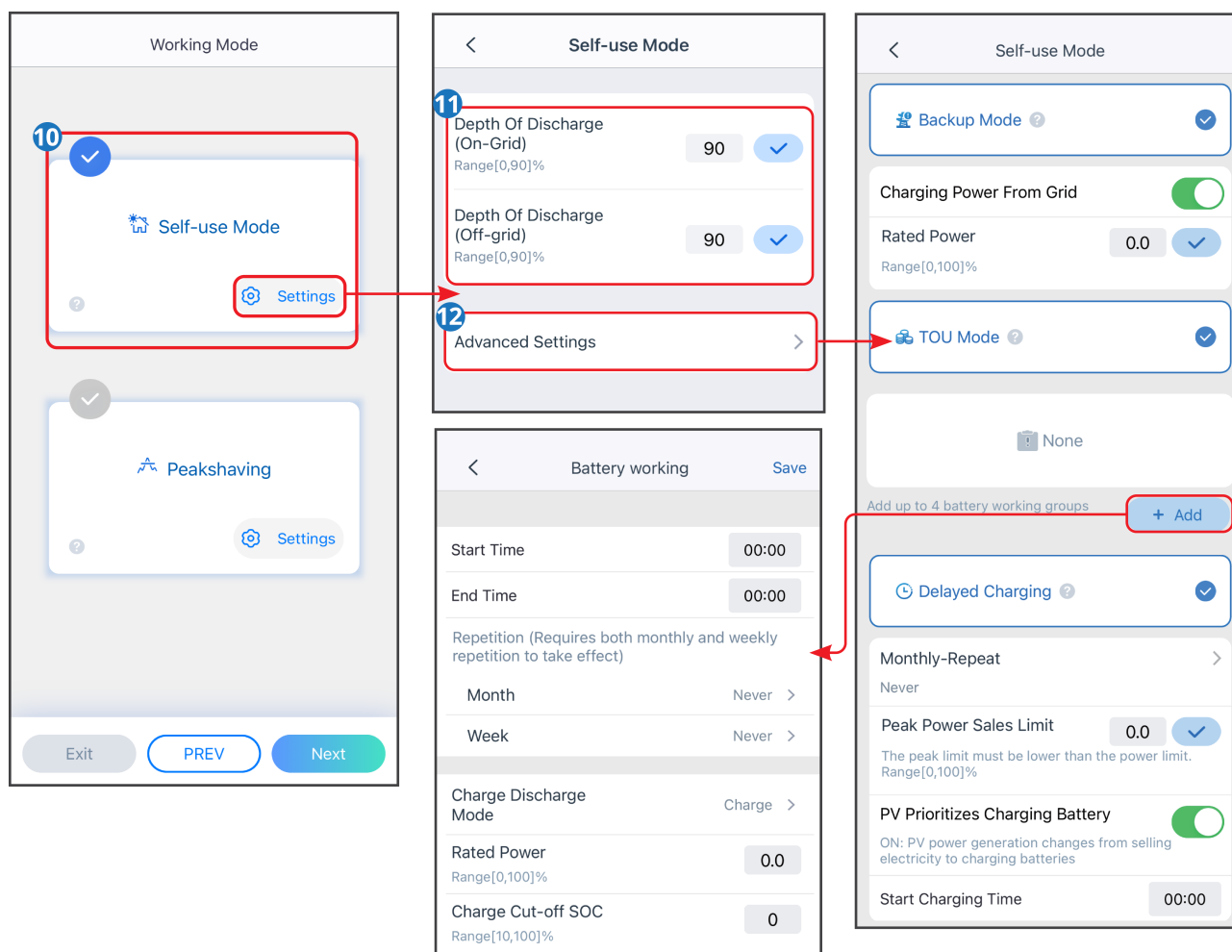
- If Peakshaving mode is selected, tap Settings to set the parameters.



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, TOU Mode or Smart Charging based on actual needs. If TOU Mode is selected, tap Add to set the working time and working mode of the battery group.



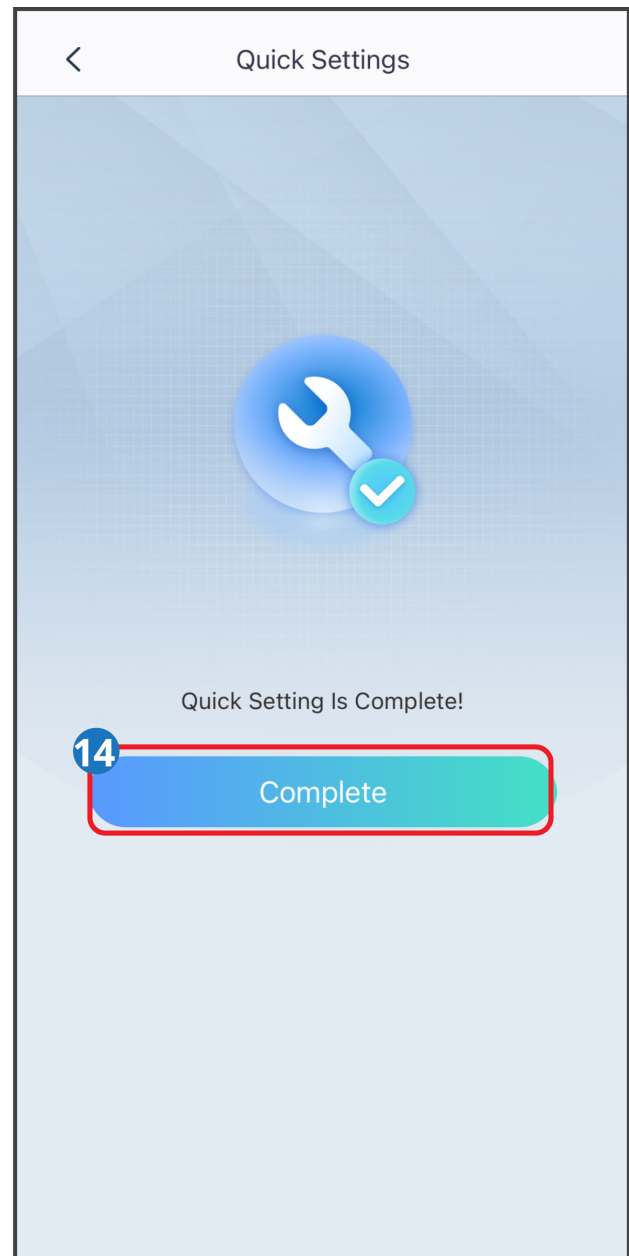
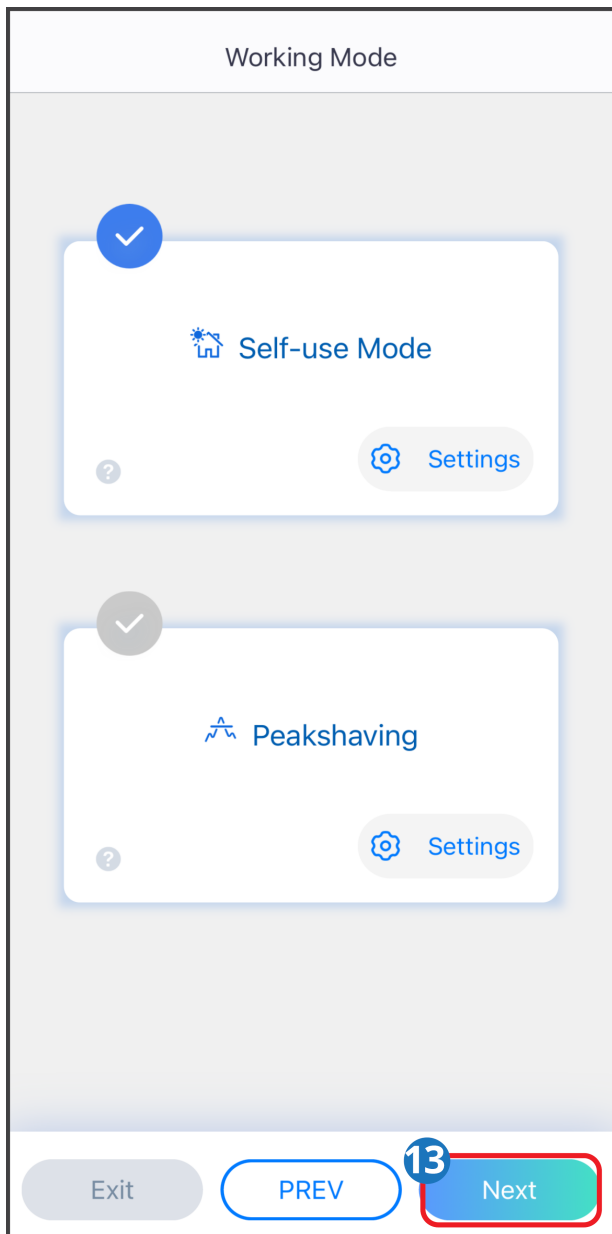
No.	Parameters	Description
Self-use mode		
1	Depth Of Discharge (On-Grid)	The maximum depth of discharge of the battery when the system is working on-grid.
2	Depth Of Discharge (Off-grid)	The maximum depth of discharge of the battery when the system is working off-grid.

No.	Parameters	Description
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	Charge or discharge according to actual needs.
8	Rated Power	The percentage of the charging/discharging power to the rated power of the inverter.
9	Charge Cut-off SOC	The battery stop charging/discharging once the battery SOC reaches Charge Cut-off SOC.
Smart 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 7:** Execute device self-check or skip it based on actual needs.

**Step 8:** Tap **Recheck** or **Next** to complete the test based on your actual needs. Tap Export to export the test reports if needed.

**Step 9:** Tap **Complete** to complete the quick settings.



### 3.5.4 Quick Setting the Basic Information(Type IV)

**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.

**Step 6:** Set the working mode based on actual needs. Tap **Next** to complete the Settings.



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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 rated power of the inverter.
4	Select mode	Charge or discharge according to actual needs.
5	Charge Cut-off SOC	The battery stop charging/discharging once the battery SOC reaches Charge Cut-off SOC.
Smart charging		
6	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.
7	PV Prioritizes Charing 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	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.

No.	Parameters	Description
12	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.

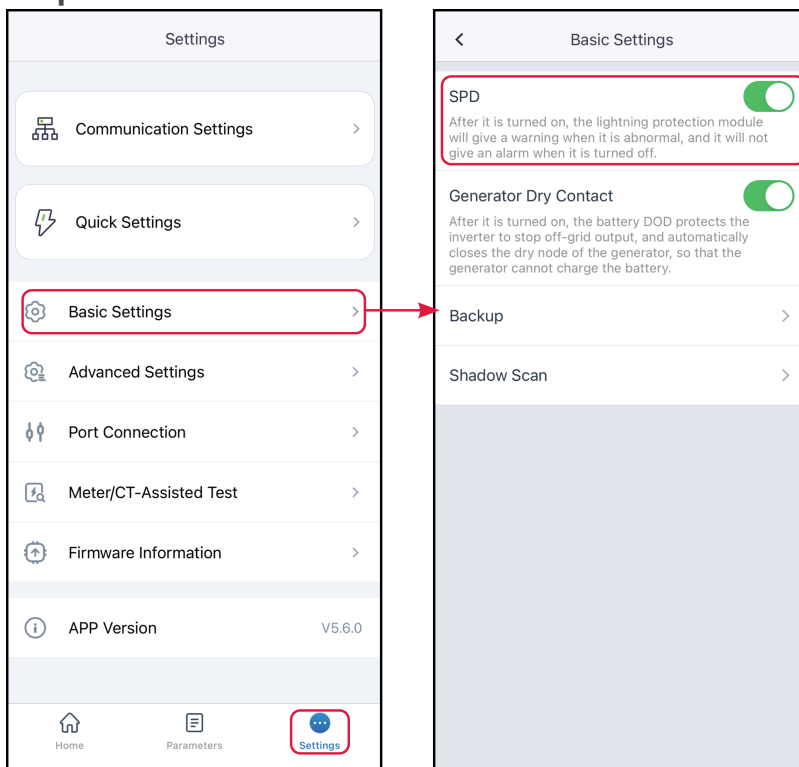
## 3.6 Setting the Basic Information

### 3.6.1 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:** enable or disable the function based on actual needs.

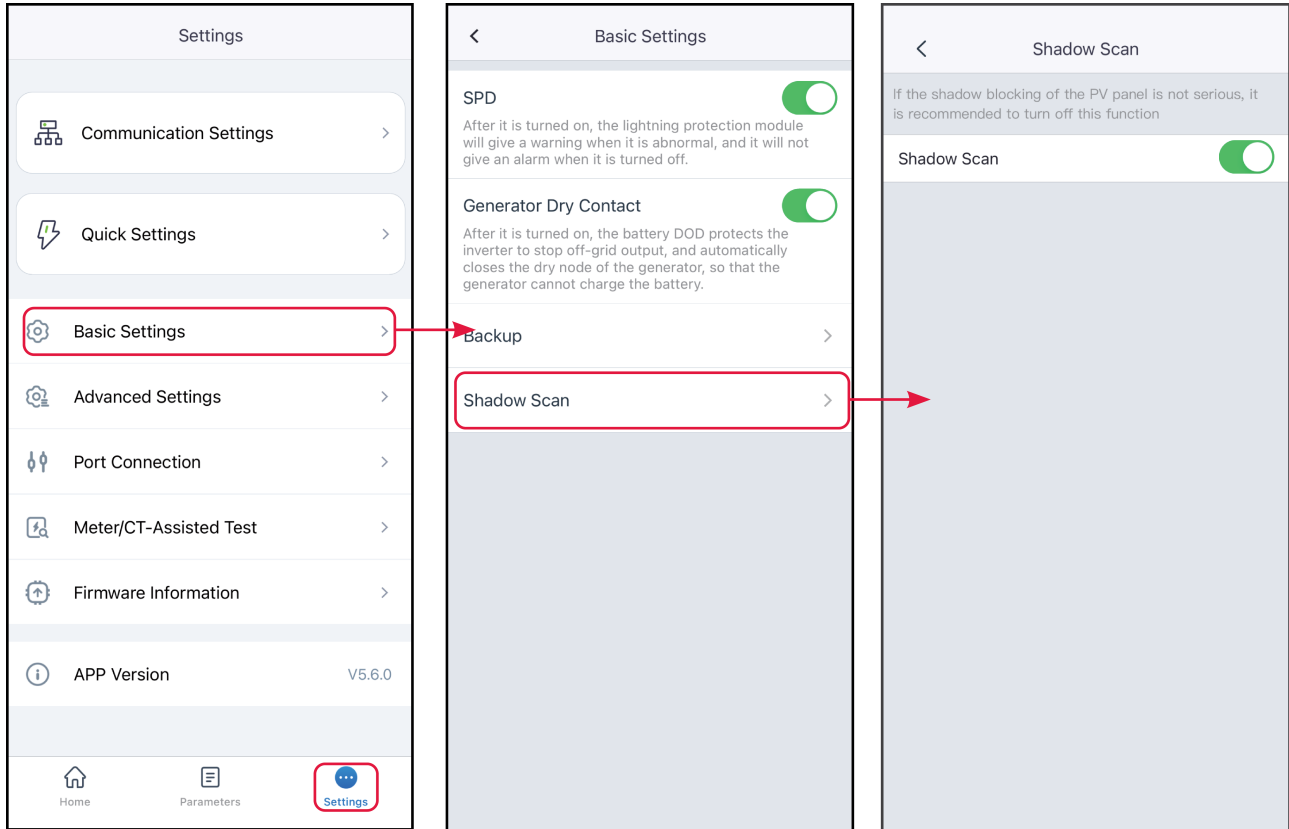


### 3.6.2 Setting the Shadow Scan

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:** Enable or disable the function based on actual needs. Set the Shadow Scan interval and MPPT shadow scan if the inverter supports.



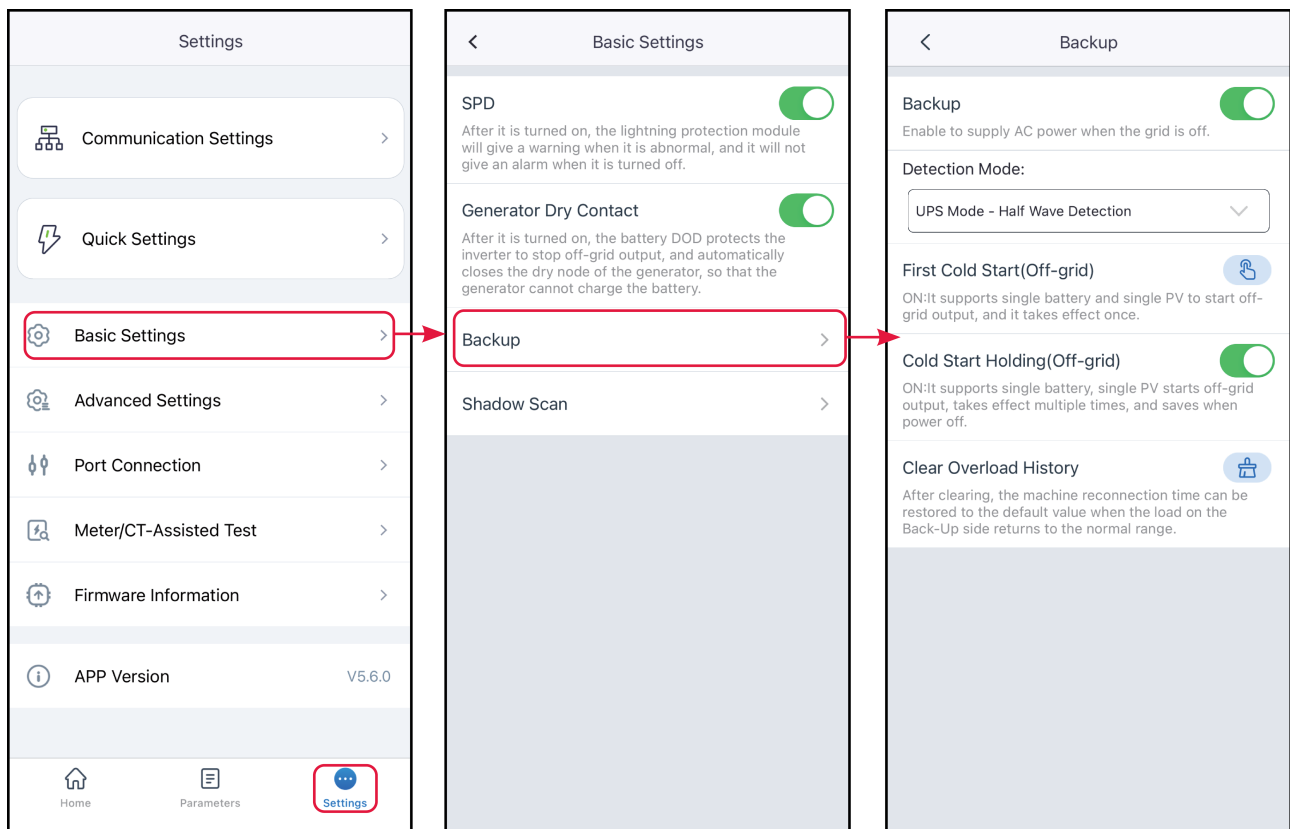
### 3.6.3 Setting the Back-up Power Parameters

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	EPS mode-with LVRT support.	Stop detecting utility grid voltage.
4	First Cold Start (Off-grid)	It will only 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.

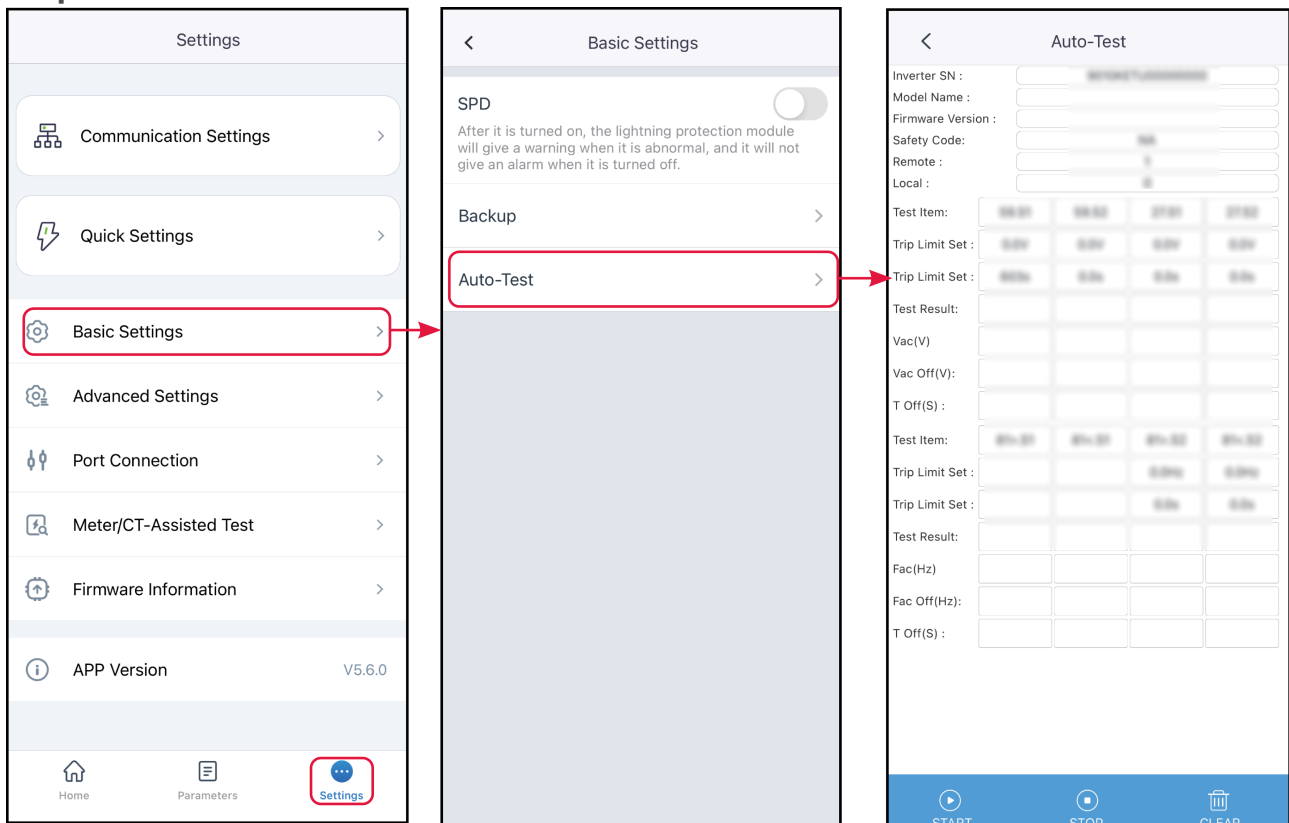
No.	Parameters	Description
6	Clear Overload History	Once the power of loads connected to the inverter BACK-UP ports exceeds the rated load power, the inverter will restart and detect the power again. The inverter will perform restart and detection several times until the overloading problem is solved. 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.

### 3.6.4 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.

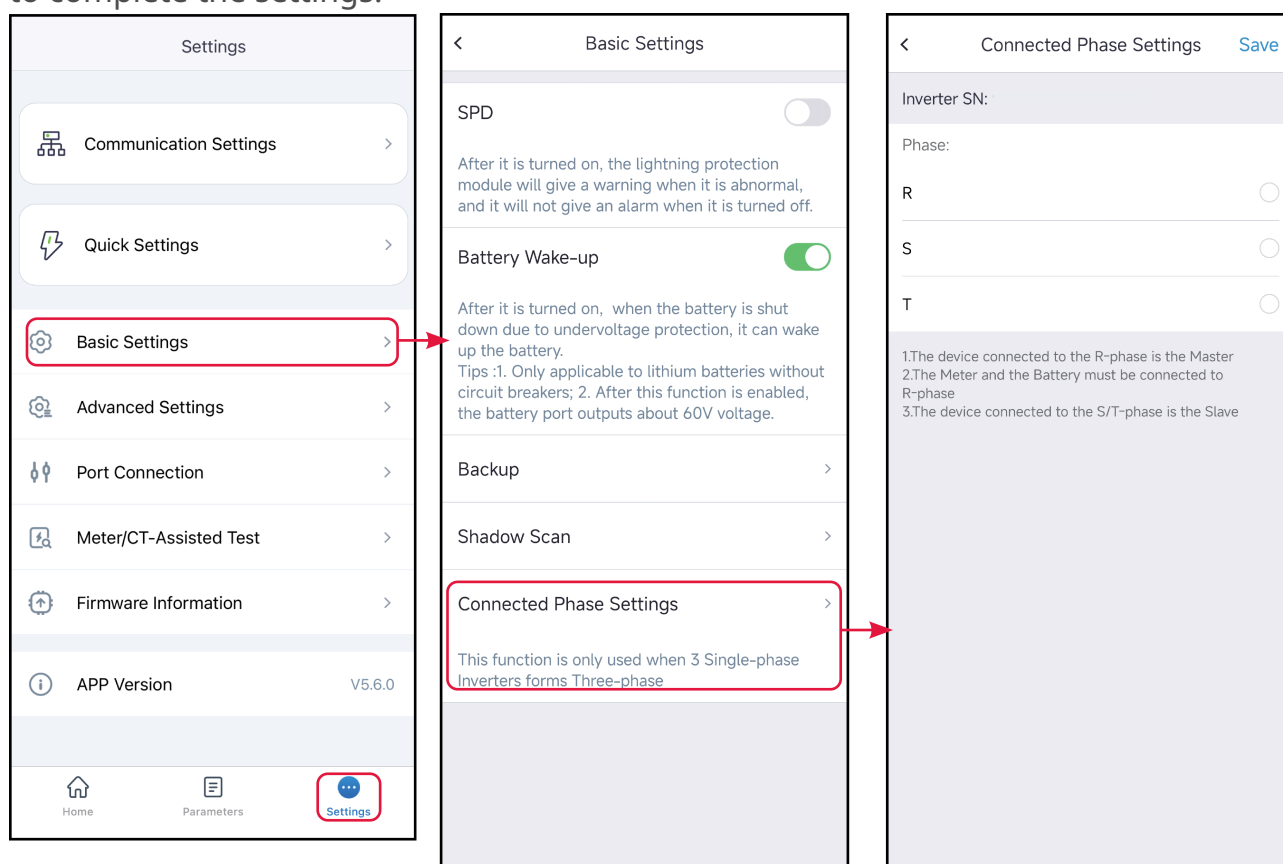


### 3.6.5 Setting the Connected Phase

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.



### 3.6.6 Setting Power Adjustment Parameters

**Step 1:** Go to the settings interface via **Home > Settings > Basic Settings > Power Scheduling**.

**Step 2:** Set the active power dispatch or reactive power dispatch parameters according to the actual situation.

<

Active Dispatch

Local control: Self-control according to user needs;  
Remote control: Passive control according to the requirements of the power grid (enabled by default).

Current Active Power Dispatch Mode:

Extreme Speed Percentage  
Derating(Remote)100.0%

Local Control

Active Dispatch Mode:

Active Power (W)▼

Active Power1100011000✓

Range[-400000,400000]W

<

Reactive Scheduling

Local control: Self-control according to user needs;  
Remote control: Passive control according to the requirements of the power grid (enabled by default).

Reactive Power Dispatch Mode

Disable

Local Control

Select Mode:

Disable▼

Fixed Value Compensation

Percentage Compensation

PF Compensation

SLG00CON0124

No.	Parameter	Description
Active Scheduling		

No.	Parameter	Description
1	Active Scheduling Mode	<p>According to the requirements of the power grid company in the country/region where the inverter is located, control the active power according to the selected dispatch mode. Supports:</p> <ul style="list-style-type: none"> <li>• Disabled: Disables active scheduling.</li> <li>• Fixed value reduction: Dispatch according to a fixed value.</li> <li>• Percentage reduction: Dispatch based on a percentage of the rated power.</li> </ul>
2	Active Power	<ul style="list-style-type: none"> <li>• When the active power dispatch mode is set to fixed value derating, the active power is set to a fixed value.</li> <li>• When the active power dispatch mode is set to percentage derating, the active power is set as a percentage of the rated power. 比。</li> </ul>
Reactive Scheduling		
3	Reactive Scheduling Mode	<p>According to the requirements of the power grid company in the country/region where the inverter is located, control the reactive power according to the selected dispatch mode. Supports:</p> <ul style="list-style-type: none"> <li>• Disabled: Disables reactive scheduling.</li> <li>• Fixed value compensation: Dispatch according to a fixed value.</li> <li>• Percentage compensation: Dispatch based on a percentage of the rated power.</li> <li>• PF compensation.</li> </ul>
4	Status	Set the power factor as lagging or leading based on actual needs and local grid standards and requirements.

No.	Parameter	Description
5	Reactive Power	<ul style="list-style-type: none"> <li>When the reactive power dispatch mode is set to fixed value derating, the reactive power is set to a fixed value.</li> <li>When the reactive power dispatch mode is set to percentage derating, the reactive power is set as a percentage of the rated power.</li> </ul>
6	Power Factor	When the reactive power dispatch mode is set to PF compensation, set the power factor.

## 3.7 Setting Advanced Parameters

### NOTICE

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

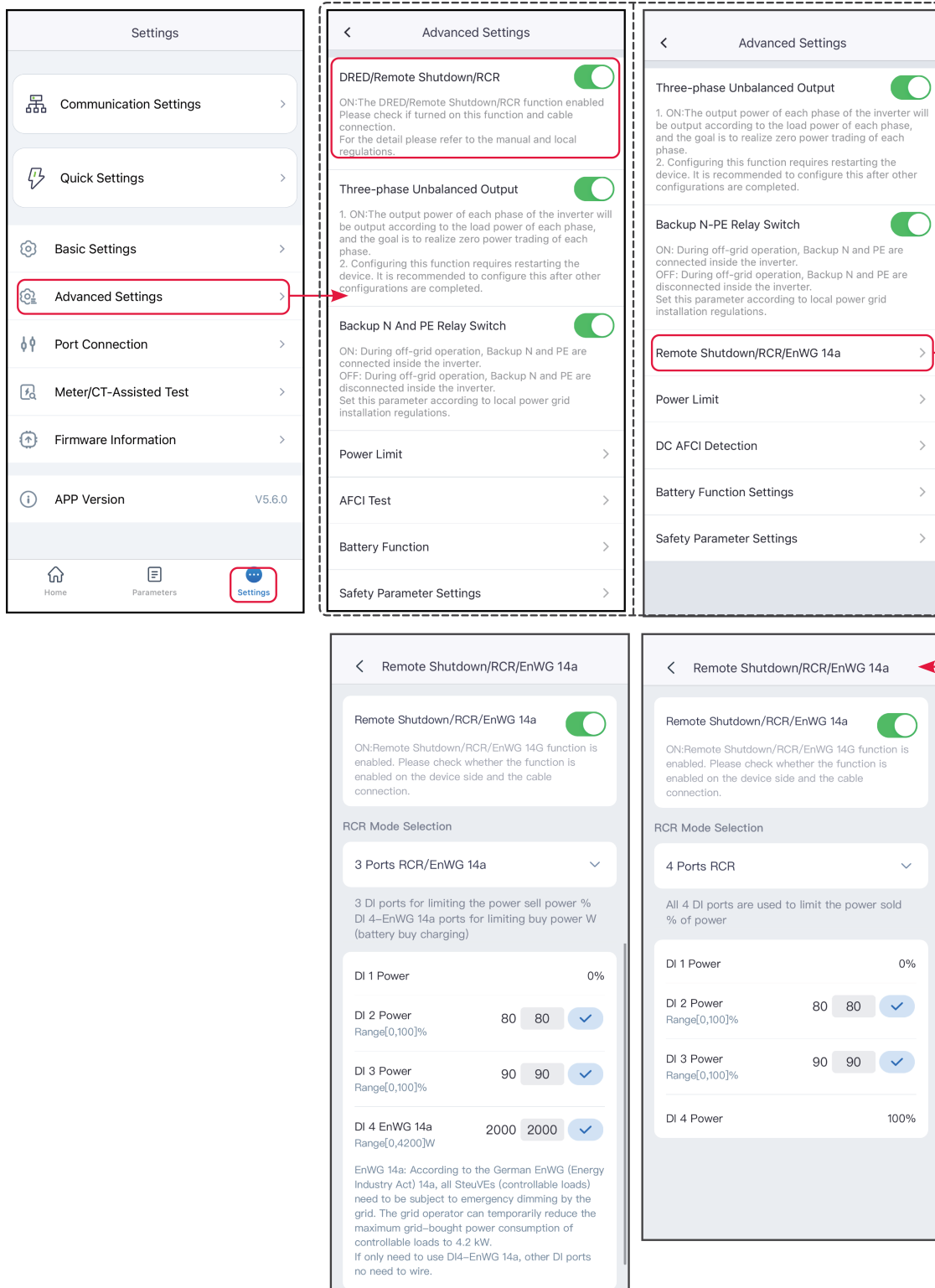
### 3.7.1 Setting DRED/Remote Shutdown/RCR/EnWG 14a

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:** 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.



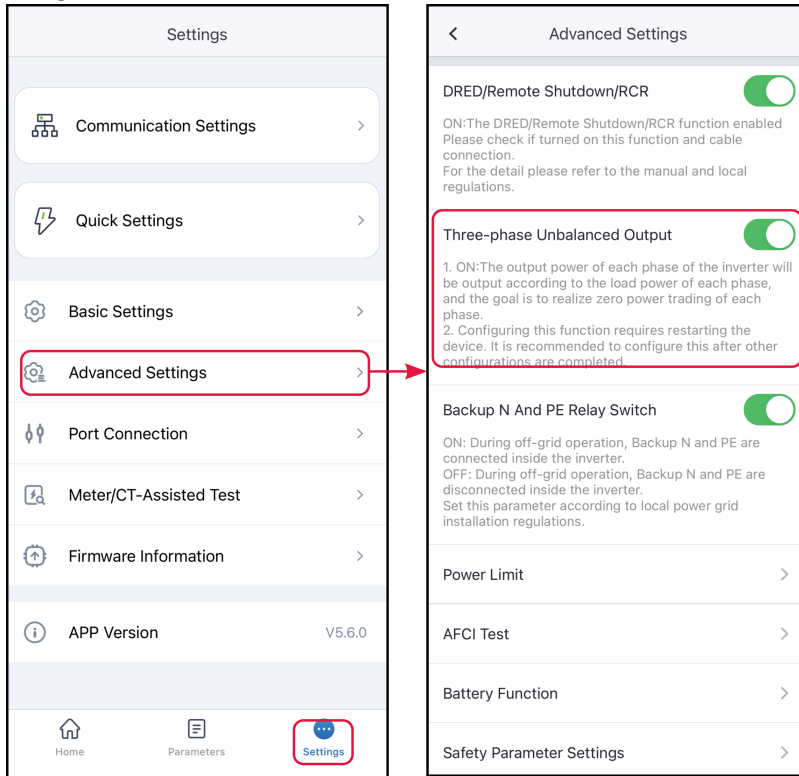
### 3.7.2 Setting Three-phase Unbalanced Output

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 :** Enable or disable the function based on actual needs.



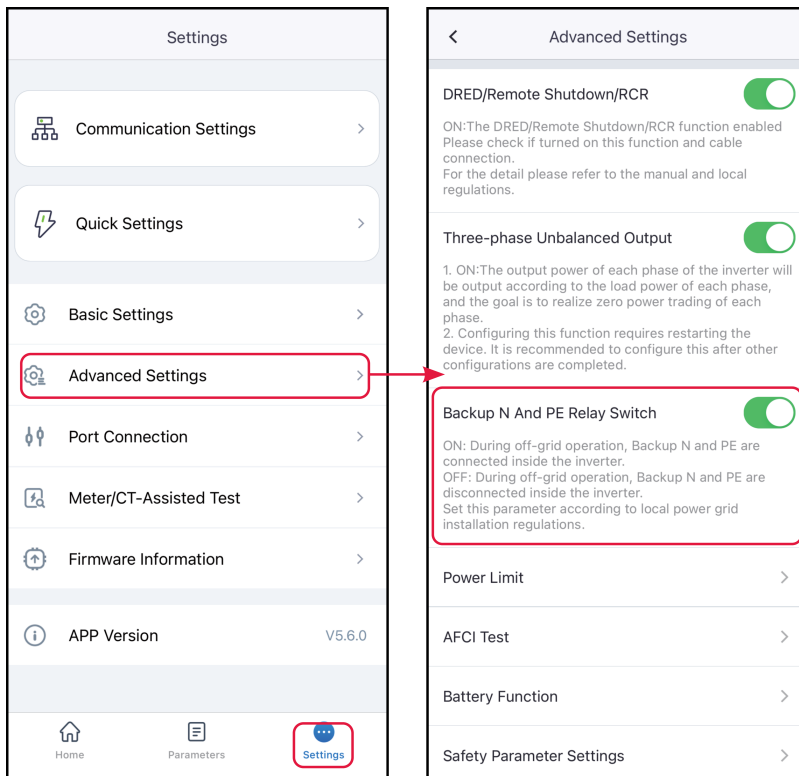
### 3.7.3 Setting the Backup N and PE Relay Switch

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 :** Enable or disable the function based on actual needs.





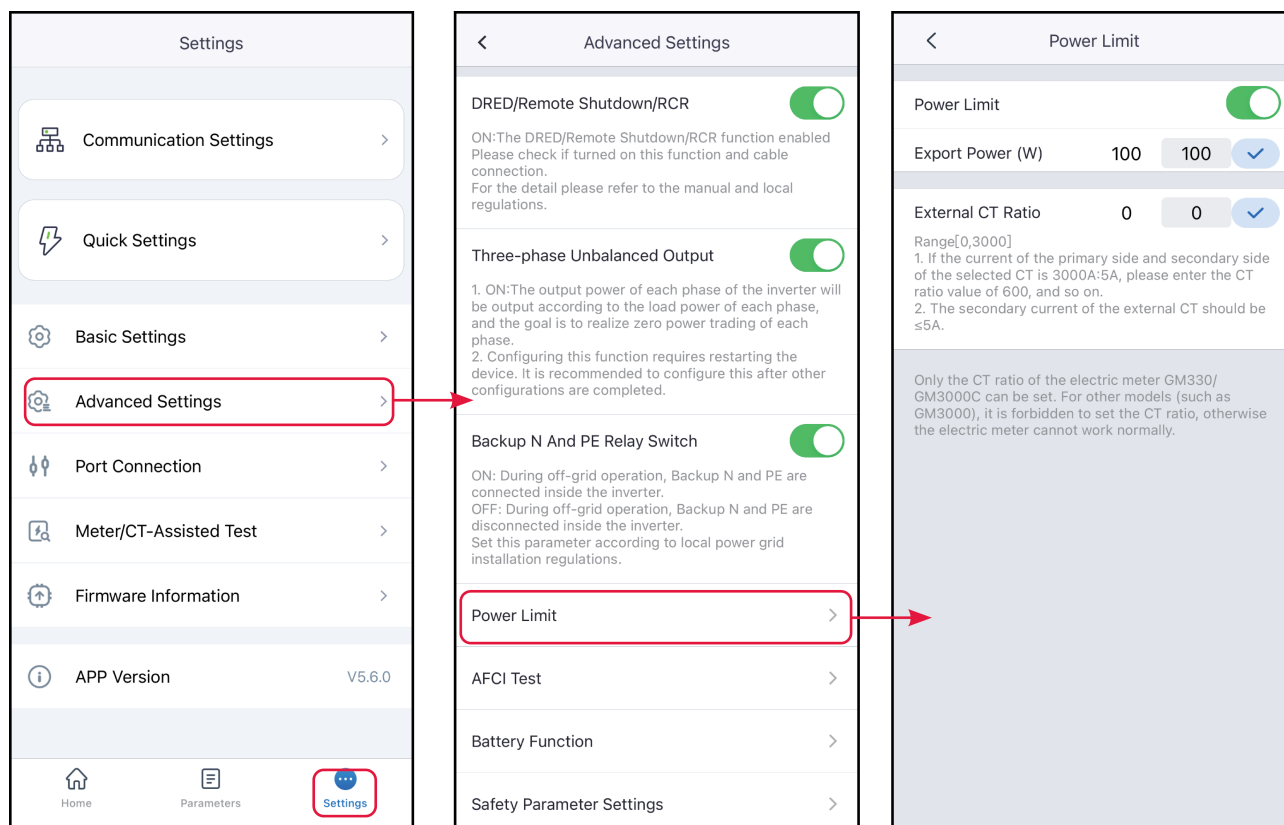
### 3.7.4 Setting the Power Limit Parameters

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

**Step 2 :** Turn on or off the power limit function according to actual needs.

**Step 3 :** After turning on the function, enter the parameter value according to actual needs and tap "v" to successfully set the parameter.

#### 3.7.4.1 Setting the Power Limit Parameters (General)



No.	Parameters	Description
1	Power Limit	Turn on this function when output power needs to be limited according to the grid standards of some countries or regions.
2	Export Power	Set according to the maximum power that can be input to the grid.
3	External Meter CT ratio	Set the ratio of the primary current to the secondary current of the external CT.

### 3.7.4.2 Setting the Power Limit Parameters (Australia)

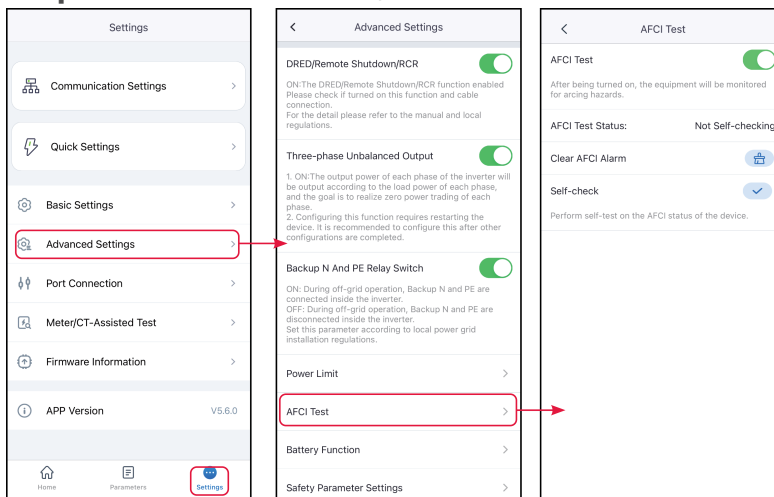
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No.	Parameters	Description
3	Hardware Power Limit	After enabling this function, when the amount of electricity fed into the grid exceeds the limit value, the inverter will automatically disconnect from the grid.
4	External Meter CT Ratio	Set the ratio of the primary current to the secondary current of the external CT.

### 3.7.5 Setting 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.



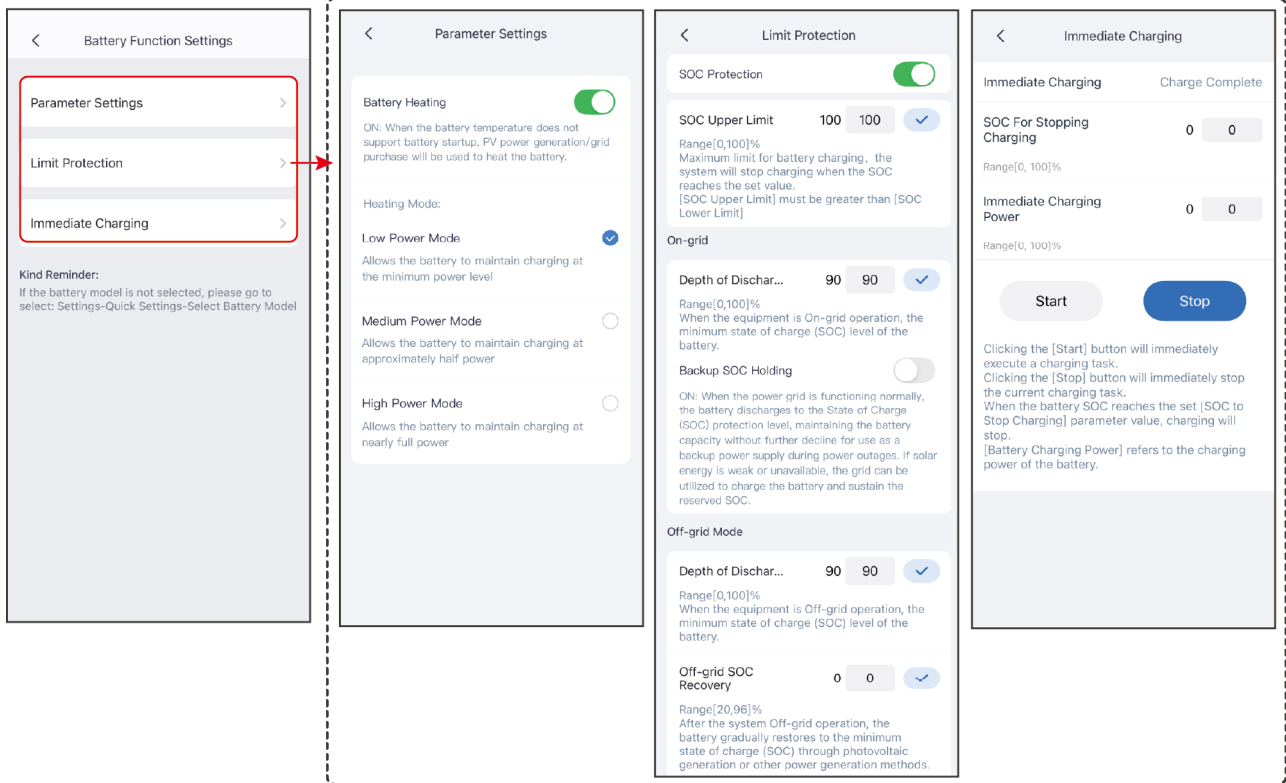
No.	Parameters	Description
1	AFCI Test	Enable or disable AFCI accordingly.
2	AFCI Test Status	The detection status like Not Self-checking.
3	Clear AFCI Alarm	Clear ARC Faulty alarm records.
4	Self-check	Tap to check whether the AFCI function works normally.

### 3.7.6 Setting the Battery

### 3.7.6.1 Setting Lithium Battery Parameters

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

**Step 2:** Set the parameters based on actual needs.



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No.	Parameter	Description
Parameter Settings		
1	Max. Charging Current	Only applicable to certain models. Set the maximum charging current based on actual needs.
2	Max. Discharging Current	Only applicable to certain models. Set the maximum discharging current based on actual needs.

No.	Parameter	Description
3	Battery Heating	<p>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.</p> <p>Heating Mode:</p> <ul style="list-style-type: none"> <li>• GW5.1-BAT-D-G20/GW8.3-BAT-D-G20 <ul style="list-style-type: none"> <li>◦ Low Power Mode: Maintains minimum battery power input capacity, turns on when the temperature is below -9°C, and turns off when the temperature is above or equal to -7°C.</li> <li>◦ Medium Power Mode: to maintain the moderate power input capacity of the battery. It will be turned on when the temperature is less than 6°C, and turned off when it is greater than or equal to 8°C.</li> <li>◦ High Power Mode: to maintain the higher power input capacity of the battery. It will be turned on when the temperature is less than 11°C, and turned off when it is greater than or equal to 13°C.</li> </ul> </li> <li>• GW14.3-BAT-LV-G10 <ul style="list-style-type: none"> <li>◦ Low Power Mode: Maintains minimum battery power input capacity, turns on when the temperature is below 5°C, and turns off when the temperature is above or equal to 7°C.</li> <li>◦ Medium Power Mode: to maintain the moderate power input capacity of the battery. It will be turned on when the temperature is less than 10°C, and turned off when it is greater than or equal to 12°C.</li> <li>◦ High Power Mode: to maintain the higher power input capacity of the battery. It will be turned on when the temperature is less than 20°C, and turned off when it is greater than or equal to 22°C.</li> </ul> </li> </ul>

No.	Parameter	Description
4	Battery Wake-up	<ul style="list-style-type: none"> <li>After being turned on, the battery can be awakened when it shuts down due to undervoltage protection.</li> <li>Only applicable to lithium batteries without circuit breakers. After being turned on, the output voltage of the battery port is about 60V.</li> </ul>
Limit Protection		
5	SOC Protection	Start battery protection when the battery capacity is lower than the Depth of Discharge.
6	SOC Limit	The upper limit value for battery charging. Charging stops when the battery SOC reaches the SOC upper limit.
7	Discharge Depth (On-grid)	The maximum discharge value allowed for the battery when the inverter is in the on-grid scenario.
8	Backup Power SOC Maintenance	To ensure that the battery SOC is sufficient to maintain normal operation when the system is off-grid, the battery will purchase electricity from the grid and charge to the set SOC protection value when the system is connected to the grid.
9	Discharge Depth (Off-grid)	The maximum discharge value allowed for the battery when the inverter is in the off-grid scenario.
10	Off-grid SOC Recovery	When the inverter is operating off-grid, if the battery SOC drops below the lower limit, the inverter stops outputting power and only charges the battery until the battery SOC returns to the off-grid recovery SOC value. If the SOC lower limit value is higher than the off-grid recovery SOC value, charge to SOC lower limit +10%.
Immediate Charging		
11	Immediate Charging	Enable to charge the battery by the grid immediately. This takes effect once. Enable or Disable based on actual needs.

No.	Parameter	Description
12	SOC for Stopping Charging	Stop charging the battery once the battery SOC reaches SOC For Stopping Charging.
13	Immediate Charging Power	Indicates the percentage of the charging power to the inverter rated power when enabling Immediate Charging. For example, for an inverter with a rated power of 10kW, when set to 60, the charging power is 6kW.
14	Start	Start charging immediately.
15	Stop	Immediately stop the current charging task.

### 3.7.6.2 Setting Lead-acid Battery Parameter

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

**Step 2:** Set the parameters based on actual needs.



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No.	Parameter	Description
1	Nominal Capacity	Set the battery capacity according to the actual parameters.
2	Battery Internal Resistance	Set the battery internal resistance according to the actual parameters.
3	Temperature Compensation	<p>When the battery temperature changes, the battery charging voltage will be affected. Based on 25°C, the charging voltage upper limit is adjusted according to the set value for every degree change in battery temperature.</p> <p>For example, if the charging temperature influence coefficient is set to 10, when the battery temperature rises to 26 degrees, the charging voltage upper limit decreases by 10 mV.</p>
4	Lower Discharge Voltage	Set the minimum voltage during battery discharge according to actual requirements.
5	Max. Discharging Current	Set the maximum discharging current based on actual needs.
6	Max. Charging Current	Set the maximum charging current based on actual needs.
7	Constant Charging Voltage	Set the voltage value for constant charging of the battery according to actual requirements.
8	Floating Voltage	Set the voltage value for battery float charging according to actual requirements.
9	Maximum Current When Switching to Floating Charge	The maximum charging current after switching the battery charging mode from constant charging/equal charging to float charging.

No.	Parameter	Description
10	Time to Switch to Float Charging Mode	The time required to switch the battery charging mode from constant charging/equal charging to float charging.
11	Equalization Charging Cycle	Set the interval days for battery equalization charging.
Restriction protection.		
12	SOC Protection	Start battery protection when the battery capacity is lower than the Depth of Discharge.
13	SOC Lower Limit (Grid Connection)	The minimum battery charge that must be maintained when the inverter is connected to the grid.
14	Backup Power SOC Maintenance	To ensure that the battery SOC is sufficient to maintain normal operation when the system is off-grid, the battery will purchase electricity from the grid and charge to the set SOC protection value when the system is connected to the grid.
15	SOC Lower Limit (Off-Grid)	The minimum battery charge that must be maintained when the inverter is operating off-grid.
16	Off-grid SOC Recovery	When the inverter is operating off-grid, if the battery SOC drops below the lower limit, the inverter stops outputting power and only charges the battery until the battery SOC returns to the off-grid recovery SOC value. If the SOC lower limit value is higher than the off-grid recovery SOC value, charge 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.

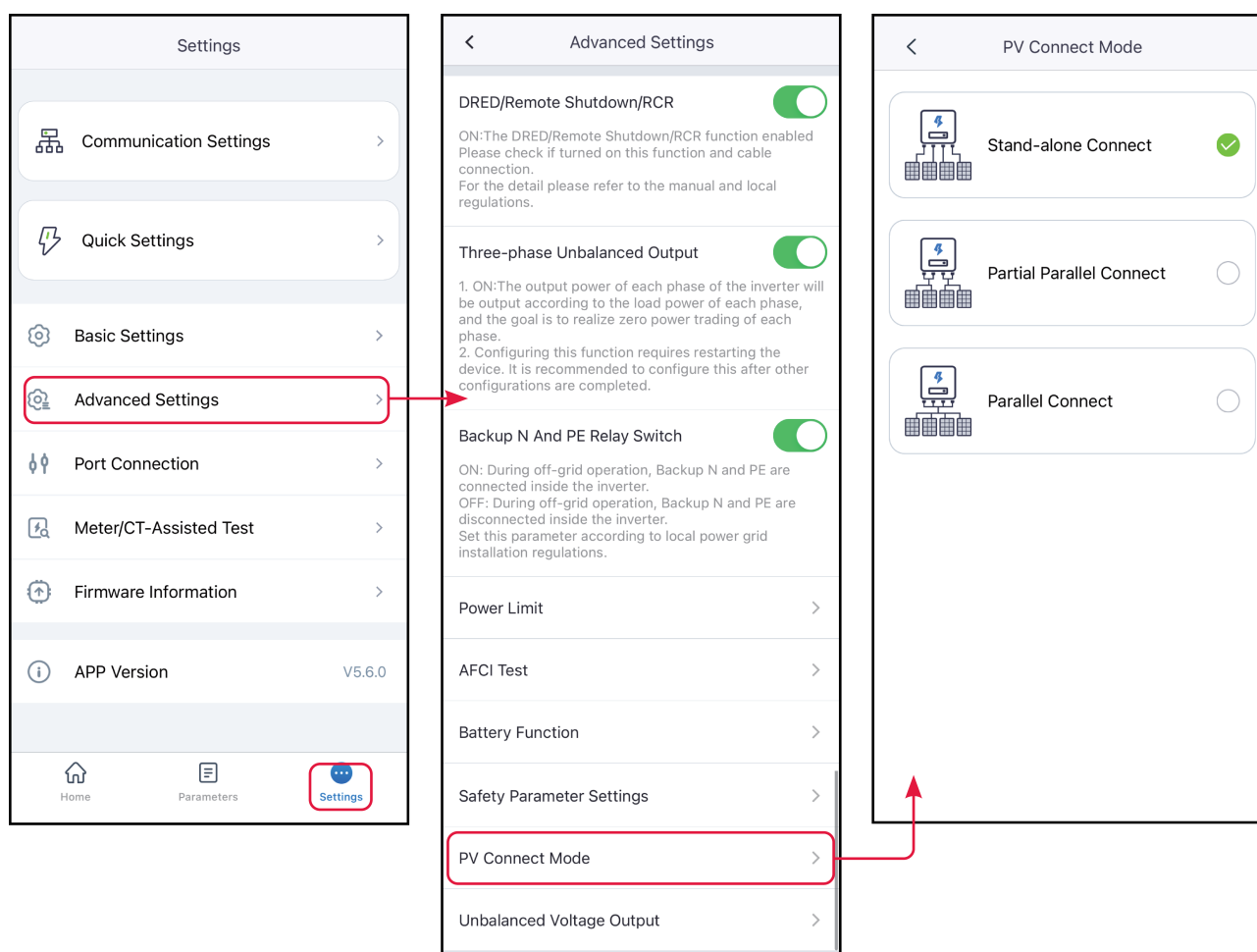
No.	Parameter	Description
18	Immediate Charging Power	Indicates the percentage of the charging power to the inverter rated power when enabling Immediate Charging. For example, for an inverter with a rated power of 10kW, when set to 60, the charging power is 6kW.
19	Start	Start charging immediately.
20	Stop	Immediately stop the current charging task.

### 3.7.7 Setting PV Connect Mode

Select the PV connect 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 connect mode to Independent Access, Partial Parallel Connect or Parallel Connection based on actual connections.



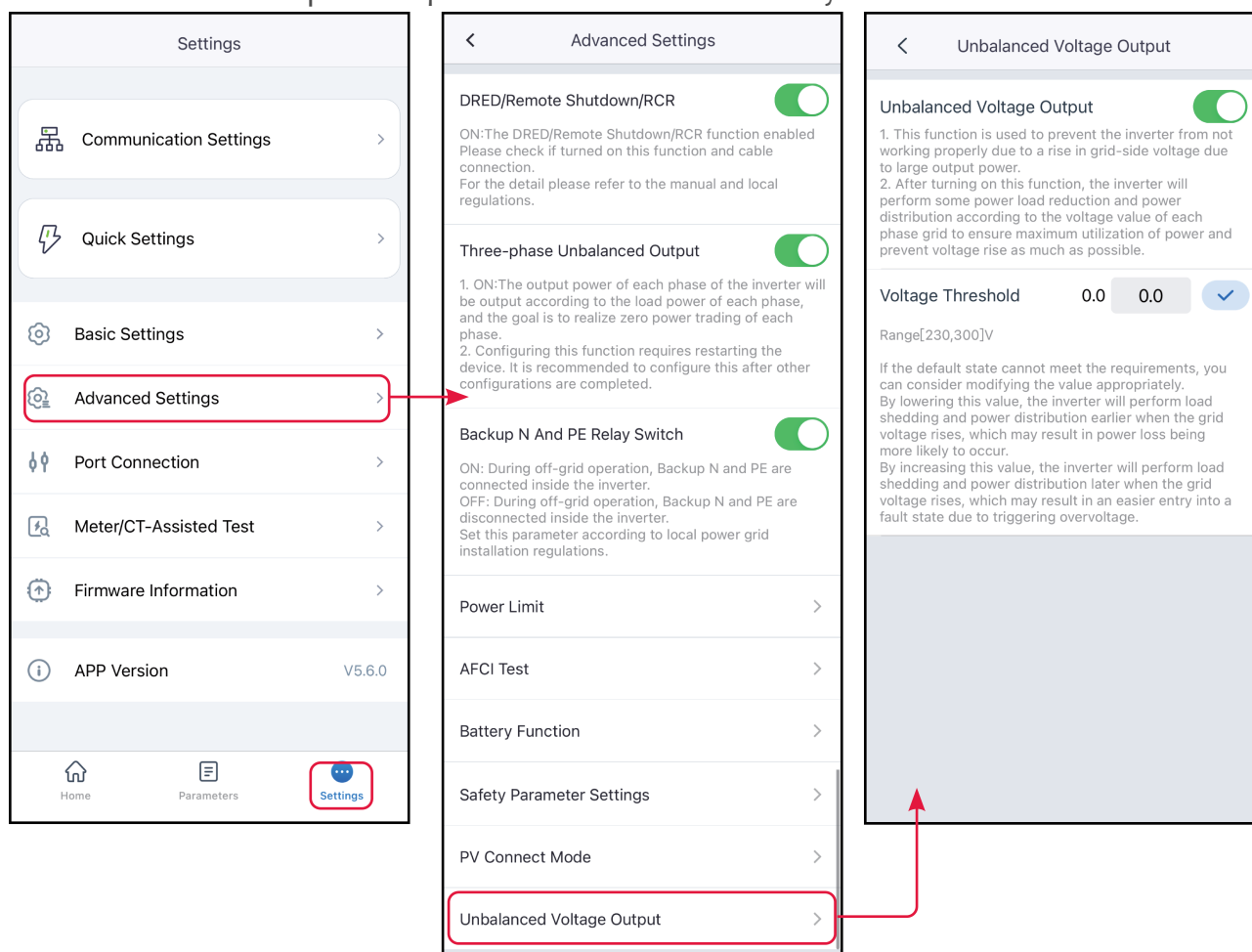
No.	Parameters	Description
1	Stand-alone Connect	The external PV string is connected to multi MPPT terminals of the inverter.
2	Partial Parallel Connect	The PV strings are connected to the inverter in both stand-alone and parallel connection. For example, one PV string connect to MPPT1 ad MPPT2, another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

### 3.7.8 Setting the Unbalanced Voltage Output

**Step 1 :** Tap **Home > Settings > Advanced Settings > Unbalanced Voltage Output** to se the parameters.

**Step 2 :** 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 'V'.The parameters are set successfully.



### 3.7.9 Setting Power Adjustment Response Parameters

**Step 1:** Go to the parameter settings page via **Home > Settings > Advanced Settings > Power Adjustment Response Parameters**.

**Step 2:** Based on actual requirements, select **Disable**, **Slope Adjustment**, or **First-Order Low-Pass Filter** Mode from the Active Power Adjustment drop-down menu. If you select slope adjustment, enter the power change gradient value; if you select first-order low-pass filter mode, enter the first-order low-pass filter time parameter value.

**Step 3:** Based on actual requirements, select **Disable**, **Slope Adjustment**, or **First-Order Low-Pass Filter** Mode from the Reactive Power Adjustment drop-down menu. If you select slope adjustment, enter the power change gradient value; if you select first-order low-pass filter mode, enter the first-order low-pass filter time

parameter value.

**Step 4:** Click ✓ to save the settings.

< Power Scheduling Response Parameters

Active Power Dispatching Response Mode

Slope Mode

Increasing Slope

Derating Slope

Power Gradient 20.0 20.0 ✓

Range[0,6000]%Pn/min

Reactive Dispatching Response Mode

Disable

SLG00CON0125

No.	Parameter	Description
Active Adjustment Response Mode		
1	First-order Low-pass Filter	Within the response time constant, active adjustment is implemented according to a first-order low-pass curve.
2	First-order Low-pass Filter Time Parameter	Set the time constant within which the active power changes based on the first order LPF curve.
3	Slope Adjustment	Implement active power dispatch based on the power change slope.
4	Power Change Gradient	Set the slope of active power adjustment changes.

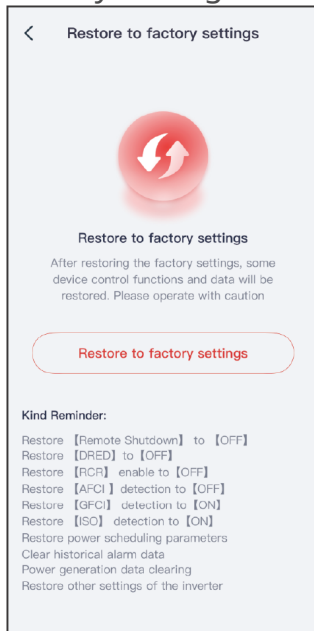
No.	Parameter	Description
Reactive Adjustment Response Mode		
5	First-order Low-pass Filter	Within the response time constant, reactive adjustment is implemented according to a first-order low-pass curve.
6	First-order Low-pass Filter Time Parameter	Set the time constant within which the reactive power changes based on the first order LPF curve.
7	Slope Adjustment	Implement reactive power dispatch based on the power change slope.
8	Power Change Gradient	Set the slope of reactive power adjustment changes.

### 3.7.10 Restore Factory Settings

To restore the device to its factory default settings, perform the following steps.

**Step 1:** Go to the settings page by selecting **Home > Settings > Advanced Settings > Restore Factory Settings**.

**Step 2:** Tap **Restore Factory Settings** to restore the interface prompt section to factory settings.



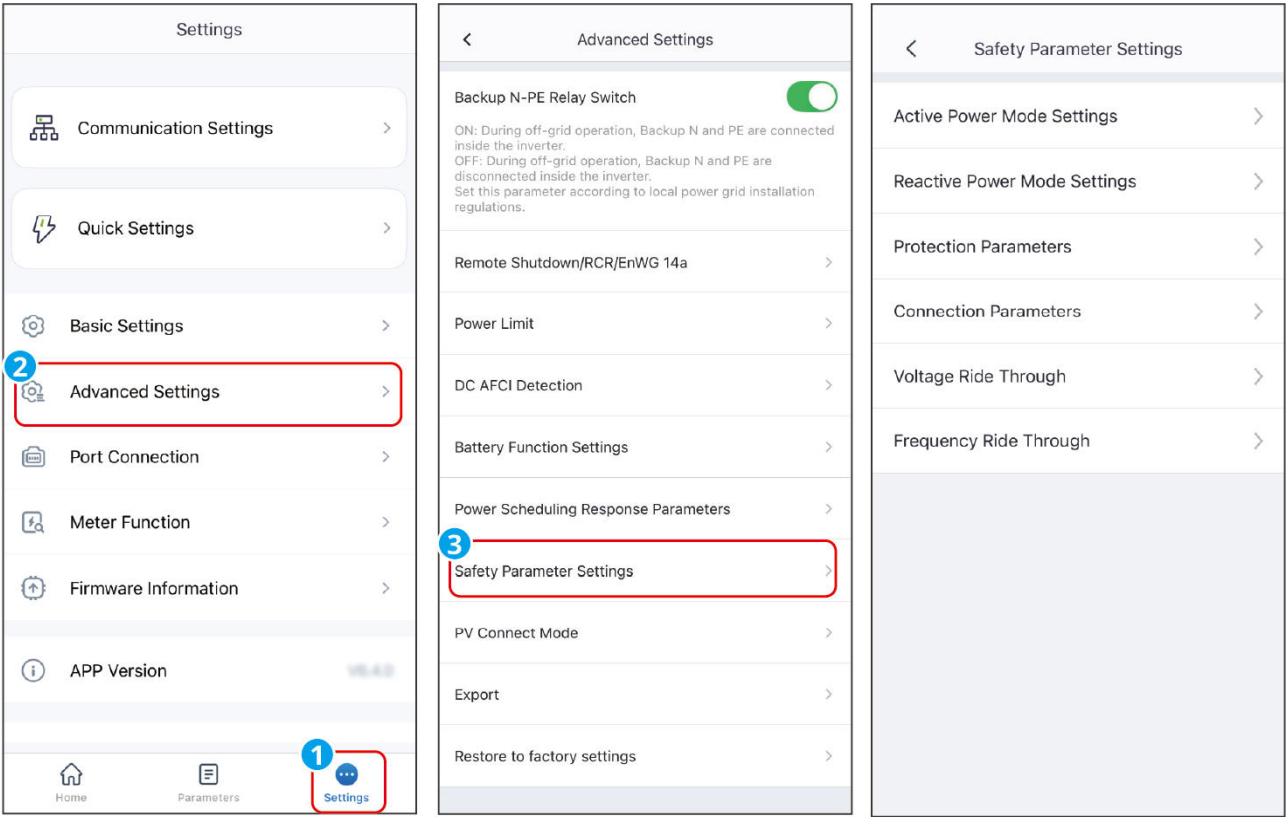
SLG00CON0122



### 3.8 Setting Safety Parameters

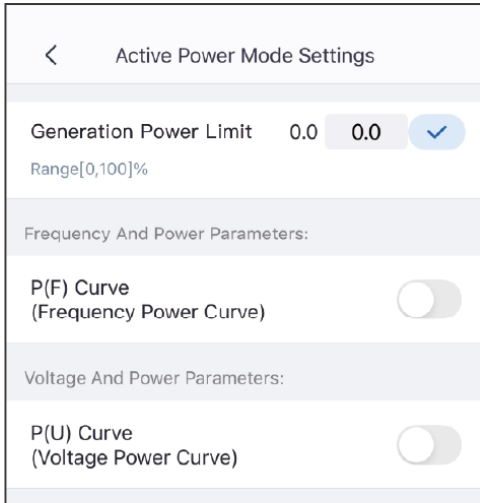
NOTICE

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



SLG00CON0076

#### 3.8.1 Setting the Active Power Mode

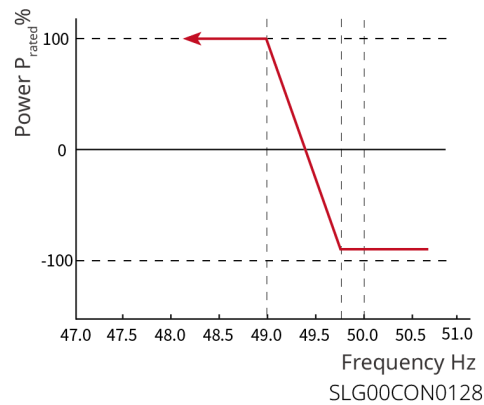
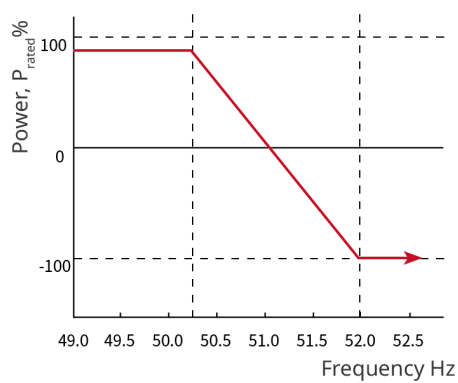


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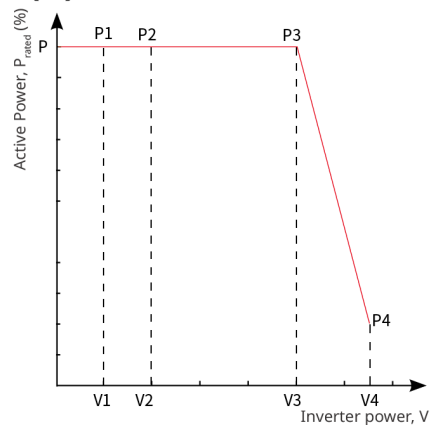
**Step 1:** Tap **Home > Settings > Advanced Settings > Safety Parameter Settings > Active Power Mode Settings** to set the parameters.

**Step 2:** Set the parameters based on actual needs.

### P(F) Curve



### P(U) Curve



SLG00CON0129

No.	Parameters	Explanation
1	Generation Power Limit	Set the change slope when the active output power increases or decreases.
2	Power Gradient	Set the active power change slope.
Overfrequency Unloading		
1	P(F) Curve	Enable P(F) Curve when it is required by local grid standards and requirements.
2	Over-Frequency Load Shedding Mode	<p>Set the overfrequency unloading mode based on actual needs.</p> <ul style="list-style-type: none"> <li>• Slope mode: adjusts power based on the over frequency point and load reduction slope.</li> <li>• Stop mode: adjusts the power based on the over-frequency start point and over-frequency end point.</li> </ul>
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 <b>Overfrequency Threshold</b> .
4	Import/Export Electricity Conversion Frequency	When the set frequency value is reached, the system switches from selling electricity to buying electricity.
5	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 <b>Overfrequency Endpoint</b> .

No.	Parameters	Explanation
6	Over-Frequency Power Slope Reference Power	Adjust the inverter output power based on Apparent Active Power, Rated Active Power, Momentary Active Power, Or Max. Active Power.
7	Power response to overfrequency gradient	The inverter output active power will increase when the utility grid frequency is too high. Indicates the slope when the inverter output power decreases.
8	Intentional Delay $T_a$	Indicates the delayed response time when the inverter output power is higher than the <b>Overfrequency Threshold</b> .
9	Hysteretic Function	Enable the hysteretic function.
10	Frequency Hysteresis Point	During over-frequency load reduction, if the frequency decreases, the power output is based on the lowest point of the load reduction power until the frequency is less than the hysteresis point and the power is restored.
11	Hysteresis Waiting Time	For over-frequency load reduction and frequency decrease, when the frequency is less than the hysteresis point, the power recovery waiting time, that is, it takes a certain amount of time to recover the power.
12	Hysteresis Power Recovery Slope Reference Power	For over-frequency load reduction and frequency decrease, when the frequency is less than the hysteresis point, the power recovery benchmark, that is, the power recovery is based on the recovery slope * the rate of change of the reference power. Support: $P_n$ rated power, $P_s$ apparent power, $P_m$ current power, $P_{max}$ maximum power, power difference ( $\Delta P$ ).

No.	Parameters	Explanation
13	Hysteretic Power Recovery Slope	For over-frequency load reduction and frequency reduction, when the frequency is less than the hysteresis point, the power change slope when the power is restored.
Underfrequency Loading		
1	P(F) Curve	Enable P(F) Curve when it is required by local grid standards and requirements.
2	Underfrequency Load Mode	<p>Set the underfrequency unloading mode based on actual needs.</p> <ul style="list-style-type: none"> <li>• Slope mode: adjusts power based on the underfrequency point and load increase slope.</li> <li>• Stop mode: adjusts the power based on the underfrequency start point and underfrequency end point.</li> </ul>
3	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 <b>Underfrequency Threshold</b> .
4	Import/Export Electricity Conversion Frequency	When the set frequency value is reached, the system switches from selling electricity to buying electricity.
5	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 <b>Underfrequency Endpoint</b> .

No.	Parameters	Explanation
6	Over-Frequency Power Slope Reference Power	Adjust the inverter output power based on Apparent Active Power, Rated Active Power, Momentary Active Power, Or Max. Active Power.
7	Under-Frequency Power Slope	The inverter output active power will increase when the utility grid frequency is too low. The slope of the inverter output power when it rises.
8	Intentional Delay Ta	Indicates the delayed response time when the inverter output power is lower than the <b>Underfrequency Threshold</b> .
9	Hysteretic Function	Enable the hysteretic function.
10	Frequency Hysteresis Point	During underfrequency loading, if the frequency increases, the power is output according to the lowest point of the loaded power until the frequency is higher than the hysteresis point and the power is restored.
11	Hysteresis Waiting Time	For underfrequency loading, the frequency increases, when the frequency is higher than the hysteresis point, the waiting time for power recovery, that is, it takes a certain amount of time to recover the power.
12	Hysteresis Power Recovery Slope Reference Power	For underfrequency loading, the frequency increases, when the frequency is higher than the hysteresis point, the benchmark for power recovery, that is, the power recovery is carried out according to the recovery slope * the rate of change of the benchmark power. Support: Pn rated power, Ps apparent power, Pm current power, Pmax maximum power, power difference ( $\Delta P$ ).

No.	Parameters	Explanation
13	Hysteretic Power Recovery Slope	For under-frequency loading, frequency increase, when the frequency is higher than the hysteresis point, the power change slope when power is restored.
14	P(U) Curve	Enable P(U) Curve when it is required by local grid standards and requirements.
15	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 $V/V_{rated}\%=90\%$ .
16	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 <b>Vn Reactive Power</b> to 48.5 means $P/P_{rated}\%=48.5\%$ .
17	Output Response Mode	Set the active power output response mode. Supports: <ul style="list-style-type: none"> <li>• PT-1 Behavior, realize active scheduling based on the first-order LPF curve within the response time constant.</li> <li>• Gradient Control, realize active scheduling based on the power change slope.</li> </ul>
18	Power Gradient	When the output response mode is set to Gradient Control, active power scheduling is achieved according to the power change gradient.
19	First-order Low-pass Filter Time Parameter	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 First-order Low-pass Filter Time Parameter.
20	Overload Function Switch	When enabled, the maximum active power output is 1.1 times the rated power; otherwise, the maximum active power output is consistent with the rated power value.

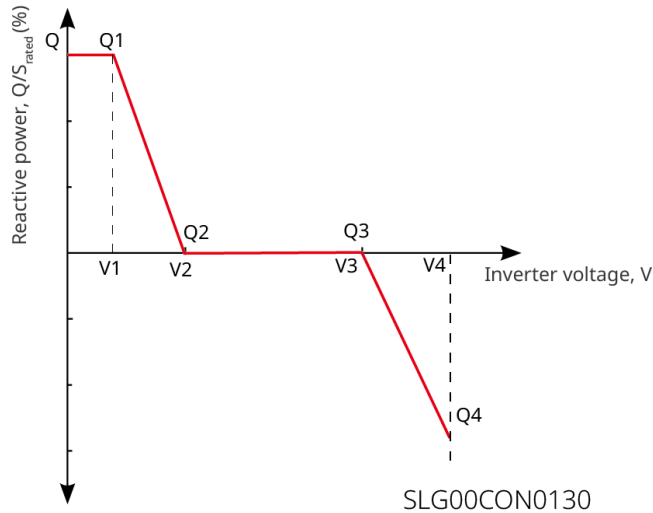
### 3.8.2 Setting the Reactive Power Mode

**Step 1 :** Tap **Home > Settings > Advanced Settings > Safety Parameter Setting >**

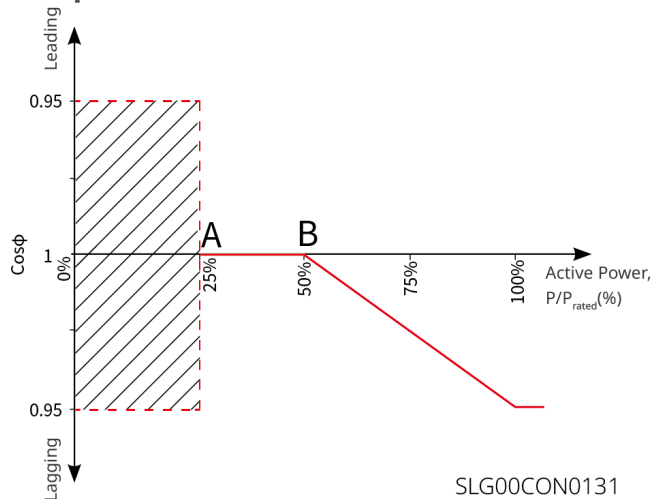
**Reactive Power Mode Settings** to set the parameters.

**Step 2** :Set the parameters based on actual needs.

### Q(U) Curve



### Cosφ Curve



No.	Parameters	Description
Fix PF		
1	Fix PF	Enable Fix PF when it is required by local grid standards and requirements. After the parameters are set successfully, the power factor remains unchanged during the operation of the inverter.
2	Under-excited	Set the power factor as lagging or leading based on actual needs and local grid standards and requirements.
3	Over-excited	



No.	Parameters	Description
4	Power Factor	Set the power factor based on actual needs. Range: 0~-0.8, or +0.8~+1.
Fix Q		
1	Fix Q	Enable Fix Q when it is required by local grid standards and requirements.
2	Over-excited/Under-excited	Set the reactive power as inductive or capacitive reactive power based on actual needs and local grid standards and requirements.
3	Reactive Power	Set the ratio of reactive power to apparent power.
Q(U) Curve		
1	Q(U) Curve	Enable Q(U) Curve when it is required by local grid standards and requirements.
2	Mode Selection	Set Q(U) curve mode, supporting basic mode and slope mode.
3	Vn Voltage	The percentage of actual voltage to the rated voltage at Vn point, n=1, 2, 3, 4. When set to 90, it means: $V/V_{rated}\% = 90\%$ .
4	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 <b>Vn Reactive Power</b> to 48.5 means $Q/S_{rated}\%=48.5\%$ .
5	Voltage Deadband Width	When Q(U) curve mode is set to slope mode, this parameter defines the voltage deadband range where no reactive power output is required.
6	Over-excitation Slope	(In Q(U) slope mode) Sets the positive or negative slope for reactive power variation during over-voltage conditions.
7	Under-excitation Slope	

No.	Parameters	Description
8	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 <b>Vn Reactive Power</b> to 48.5 means $Q/S_{rated}\%=48.5\%$ 。
9	Q(U) Curve Response Time Constant	The reactive power must reach 95% of the target value within 3 time constants, following a first-order low-pass filter curve.
10	Extended Function	Enable the extended function and configure the corresponding parameters.
11	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.
12	Lock-out Power	
Cosφ(P) Curve		
1	Cosφ(P) Curve	Enable Cosφ Curve when it is required by local grid standards and requirements.
2	Mode Selection	Set cosφ(P) Curve Mode and support basic mode and slope mode configurations.
3	N-point Power	The percentage of inverter output active power relative to rated power at the N-point. N=A, B, C, D, E。
4	N-point cosφ Value	N-point Power Factor N=A, B, C, D, E。
5	Over-excitation Slope	When cosφ(P) curve mode is set to slope mode, configures the power variation slope as either positive or negative.
6	Under-excitation Slope	
7	N-point Power	The percentage of inverter output active power relative to rated power at the N-point. N=A, B, C。
8	N-point cosφ Value	N-point Power Factor N=A, B, C。

No.	Parameters	Description
9	cosφ(P) Curve Response Time Constant	The reactive power must reach 95% of the target value within 3 time constants, following a first-order low-pass filter curve.
10	Extended Function	Enable the extended function and configure the corresponding parameters.
11	Lock-in Voltage	When the grid voltage is between Lock-in Voltage and Lock-out Voltage, the voltage meets Cosφ curve requirements.
12	Lock-out Voltage	
Q(P) Curve		
1	Q(P) Curve Function	Enable Q(P) Curve when it is required by local grid standards and requirements.
2	Mode Selection	Set Q(P) curve mode, supporting basic mode and slope mode.
3	Pn-point 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 to 90 means Q/Prated%=90%.
4	Pn-point Reactive Power	The percentage of the output active power to the rated power at Pn point, n=1, 2, 3, 4, 5, 6. For example, When set to 90, it means: P/Prated% = 90%.
5	Over-excitation Slope	When the Q(P) curve mode is set to slope mode, configure the power variation slope as either a positive or negative value.
6	Under-excitation Slope	
7	Pn-point Power	Ratio of reactive power to rated power at Pn points (n=1, 2, 3). For example, setting to 90 means Q/Prated%=90%.
8	Pn-point Reactive Power	Ratio of active power to rated power at Pn points (n=1, 2, 3). For example, When set to 90, it means: P/Prated% = 90%.

No.	Parameters	Description
9	Time Constant	The reactive power must reach 95% of the target value within 3 time constants, following a first-order low-pass filter curve.

### 3.8.3 Setting Protection Parameters

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

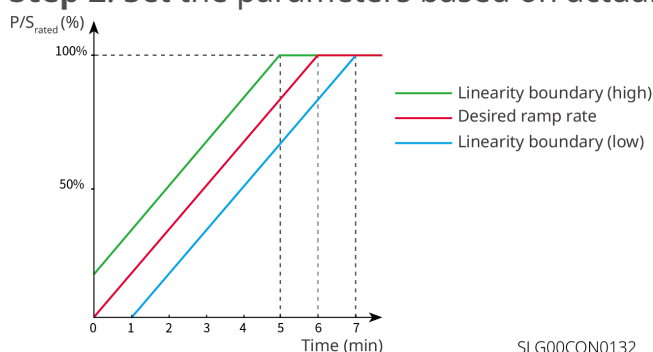
**Step 2:** Set the parameters based on actual needs.

No.	Parameters	Description
1	OV Stage n Trip Value	Set the grid overvoltage protection threshold value, n=1,2,3,4.
2	OV Stage n Trip Time	Set the grid overvoltage protection tripping time, n=1,2,3,4.
3	UV Stage n Trip Value	Set the grid undervoltage protection threshold value, n=1,2,3,4.
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.
7	OF Stage n Trip Value	Set the grid overfrequency triggering n-th order protection point, n=1,2,3,4.
8	OF Stage n Trip Time	Set the grid overfrequency trigger n-th order trip time, n=1,2,3,4.
9	UF Stage n Trip Value	Set the grid underfrequency triggering n-th order protection point, n=1,2,3,4.
10	UF Stage n Trip Time	Set the grid underfrequency trigger n-th order trip time, n=1,2,3,4.

### 3.8.4 Setting Connection Parameters

**Step 1 :** Tap **Home > Settings > Advanced Settings > Safety Parameter Settings > 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 <b>Upper Voltage</b> .
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 <b>Lower Voltage</b> .
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 <b>Upper Frequency</b> .
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 <b>Lower Frequency</b> .
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	Enable the start up power slope.
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.
Reconnection		
8	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 <b>Upper Voltage</b> .
9	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 <b>Lower Voltage</b> .
10	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 <b>Upper Frequency</b> .
11	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 <b>Lower Frequency</b> .
12	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.
13	Reconnection Gradient	Enable the start up power slope.
14	Reconnection 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 Reconnection Gradient to 10 means the reconnect slope is 10%P/Srated/min.

### 3.8.5 Setting Voltage Ride Through Parameters

**Step 1 :** Tap **Home > Settings > Advanced Settings > Safety Parameter Settings > 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. n=1,2,3,4,5,6,7.
2	UVn Time	The ride through time at UVn point during LVRT. n=1,2,3,4,5,6,7
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	Slope K2	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		
1	OVn Voltage	The ratio of the ride through voltage to the rated voltage at OVn point during HVRT. n=1,2,3,4,5,6,7.
2	OVn Time	The ride through time at OVn point during HVRT. n=1,2,3,4,5,6,7.
3	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.

No.	Parameters	Description
4	Exit High Crossing Threshold	
5	Slope K2	K-factor for reactive power during HVRT.
6	Zero Current Mode	The system outputs zero current during HVRT.
7	Entry Threshold	Set the entry threshold of zero current mode.

### 3.8.6 Setting Frequency Ride Through Parameters

**Step 1 :** Tap **Home > Settings > Advanced Settings > Safety Parameter Settings > 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 Frequency	The frequency at the UFn point during frequency ride through. n=1,2,3.
3	UFn Time	The ride through duration at the UFn point during frequency ride through. n=1,2,3.
4	OFn Frequency	The frequency at the OFn point during frequency ride through. n=1,2,3.
5	OFn Time	The ride through duration at the OFn point during frequency ride through. n=1,2,3.



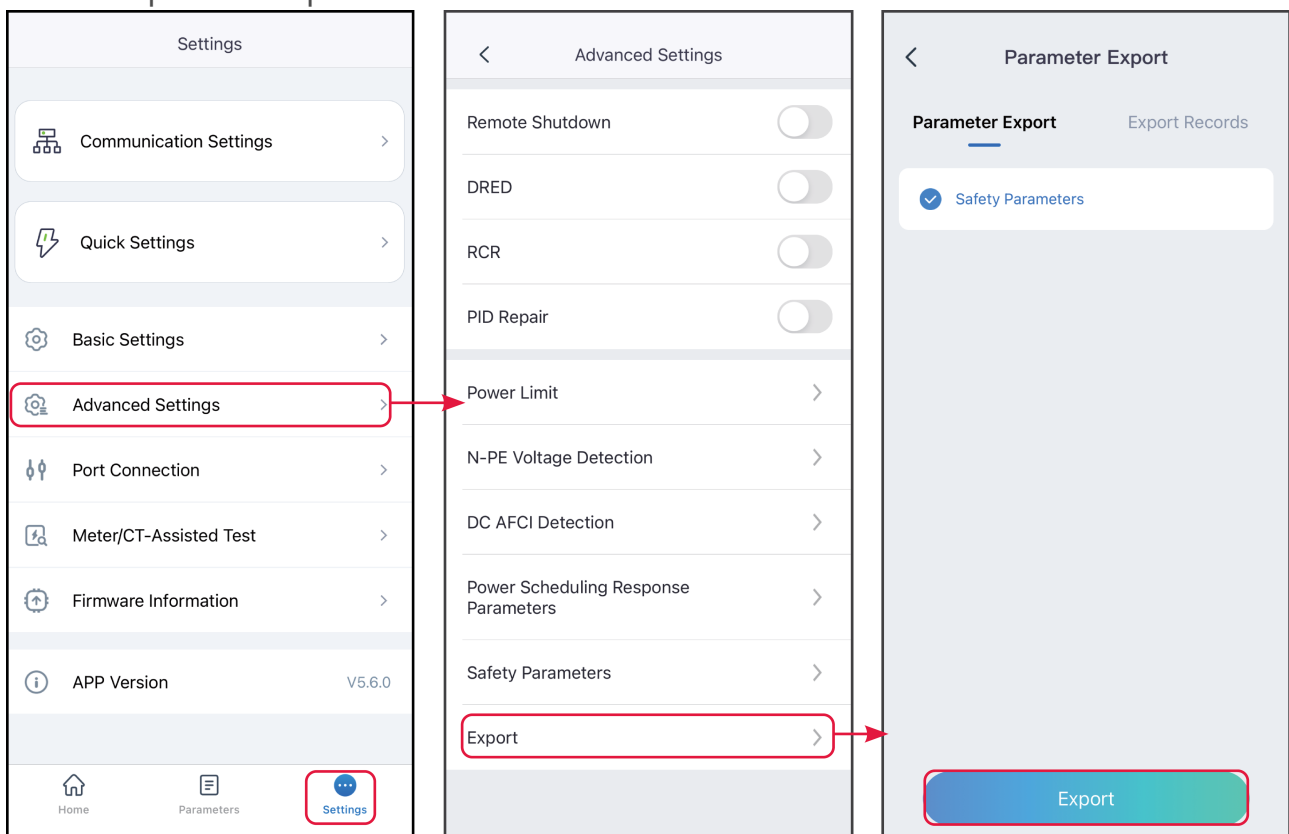
## 3.9 Exporting Parameters

### 3.9.1 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.



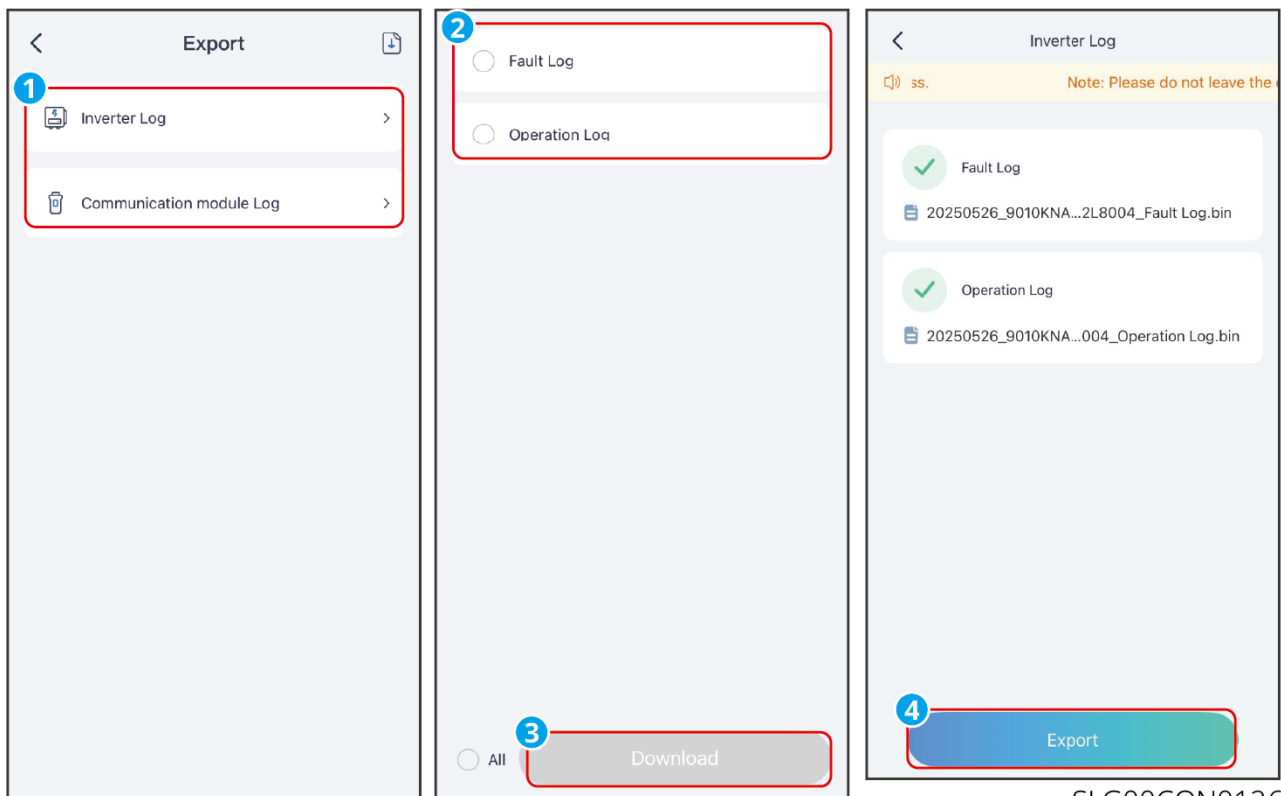
### 3.9.2 Exporting Log Parameters

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

**Step 2:** Select the device type to export logs, such as inverter logs, communication module logs, etc.

**Step 3:** Select the log type to export, download and export the log file. After the export is complete, tap **Share** and choose how to open the exported file according to

actual needs.



SLG00CON0126

## 3.10 Setting Generator/Load Control

### 3.10.1 Setting Load Control

#### NOTICE

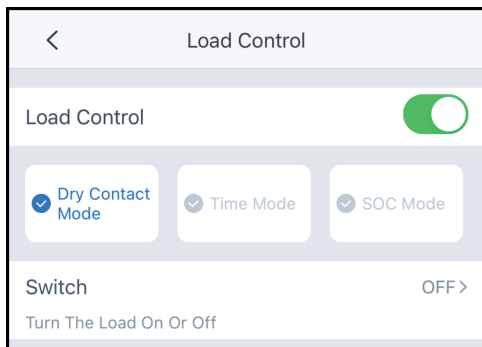
- Loads and generators can be controlled by SolarGo app when the inverter supports load control function.
- For ET40-50kW series inverters, the load control function is supported only when the inverter is used with STS. The inverter supports load control of the GENERATOR port or the BACKUP LOAD port.

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

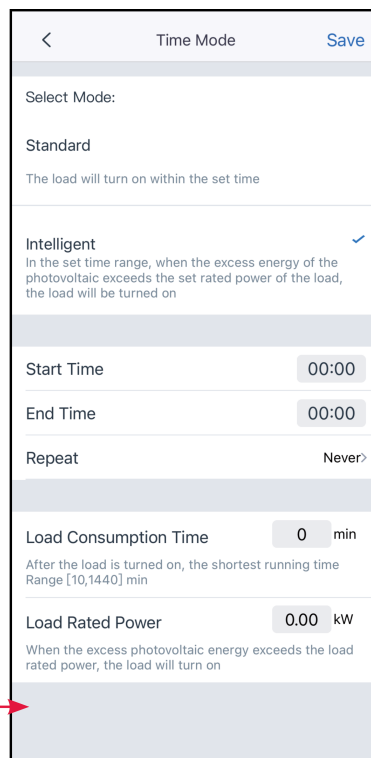
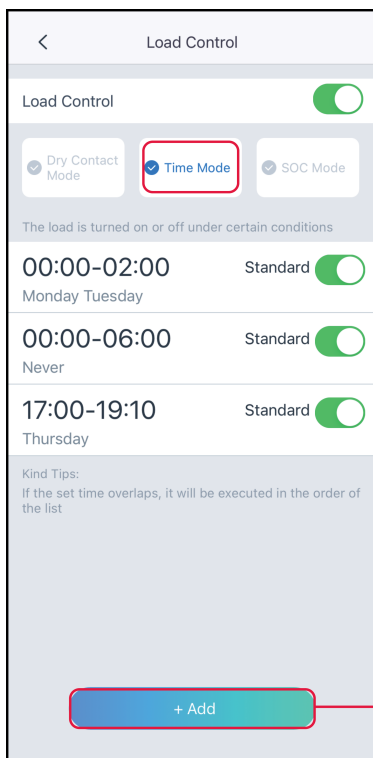
**Step 2:** Select **Generator Control** or **Load Control** based on actual needs.

- 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.



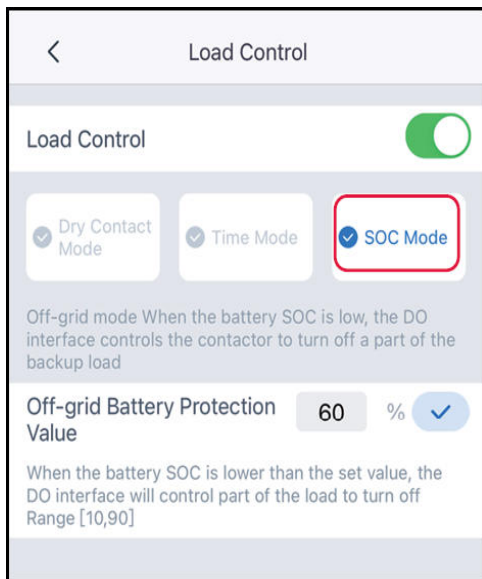
- **Time Mode:** set the time to enable the load, and the load will be powered automatically within the setting time period. Select standard mode or intelligent mode.



No.	Parameters	Description
1	Standard	The loads will be powered within the setting time period.

No.	Parameters	Description
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 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.



### 3.10.2 Setting the Generator Parameters

#### NOTICE

- When the inverter supports the generator control function, the generator can be controlled through the SolarGo App.
- For ET40-50kW series inverters, the generator can be connected and controlled only when the inverter is used with 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 :** 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 automatically after reaching Run Time.
  - Automatic Control Mode: The generator will work during Run Time, but stop working during Prohibited Working Hours.

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
  
9.00 9.00
  
Range [0,650]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 (%)
  
1 1
  
% of rated power of generator

SOC for Starting Charging
  
20 20
  
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
  
9.00 9.00
  
Range [0,650]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 (%)
  
1 1
  
% of rated power of generator

SOC for Starting Charging
  
20 20
  
Range [20,90]%

SOC For Stopping Charging
  
90 90
  
Range [40,95]%

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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.
3	Run Time	Set the generator's continuous runtime, after which the generator will be turned off.
Automatic Control Mode		
4	Prohibited Working Hours	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. If the generator start-up operation time includes prohibited working time, the generator will stop running during this time period; after the prohibited working time, the generator will restart running and timing.

No.	Parameters	Description
Generator Information Settings		
1	Rated Power	Set the rated power of the generator.
2	Run Time	Set the continuous running time of the generator. The generator will be shut down after the continuous running time ends.
3	Upper Voltage	Set the operation voltage range of the generator.
4	Lower Voltage	
5	Frequency Cap	Set the operation frequency range of the generator.
6	Lower Frequency	
7	Preheating time	Set the generator no-load preheating time.
Parameter settings for generator charging batteries		

No.	Parameters	Description
8	Switch	Select whether to use the generator to generate electricity to charge the battery.
9	Max.charging power (%)	The charging power when the generator generates electricity to charge the battery.
10	Start charging SOC	When the battery SOC is lower than this value, the generator generates electricity to charge the battery.
11	Stop charging SOC	When the battery SOC is higher than this value, stop charging the battery.

### 3.10.3 Setting Microgrid Parameters

#### NOTICE

When the inverter supports microgrid function, you can set microgrid parameters through SolarGo App.

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

**Step 2 :** According to the actual interface prompts, enter the microgrid control interface and set the microgrid parameters according to actual needs.



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No.	Parameters	Description
3	Automatic wake-up	<ul style="list-style-type: none"> <li>When the grid fails, if the battery power is low, the energy storage inverter cannot be supported to work off the grid. After enabling this function, the system will force the energy storage inverter to output voltage to the grid-connected inverter at a fixed time, thereby starting the grid-connected inverter.</li> <li>Multiple effect.</li> </ul>
4	Grid Import Power Limit Offset	Set the adjustable range of the maximum power that the device can actually buy from the grid.

## 3.11 Setting the Meter Parameters

### 3.11.1 Bind/Unbind Meter

#### NOTICE

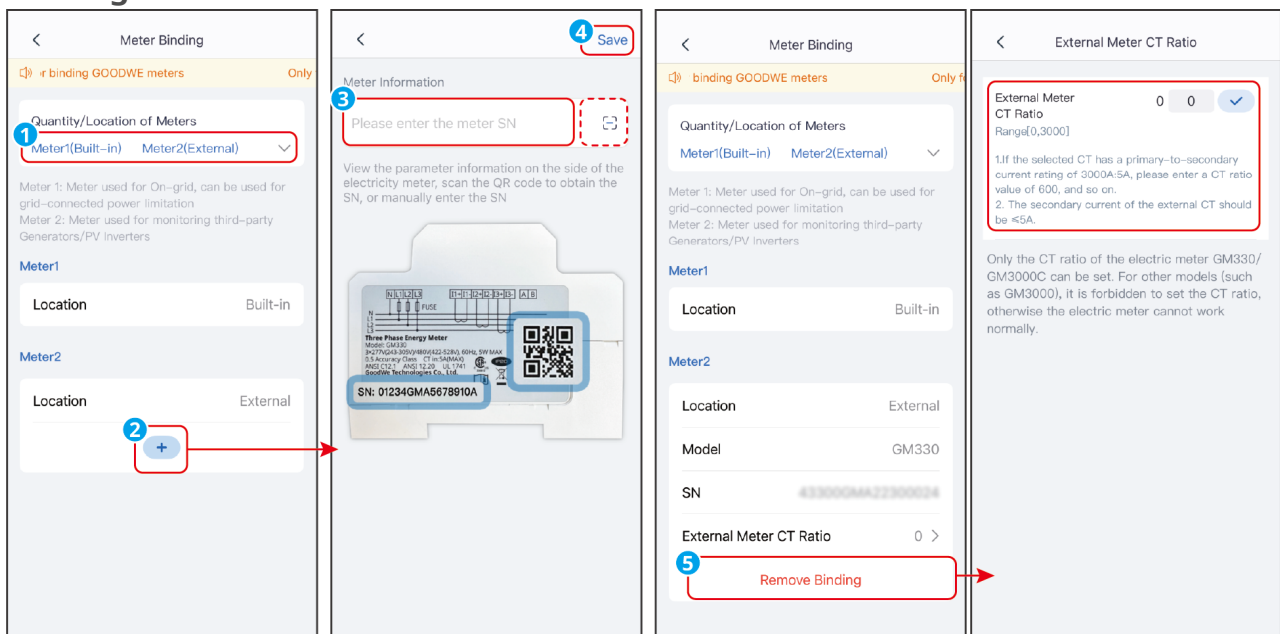
- When the PV system uses both the grid-connected inverter and the energy storage inverter to achieve coupling or microgrid functions, dual meters may be used in the system. Please set the meter binding information according to the actual usage.
- Applicable only to GoodWe meters.

**Step 1 :** Tap **Home > Settings > Meter Function > Meter Binding** to enter the binding interface.

**Step 2 :** Tap **Quantity/Location of Meters** to select the actual application scenario. Supported options: Meter 1 (built-in) No Meter 2; Meter 1 (external) No Meter 2; Meter 1 (built-in) Meter 2 (external); Meter 1 (external) Meter 2 (external). the interface of Meter 1 (built-in) Meter 2 (external) is used as an example to explain how to bind the meter.

**Step 3 :** As shown in the figure below, when you choose to use an external meter, you need to manually add the external meter information. Tap **+** to bind the meter by manually entering the meter SN or scanning the meter SN QR code. When the bound meter model is GM330, please set the meter CT ratio according to the actual situation and click **✓** to complete the setting. If you use other meters, you do not need to set the meter CT ratio.

**Step 4 :** (Optional) If you need to unbind the external meter, please tap **Remove Binding**.



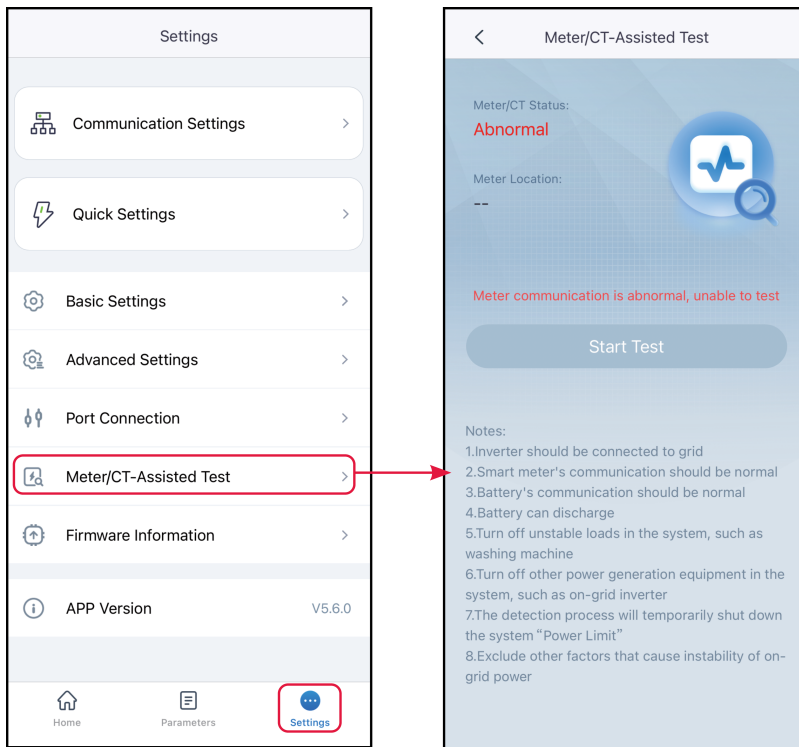
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### 3.11.2 Meter/CT-Assisted Test

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.



## 3.12 Equipment Maintenance

### 3.12.1 Checking Firmware Information/Upgrading Firmware Version

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.

#### NOTICE

If the Firmware Upgrade dialog box pops up once logging into the app, click Firmware Upgrade to directly go to the firmware information page.

#### 3.12.1.1 Regular Upgrade

## NOTICE

- When there is a red dot on the right side of the firmware information, please tap to view the firmware update information.
- During the upgrade process, please ensure that the network is stable and the device is connected to SolarGo, otherwise the upgrade may fail.

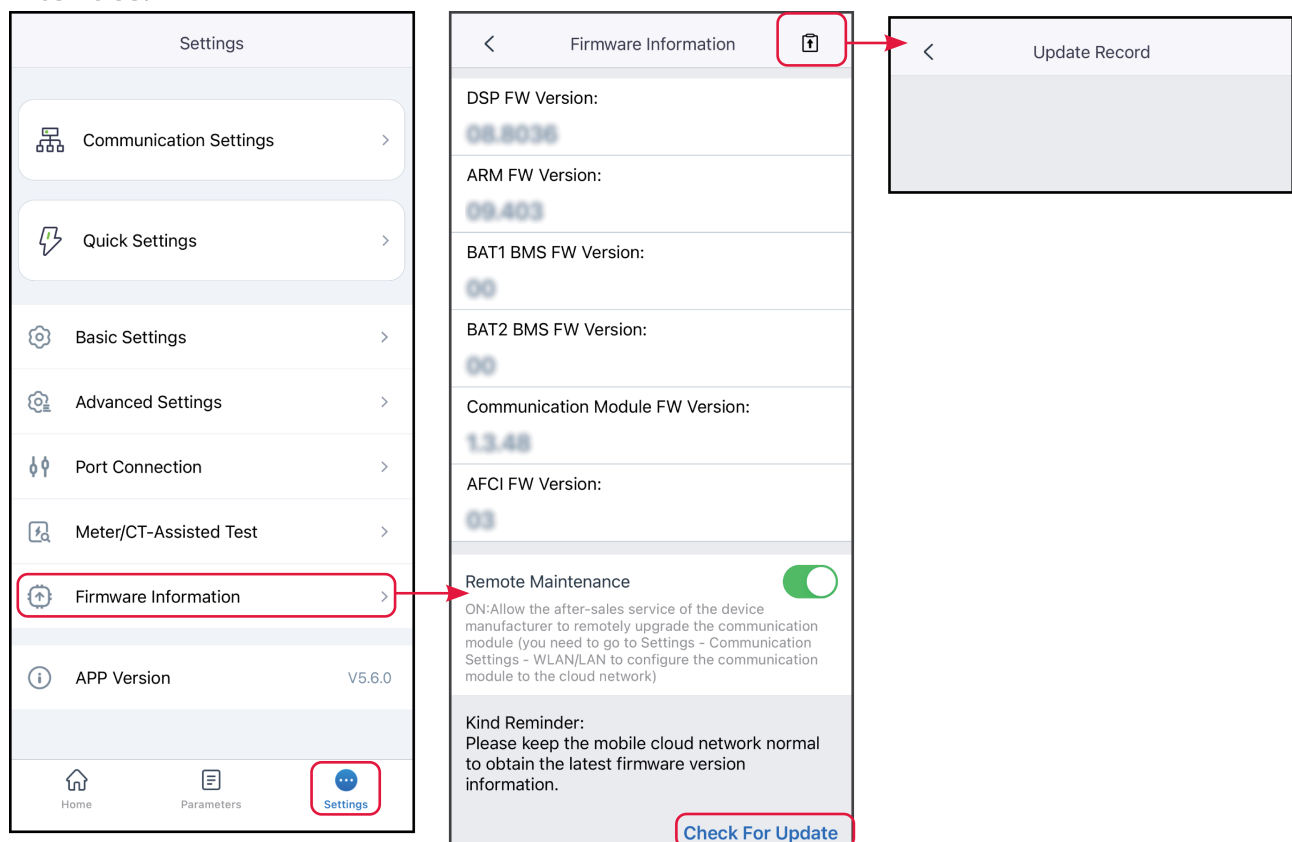
**Step 1 :** Tap **Home > Settings > Firmware Information** to check the firmware version. If the firmware upgrade dialog box pops up, tap **Firmware Upgrade** and turn to the upgrade interface.

**Step 2 :** (Optional) Tap **Check For Update** to confirm whether the latest firmware version is available for updating.

**Step 3:** Tap **Firmware Upgrade** to enter the firmware upgrade interface.

**Step 4 :** (Optional) Tap **Learn More** to view firmware-related information, such as the current version, the latest version, firmware update records, etc.

**Step 5 :** Tap **Upgrade** and complete the upgrade according to the prompts on the interface.



### 3.12.1.2 One-click Upgrade


#### NOTICE

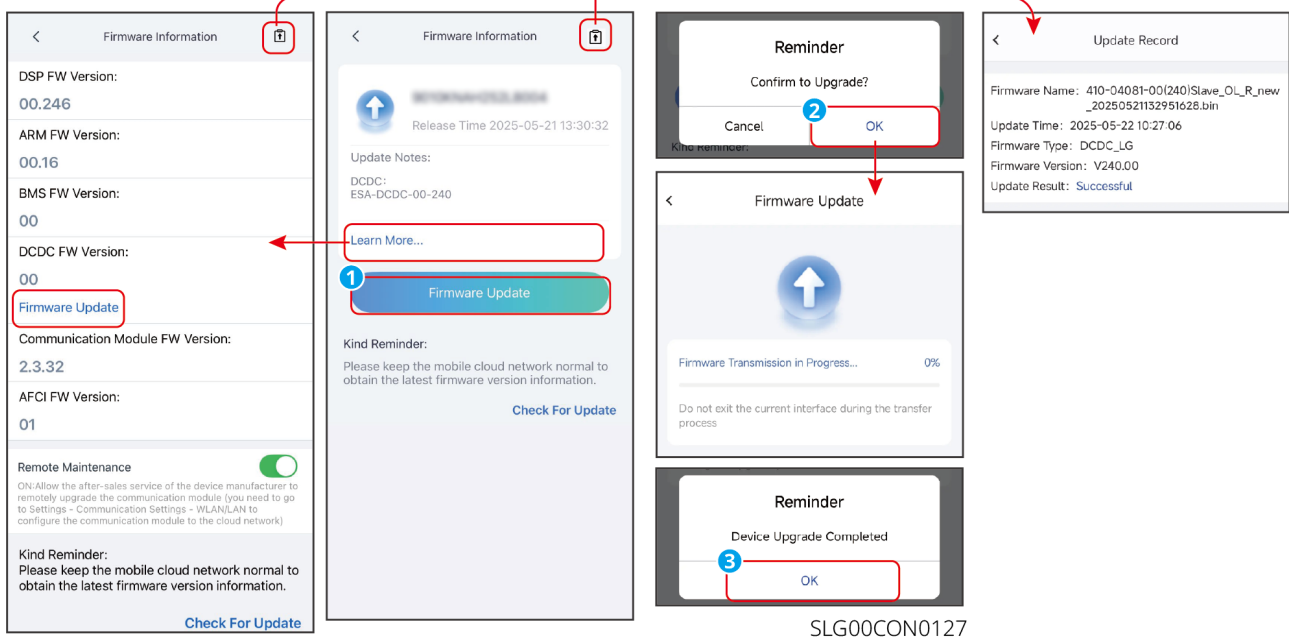
- When there is a red dot on the right side of the firmware information, please click to view the firmware update information.
- During the upgrade process, please ensure that the network is stable and the device is connected to SolarGo, otherwise the upgrade may fail.

**Step 1 :** Tap **Home > Settings > Firmware Information**. Tap **Firmware Information** as prompted to enter the firmware upgrade page.

**Step 2 :** Tap **Upgrade** and follow the prompts to complete the upgrading. If you only need to upgrade a specific firmware version, tap **Learn More** to check the firmware related information and tap **Firmware Upgrade** below the firmware version you want to upgrade, and follow the on-screen prompts to complete the operation.

**Step 3 :** Tap **Learn More** to view all current firmware version information.

**Step 4: (Optional)** Tap , to view the version upgrade record.



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### 3.12.1.3 Automatic Upgrade

#### NOTICE

- When using WiFi/LAN Kit-20 or WiFi Kit-20 module communication and the module firmware version is V2.0.1 or above, the device automatic upgrade function can be enabled.
- After the device automatic upgrade function is enabled, if the module version is updated and the device has been connected to the network, the corresponding firmware version can be automatically upgraded.

**Step 1 :** Tap **Home > Settings > Firmware Information**.

**Step 2 :** Enable or disable the automatic device upgrade function according to actual needs.

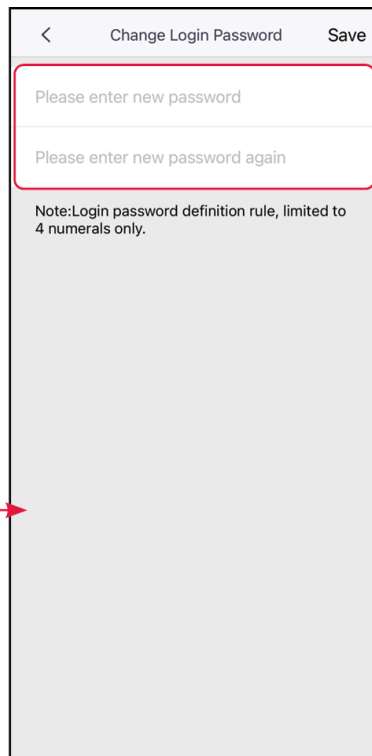
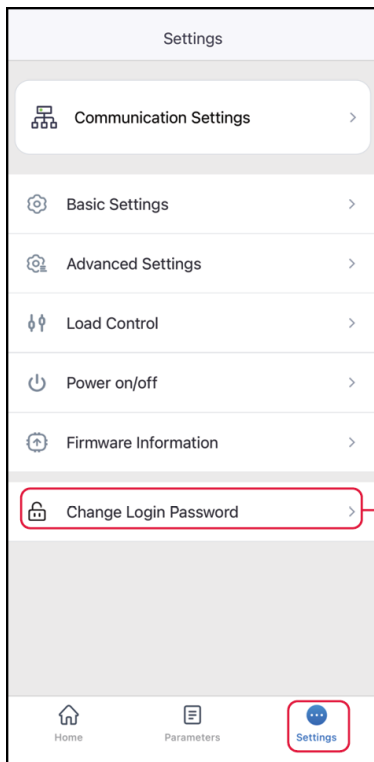
### 3.13 Change the Login Password

#### 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.



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## 4 Setting Micro Inverter Parameters

### 4.1 Connecting the Micro Inverter

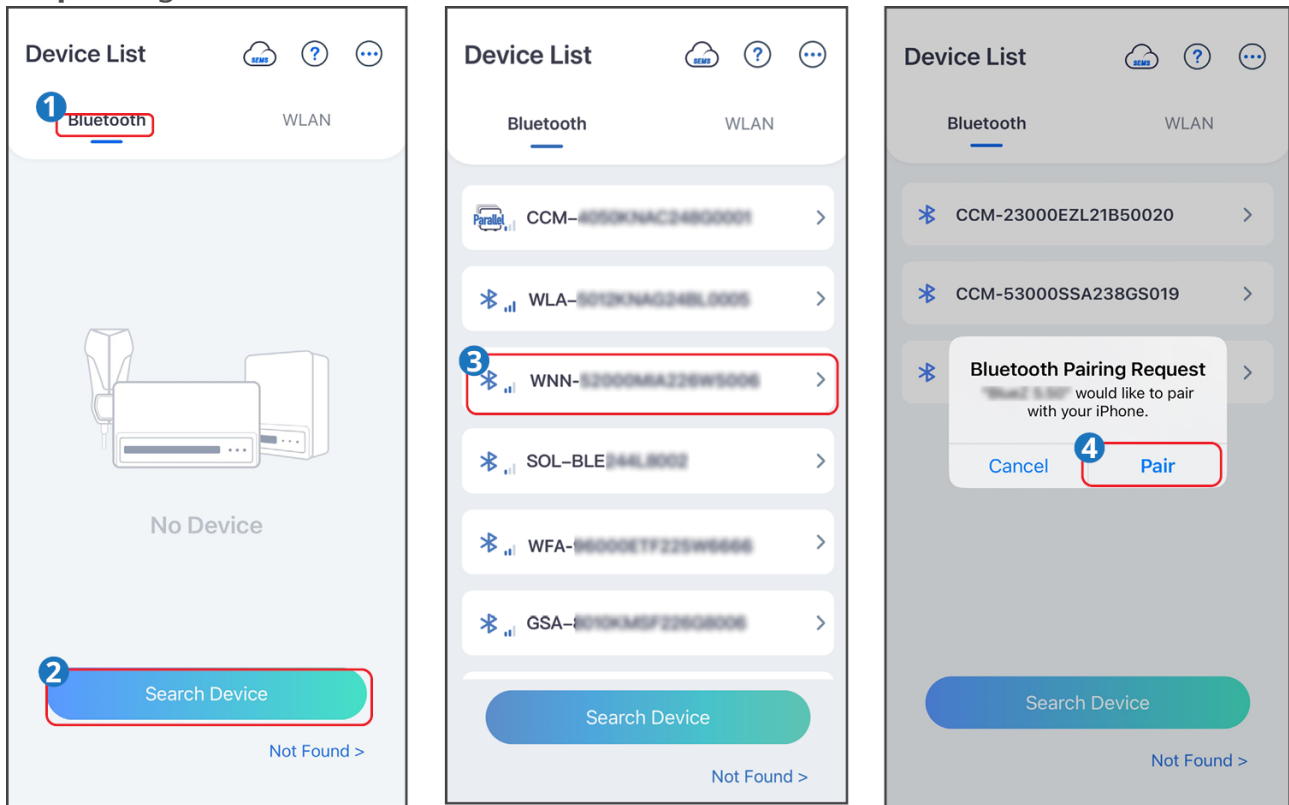
**Step 1 :** Ensure that the inverter is power on and works properly.

**Step 2 :** Select Bluetooth tab on the SolarGo app homepage

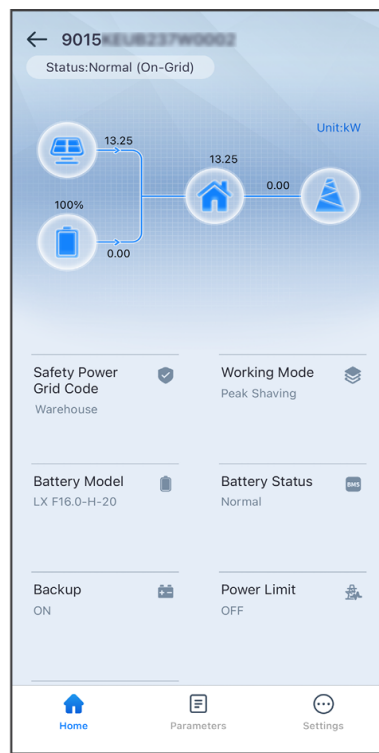
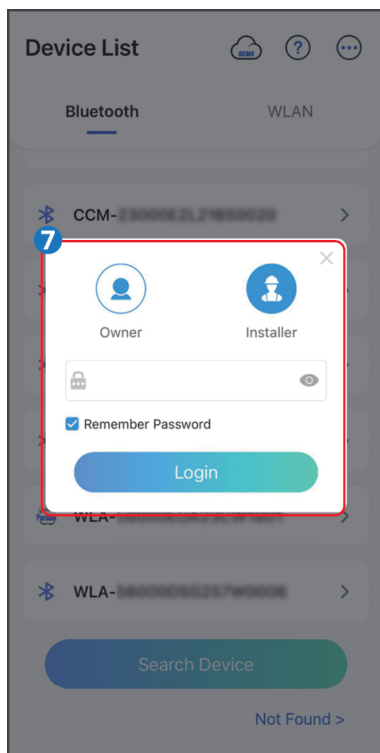
**Step 3 :** Pull down or tap **Search Device** to refresh the device list. Find the device by the the inverter serial number. Tap the device name to log into the Home page.

**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. Initial Password: 1234.

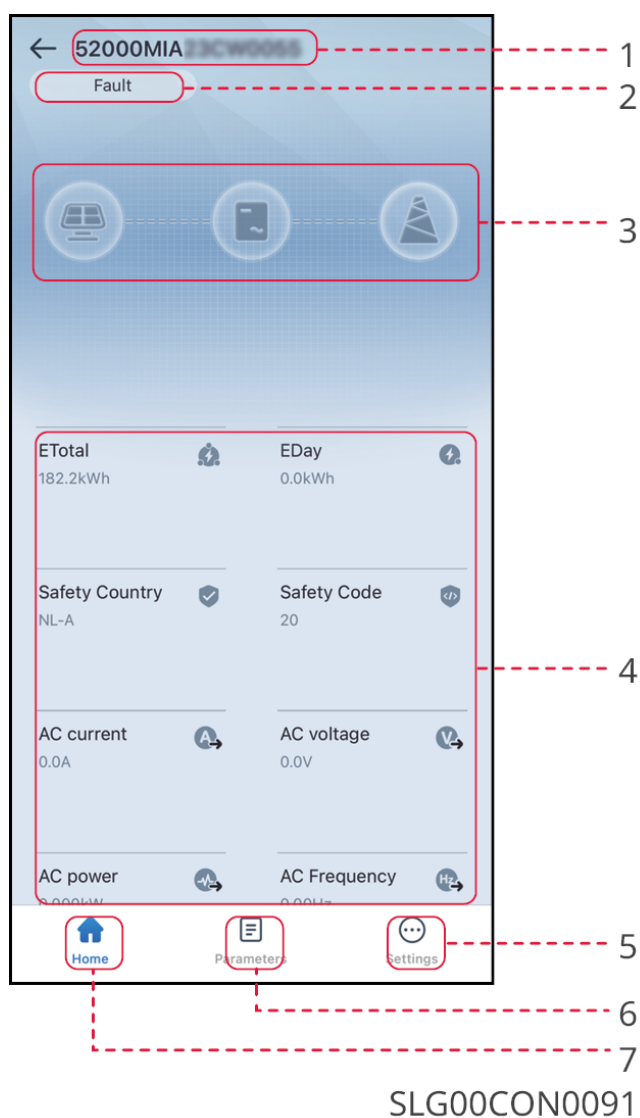



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## 4.2 GUI Introductions to Micro Inverters



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 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.

No.	Name/Icon	Description
6		Parameters Tap Parameters to check the inverter Data or check Alarm.
7		Settings Tap Settings to set parameters like Safety Code, Communication Settings, Power Limit, Firmware Update, AFCI Detection, Equipment Power Supply, etc.

## 4.3 Configuring Communication Parameters

### 4.3.1 Setting WLAN Parameters

If connecting the inverter to the cloud, please first configure the router information for communication with the inverter to ensure that the inverter and the router can communicate normally.

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

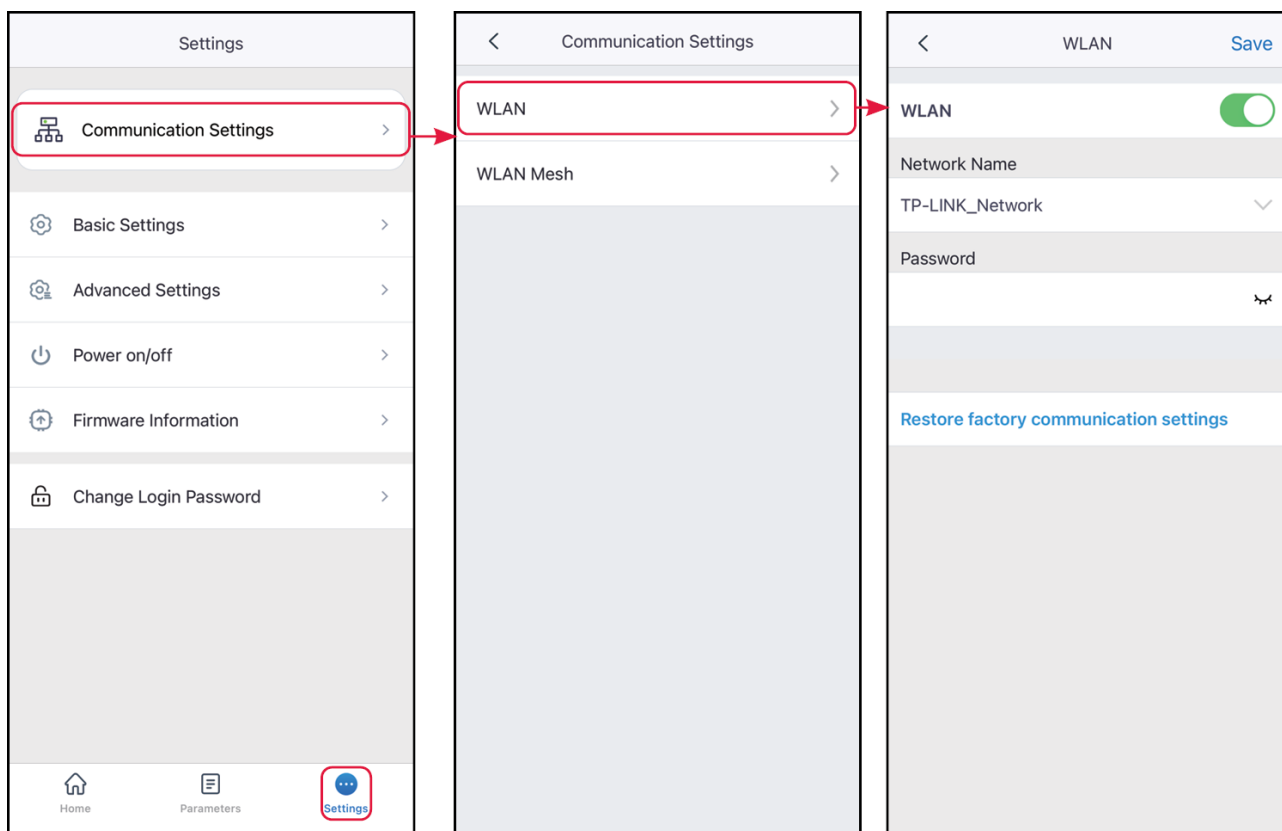
**Step 2** : Enable or disable WLAN based on actual needs.

**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.



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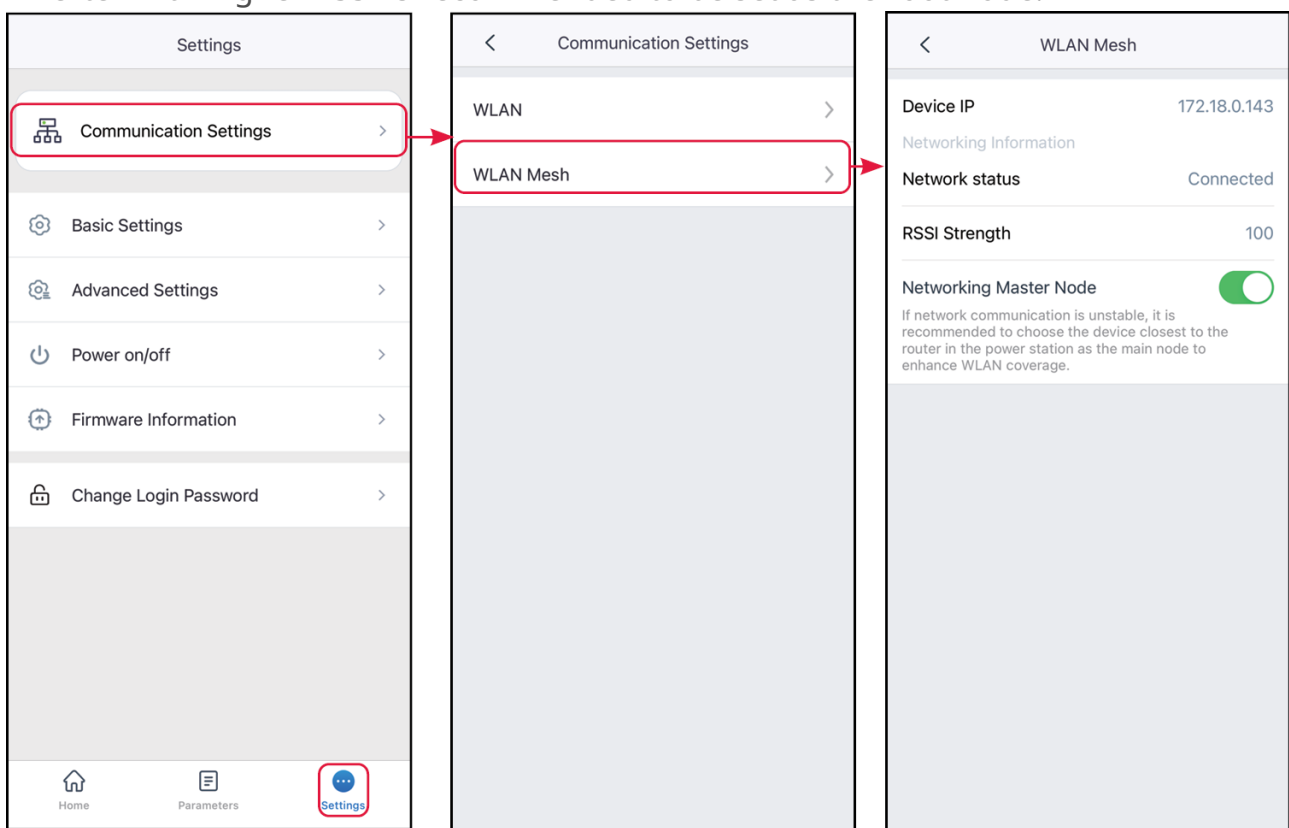
No.	Parameters	Description
1	Network Name	Select WiFi based on the actual connecting. Connect the Cloud Board to the router or switch.
2	Password	WiFi password for the actual connected network.
3	DHCP	<ul style="list-style-type: none"> <li>• Enable DHCP when the router is in dynamic IP mode.</li> <li>• Disable DHCP when a switch is used or the router is in static IP mode.</li> </ul>
4	IP Address	<ul style="list-style-type: none"> <li>• Do not configure the parameters when DHCP is enabled.</li> <li>• Configure the parameters according to the router or switch information when DHCP is disabled.</li> </ul>
5	Subnet Mask	
6	Gateway Address	

No.	Parameters	Description
7	DNS Server	

### 4.3.2 Configuring WLAN Mesh

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

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

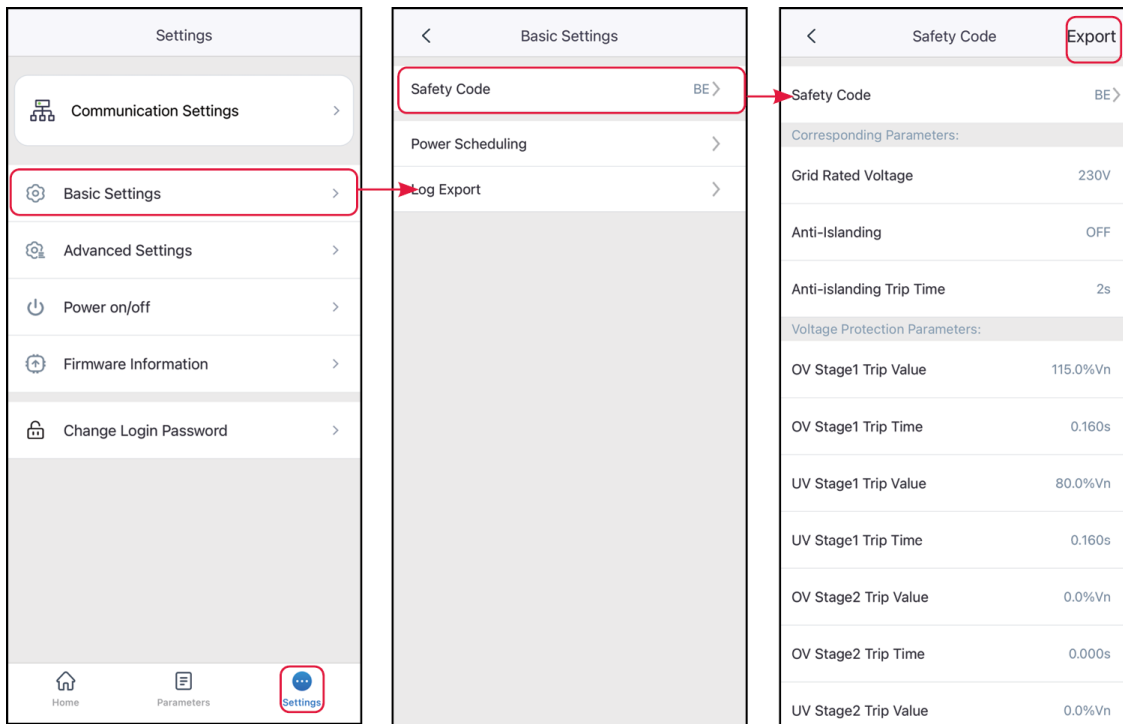


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## 4.4 Setting the Basic Information

**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.



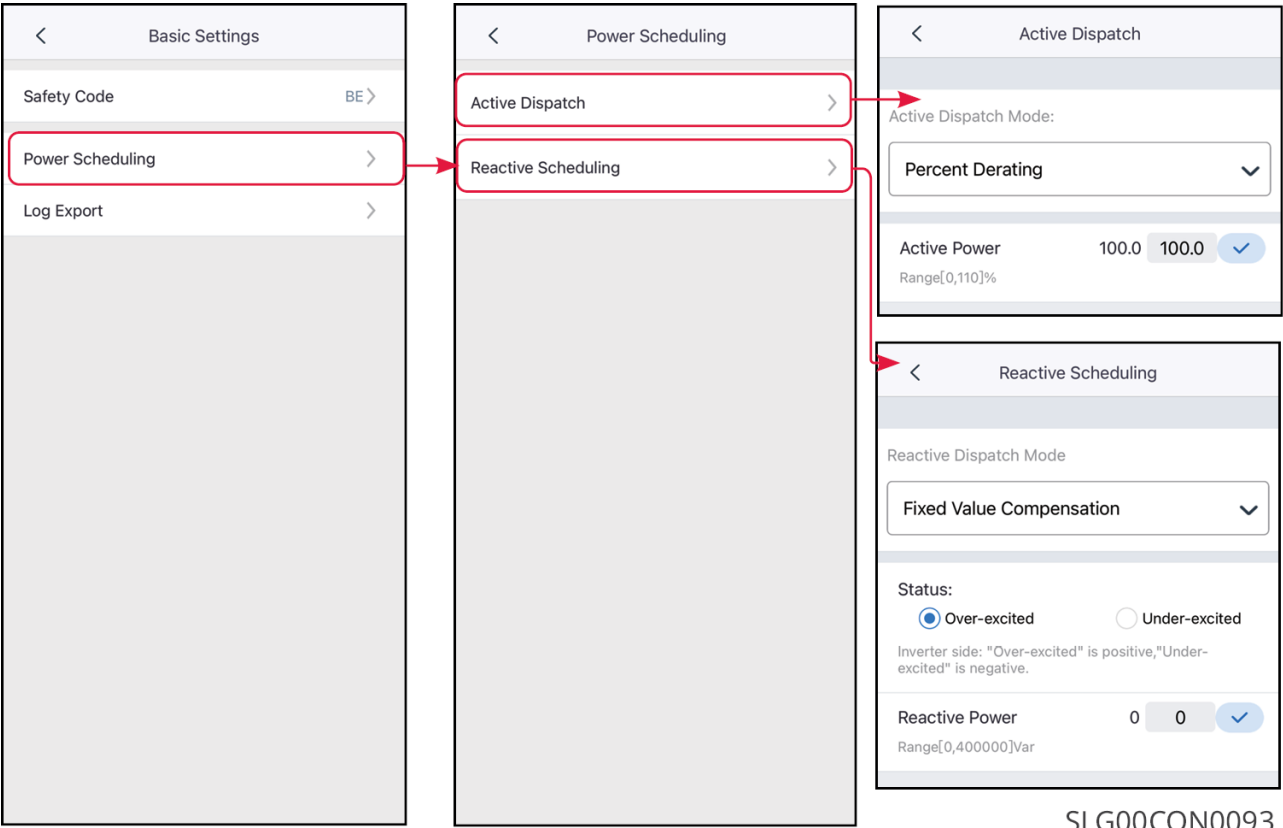
SLG00CON0092

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. Contact the supplier or after sales service for Advanced Setting password. Password for professional technicians only.
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 > Reactive Scheduling** to set the reactive 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, select Disable, 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.




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No.	Parameters	Description
Active Dispatch Mode		
1	Active Dispatch Mode	<p>The standards of some countries/regions require to control the active power according to the dispatch mode. Supports:</p> <p>Disable: disable the Active Dispatch Mode.</p> <p>Fixed Value Derating: enable the Active Dispatch Mode based on fixed values.</p> <p>Percent Derating: enable the Active Dispatch Mode based on the percentage of the rated power.</p>



No.	Parameters	Description
2	Active Power	<ul style="list-style-type: none"> <li>The Active Power is a fixed value when the Active Dispatch Mode is set to Fixed Value Derating.</li> <li>The Active Power is the percentage of the active power and the rated power when the Active Dispatch Mode is set to Percent Derating.</li> </ul>
Reactive Scheduling		
3	Reactive Dispatch Mode	<p>The standards of some countries/regions require to control the reactive power according to the dispatch mode. Supports:</p> <p>Disable: disable Reactive Dispatch Mode</p> <p>Fixed Value Compensation: enable the Reactive Dispatch Mode based on fixed values.</p> <p>Percent Compensation: enable the Reactive Dispatch Mode based on the percentage of the rated power.</p> <p>PF Compensation.</p>
4	Status	Set the power factor as lagging or leading based on actual needs and local grid standards and requirements.
5	Reactive Power	<ul style="list-style-type: none"> <li>The Reactive Power is a fixed value when the Reactive Dispatch Mode is set to Fixed Value Compensation.</li> <li>The Reactive Power is the percentage of the reactive power and the rated power when the Reactive Dispatch Mode is set to Percent Compensation.</li> </ul>
6	Power Factor	Set the power factor when the Reactive Dispatch Mode is set to PF Compensation.

**Step 4 (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.

## 4.5 Setting Advanced Parameters

### 4.5.1 Setting Power Adjustment Response Parameters

**Step 1:** Go to the parameter settings page via **Home > Settings > Advanced Settings > Power Adjustment Response Parameters**.

**Step 2:** Based on actual requirements, select **Disable**, **Slope Adjustment**, or **First-Order Low-Pass Filter** Mode from the Active Power Adjustment drop-down menu. If you select slope adjustment, enter the power change gradient value; if you select first-order low-pass filter mode, enter the first-order low-pass filter time parameter value.

**Step 3:** Based on actual requirements, select **Disable**, **Slope Adjustment**, or **First-Order Low-Pass Filter** Mode from the Reactive Power Adjustment drop-down menu. If you select slope adjustment, enter the power change gradient value; if you select first-order low-pass filter mode, enter the first-order low-pass filter time parameter value.

**Step 4:** Click ✓ to save the settings.

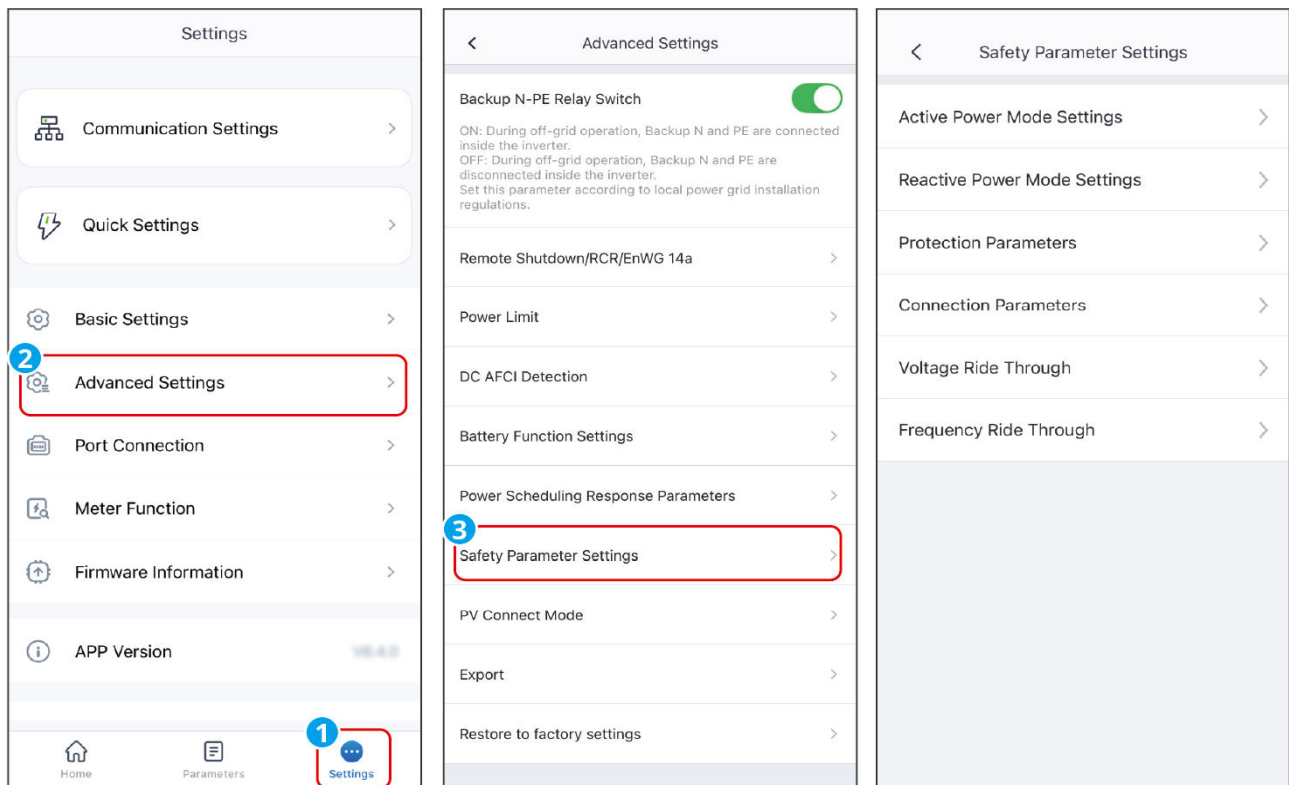
SLG00CON0125171

No.	Parameter	Description
5	First-order Low-pass Filter	Within the response time constant, reactive adjustment is implemented according to a first-order low-pass curve.
6	First-order Low-pass Filter Time Parameter	Set the time constant within which the reactive power changes based on the first order LPF curve.
7	Slope Adjustment	Implement reactive power dispatch based on the power change slope.
8	Power Change Gradient	Set the slope of reactive power adjustment changes.

## 4.5.2 Setting Safety Parameters

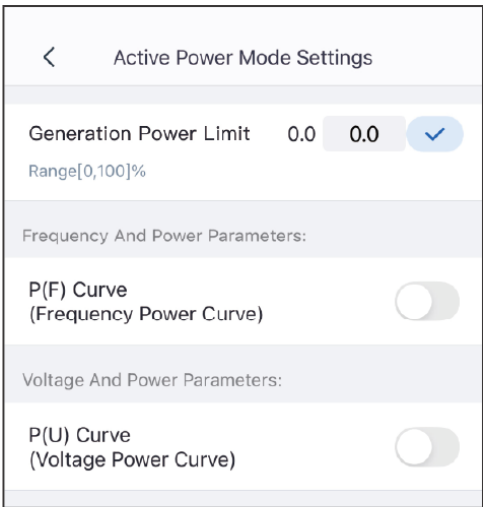
### NOTICE

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



SLG00CON0076

4.5.2.1 Setting the Active Power Mode

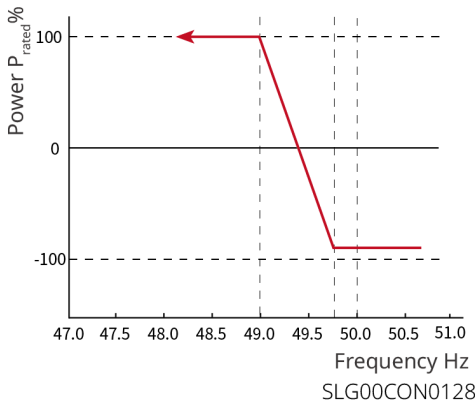
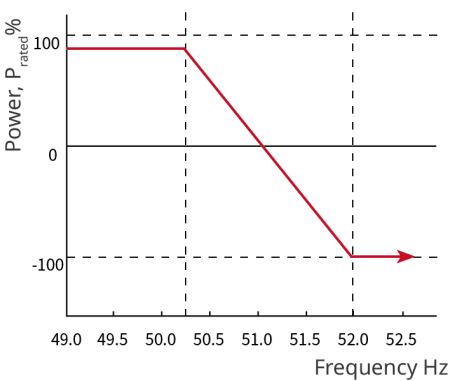


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**Step 1:** Tap **Home > Settings > Advanced Settings > Safety Parameter Settings > Active Power Mode Settings** to set the parameters.

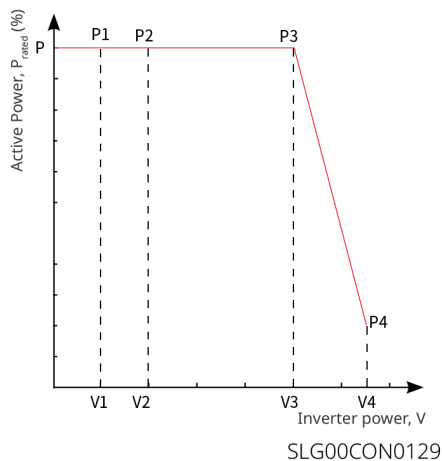
**Step 2:** Set the parameters based on actual needs.

**P(F) Curve**



SLG00CON0128

**P(U) Curve**



No.	Parameters	Explanation
1	Generation Power Limit	Set the change slope when the active output power increases or decreases.
2	Power Gradient	Set the active power change slope.
Overfrequency Unloading		
1	P(F) Curve	Enable P(F) Curve when it is required by local grid standards and requirements.
2	Over-Frequency Load Shedding Mode	Set the overfrequency unloading mode based on actual needs. <ul style="list-style-type: none"> <li>• Slope mode: adjusts power based on the over frequency point and load reduction slope.</li> <li>• Stop mode: adjusts the power based on the over-frequency start point and over-frequency end point.</li> </ul>
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 <b>Overfrequency Threshold</b> .

No.	Parameters	Explanation
4	Import/Export Electricity Conversion Frequency	When the set frequency value is reached, the system switches from selling electricity to buying electricity.
5	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 <b>Overfrequency Endpoint</b> .
6	Over-Frequency Power Slope Reference Power	Adjust the inverter output power based on Apparent Active Power, Rated Active Power, Momentary Active Power, Or Max. Active Power.
7	Power response to overfrequency gradient	The inverter output active power will increase when the utility grid frequency is too high. Indicates the slope when the inverter output power decreases.
8	Intentional Delay $T_a$	Indicates the delayed response time when the inverter output power is higher than the <b>Overfrequency Threshold</b> .
9	Hysteretic Function	Enable the hysteretic function.
10	Frequency Hysteresis Point	During over-frequency load reduction, if the frequency decreases, the power output is based on the lowest point of the load reduction power until the frequency is less than the hysteresis point and the power is restored.
11	Hysteresis Waiting Time	For over-frequency load reduction and frequency decrease, when the frequency is less than the hysteresis point, the power recovery waiting time, that is, it takes a certain amount of time to recover the power.

No.	Parameters	Explanation
12	Hysteresis Power Recovery Slope Reference Power	For over-frequency load reduction and frequency decrease, when the frequency is less than the hysteresis point, the power recovery benchmark, that is, the power recovery is based on the recovery slope * the rate of change of the reference power. Support: P <sub>n</sub> rated power, P <sub>s</sub> apparent power, P <sub>m</sub> current power, P <sub>max</sub> maximum power, power difference ( $\Delta P$ ).
13	Hysteretic Power Recovery Slope	For over-frequency load reduction and frequency reduction, when the frequency is less than the hysteresis point, the power change slope when the power is restored.
Underfrequency Loading		
1	P(F) Curve	Enable P(F) Curve when it is required by local grid standards and requirements.
2	Underfrequency Load Mode	Set the underfrequency unloading mode based on actual needs. <ul style="list-style-type: none"> <li>• Slope mode: adjusts power based on the underfrequency point and load increase slope.</li> <li>• Stop mode: adjusts the power based on the underfrequency start point and underfrequency end point.</li> </ul>
3	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 <b>Underfrequency Threshold</b> .
4	Import/Export Electricity Conversion Frequency	When the set frequency value is reached, the system switches from selling electricity to buying electricity.



No.	Parameters	Explanation
5	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 <b>Underfrequency Endpoint</b> .
6	Over-Frequency Power Slope Reference Power	Adjust the inverter output power based on Apparent Active Power, Rated Active Power, Momentary Active Power, Or Max. Active Power.
7	Under-Frequency Power Slope	The inverter output active power will increase when the utility grid frequency is too low. The slope of the inverter output power when it rises.
8	Intentional Delay $T_a$	Indicates the delayed response time when the inverter output power is lower than the <b>Underfrequency Threshold</b> .
9	Hysteretic Function	Enable the hysteretic function.
10	Frequency Hysteresis Point	During underfrequency loading, if the frequency increases, the power is output according to the lowest point of the loaded power until the frequency is higher than the hysteresis point and the power is restored.
11	Hysteresis Waiting Time	For underfrequency loading, the frequency increases, when the frequency is higher than the hysteresis point, the waiting time for power recovery, that is, it takes a certain amount of time to recover the power.

No.	Parameters	Explanation
12	Hysteresis Power Recovery Slope Reference Power	For underfrequency loading, the frequency increases, when the frequency is higher than the hysteresis point, the benchmark for power recovery, that is, the power recovery is carried out according to the recovery slope * the rate of change of the benchmark power. Support: P <sub>n</sub> rated power, P <sub>s</sub> apparent power, P <sub>m</sub> current power, P <sub>max</sub> maximum power, power difference ( $\Delta P$ ).
13	Hysteretic Power Recovery Slope	For under-frequency loading, frequency increase, when the frequency is higher than the hysteresis point, the power change slope when power is restored.
14	P(U) Curve	Enable P(U) Curve when it is required by local grid standards and requirements.
15	V <sub>n</sub> Voltage	The percentage of actual voltage to the rated voltage at V <sub>n</sub> point, n= 1, 2, 3, 4. For example, setting V <sub>n</sub> Voltage to 90 means V/V <sub>rated</sub> %=90%.
16	V <sub>n</sub> Active Power	The percentage of the output active power to the apparent power at V <sub>n</sub> point, (n= 1, 2, 3, 4). For example, setting <b>V<sub>n</sub> Reactive Power</b> to 48.5 means P/P <sub>rated</sub> %=48.5%.
17	Output Response Mode	Set the active power output response mode. Supports: <ul style="list-style-type: none"> <li>• PT-1 Behavior, realize active scheduling based on the first-order LPF curve within the response time constant.</li> <li>• Gradient Control, realize active scheduling based on the power change slope.</li> </ul>
18	Power Gradient	When the output response mode is set to Gradient Control, active power scheduling is achieved according to the power change gradient.

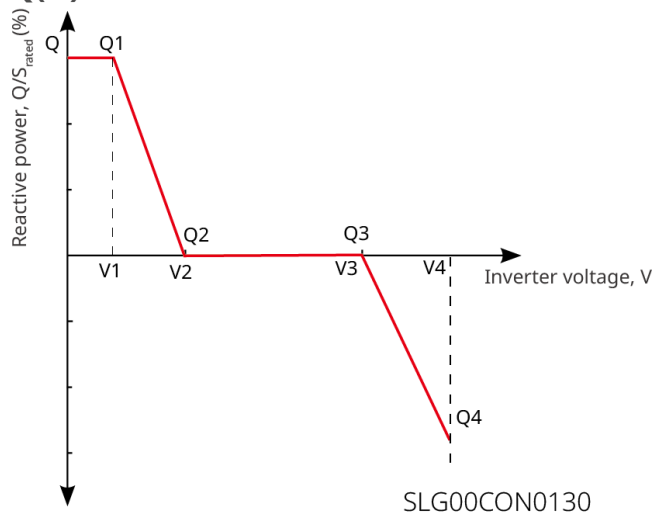
No.	Parameters	Explanation
19	First-order Low-pass Filter Time Parameter	Set the time constant within which the active power changes based on the first order LPF curve when the Output Response Mode is set to be First-order Low-pass Filter Time Parameter.
20	Overload Function Switch	When enabled, the maximum active power output is 1.1 times the rated power; otherwise, the maximum active power output is consistent with the rated power value.

#### 4.5.2.2 Setting the Reactive Power Mode

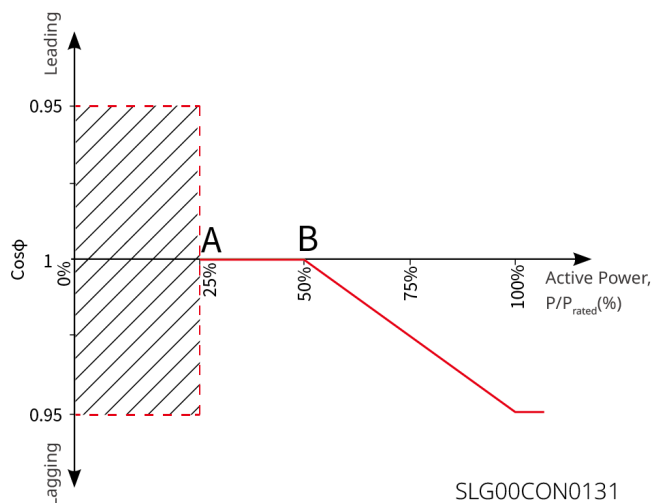
**Step 1 :** Tap **Home > Settings > Advanced Settings > Safety Parameter Setting > Reactive Power Mode Settings** to set the parameters.

**Step 2 :** Set the parameters based on actual needs.

##### Q(U) Curve



##### Cosφ Curve



No.	Parameters	Description
Fix PF		
1	Fix PF	Enable Fix PF when it is required by local grid standards and requirements. After the parameters are set successfully, the power factor remains unchanged during the operation of the inverter.
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.
Fix Q		
1	Fix Q	Enable Fix Q when it is required by local grid standards and requirements.
2	Over-excited/Under-excited	Set the reactive power as inductive or capacitive reactive power based on actual needs and local grid standards and requirements.
3	Reactive Power	Set the ratio of reactive power to apparent power.
Q(U) Curve		
1	Q(U) Curve	Enable Q(U) Curve when it is required by local grid standards and requirements.

No.	Parameters	Description
2	Mode Selection	Set Q(U) curve mode, supporting basic mode and slope mode.
3	Vn Voltage	The percentage of actual voltage to the rated voltage at Vn point, n=1, 2, 3, 4. When set to 90, it means: $V/V_{rated}\% = 90\%$ .
4	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 <b>Vn Reactive Power</b> to 48.5 means $Q/S_{rated}\%=48.5\%$ .
5	Voltage Deadband Width	When Q(U) curve mode is set to slope mode, this parameter defines the voltage deadband range where no reactive power output is required.
6	Over-excitation Slope	(In Q(U) slope mode) Sets the positive or negative slope for reactive power variation during over-voltage conditions.
7	Under-excitation Slope	
8	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 <b>Vn Reactive Power</b> to 48.5 means $Q/S_{rated}\%=48.5\%$ .
9	Q(U) Curve Response Time Constant	The reactive power must reach 95% of the target value within 3 time constants, following a first-order low-pass filter curve.
10	Extended Function	Enable the extended function and configure the corresponding parameters.
11	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.
12	Lock-out Power	
Cosφ(P) Curve		

No.	Parameters	Description
1	Cosφ(P) Curve	Enable Cosφ Curve when it is required by local grid standards and requirements.
2	Mode Selection	Set cosφ(P) Curve Mode and support basic mode and slope mode configurations.
3	N-point Power	The percentage of inverter output active power relative to rated power at the N-point. N=A, B, C, D, E.
4	N-point cosφ Value	N-point Power Factor N=A, B, C, D, E.
5	Over-excitation Slope	When cosφ(P) curve mode is set to slope mode, configures the power variation slope as either positive or negative.
6	Under-excitation Slope	
7	N-point Power	The percentage of inverter output active power relative to rated power at the N-point. N=A, B, C.
8	N-point cosφ Value	N-point Power Factor N=A, B, C.
9	cosφ(P) Curve Response Time Constant	The reactive power must reach 95% of the target value within 3 time constants, following a first-order low-pass filter curve.
10	Extended Function	Enable the extended function and configure the corresponding parameters.
11	Lock-in Voltage	When the grid voltage is between Lock-in Voltage and Lock-out Voltage, the voltage meets Cosφ curve requirements.
12	Lock-out Voltage	
Q(P) Curve		
1	Q(P) Curve Function	Enable Q(P) Curve when it is required by local grid standards and requirements.
2	Mode Selection	Set Q(P) curve mode, supporting basic mode and slope mode.

No.	Parameters	Description
3	Pn-point 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 to 90 means $Q/Prated\%=90\%$ .
4	Pn-point Reactive Power	The percentage of the output active power to the rated power at Pn point, n=1, 2, 3, 4, 5, 6. For example, When set to 90, it means: $P/Prated\% = 90\%$ .
5	Over-excitation Slope	When the Q(P) curve mode is set to slope mode, configure the power variation slope as either a positive or negative value.
6	Under-excitation Slope	
7	Pn-point Power	Ratio of reactive power to rated power at Pn points (n=1, 2, 3). For example, setting to 90 means $Q/Prated\%=90\%$ .
8	Pn-point Reactive Power	Ratio of active power to rated power at Pn points (n=1, 2, 3). For example, When set to 90, it means: $P/Prated\% = 90\%$ .
9	Time Constant	The reactive power must reach 95% of the target value within 3 time constants, following a first-order low-pass filter curve.

#### 4.5.2.3 Setting Protection Parameters

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

**Step 2:** Set the parameters based on actual needs.

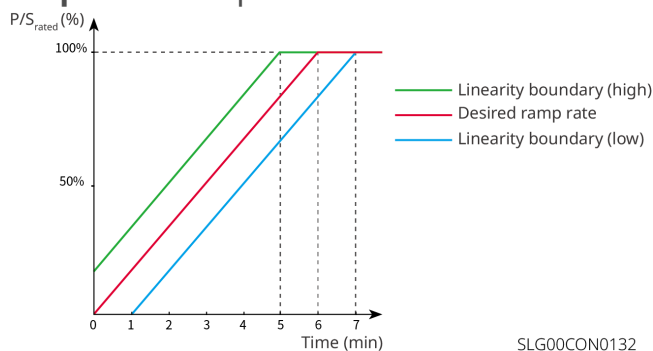
No.	Parameters	Description
1	OV Stage n Trip Value	Set the grid overvoltage protection threshold value, n=1,2,3,4.

No.	Parameters	Description
2	OV Stage n Trip Time	Set the grid overvoltage protection tripping time, n=1,2,3,4.
3	UV Stage n Trip Value	Set the grid undervoltage protection threshold value, n=1,2,3,4.
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.
7	OF Stage n Trip Value	Set the grid overfrequency triggering n-th order protection point, n=1,2,3,4.
8	OF Stage n Trip Time	Set the grid overfrequency trigger n-th order trip time, n=1,2,3,4.
9	UF Stage n Trip Value	Set the grid underfrequency triggering n-th order protection point, n=1,2,3,4.
10	UF Stage n Trip Time	Set the grid underfrequency trigger n-th order trip time, n=1,2,3,4.

#### 4.5.2.4 Setting Connection Parameters

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

**Step 2:** Set the parameters based on actual needs.



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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 <b>Upper Voltage</b> .
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 <b>Lower Voltage</b> .
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 <b>Upper Frequency</b> .
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 <b>Lower Frequency</b> .
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.
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.
Reconnection		
8	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 <b>Upper Voltage</b> .
9	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 <b>Lower Voltage</b> .

No.	Parameters	Description
10	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 <b>Upper Frequency</b> .
11	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 <b>Lower Frequency</b> .
12	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.
13	Reconnection Gradient	Enable the start up power slope.
14	Reconnection 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 Reconnection Gradient to 10 means the reconnect slope is 10%P/Srated/min.

#### 4.5.2.5 Setting Voltage Ride Through Parameters

**Step 1 :** Tap **Home > Settings > Advanced Settings > Safety Parameter Settings > 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. n=1,2,3,4,5,6,7.
2	UVn Time	The ride through time at UVn point during LVRT. n=1,2,3,4,5,6,7

No.	Parameters	Description
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	Slope K2	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		
1	OVn Voltage	The ratio of the ride through voltage to the rated voltage at OVn point during HVRT. n=1,2,3,4,5,6,7。
2	OVn Time	The ride through time at OVn point during HVRT. n=1,2,3,4,5,6,7。
3	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.
4	Exit High Crossing Threshold	
5	Slope K2	K-factor for reactive power during HVRT.
6	Zero Current Mode	The system outputs zero current during HVRT.
7	Entry Threshold	Set the entry threshold of zero current mode.

#### 4.5.2.6 Setting Frequency Ride Through Parameters

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

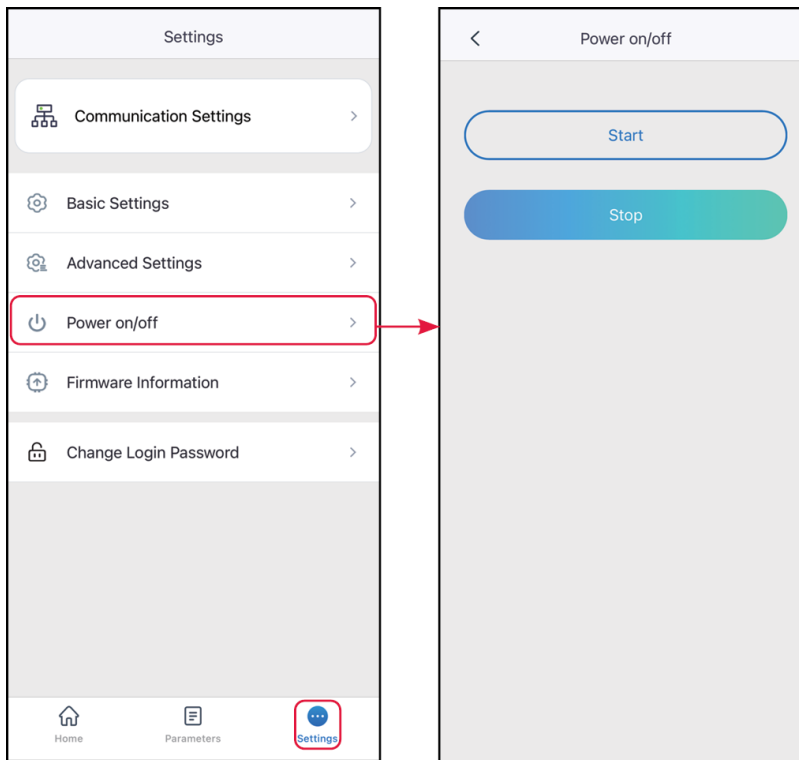
**Step 2 :** Set the parameters based on actual needs.

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

## 4.6 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.



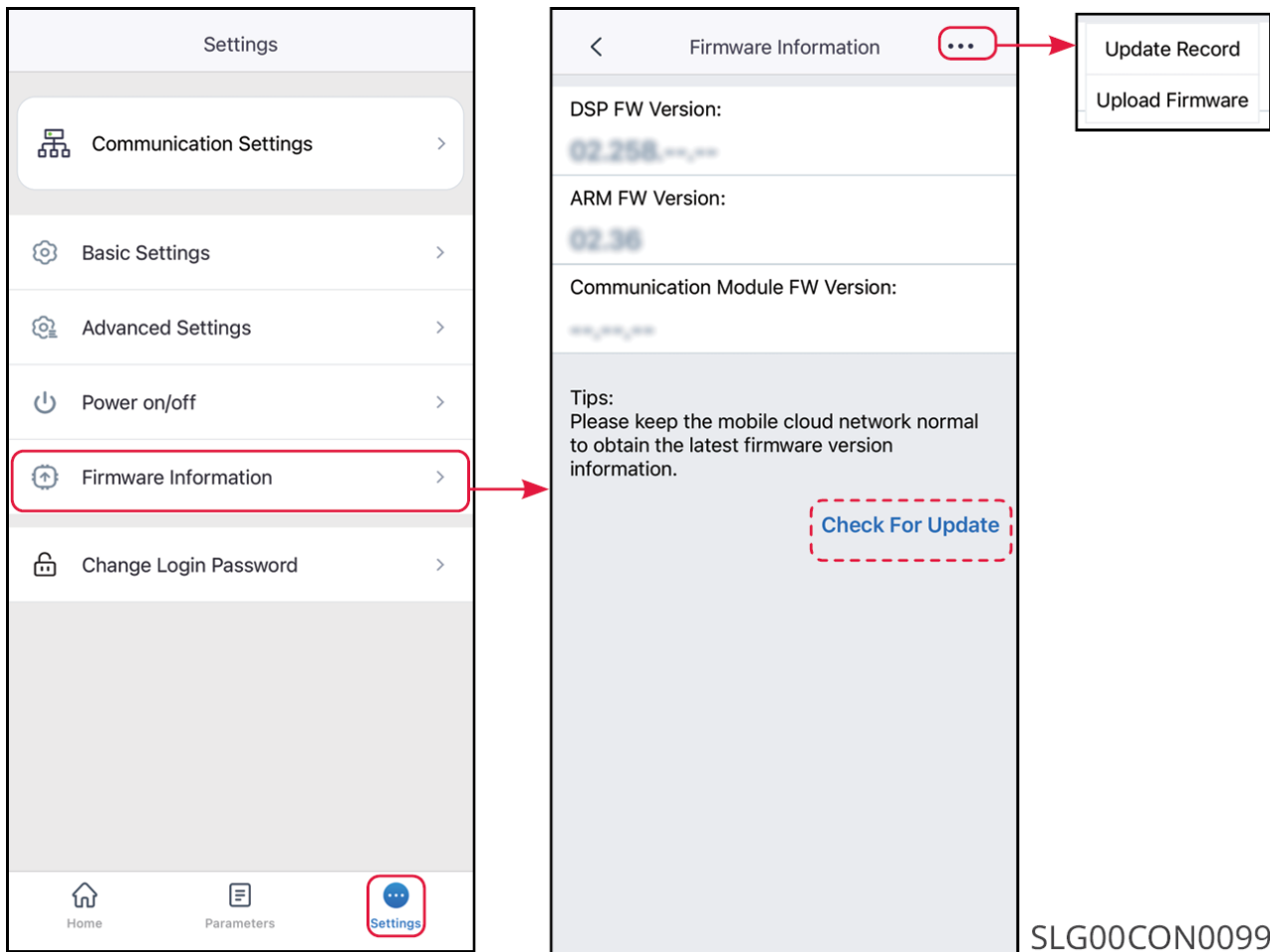
SLG00CON0098

## 4.7 Checking Firmware Information/Upgrading Firmware Version

Upgrade the DSP version and ARM version of the inverter. Some devices do not support upgrading the firmware version through SolarGo app.

### NOTICE

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

### 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.

## 4.8 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.

<


Change Login Password

Save

Please enter the new password



Please enter new password again



Note: 8-16 characters, need a combination of numbers and uppercase or lowercase letters (0-9, a-z, A-Z)

SLG00CON0088



## 5 Setting AC Charger Parameters

### 5.1 Connecting the 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.

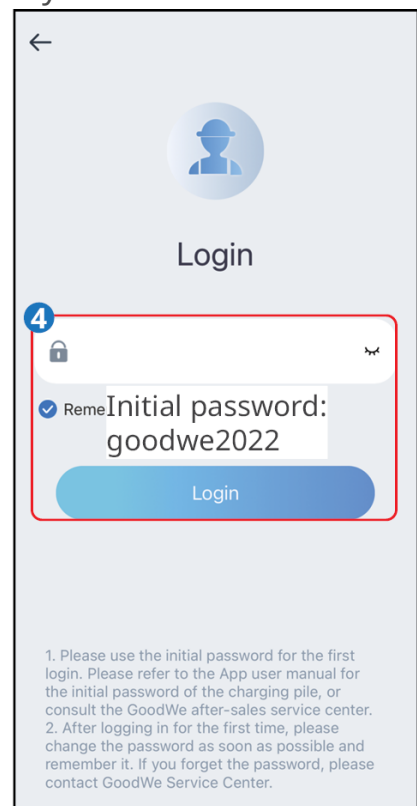
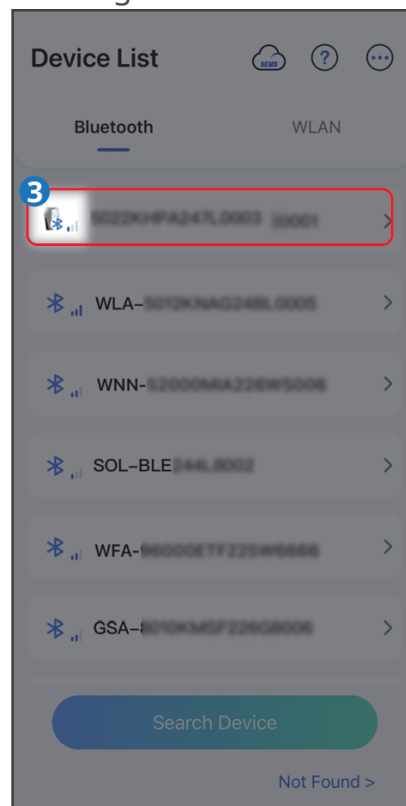
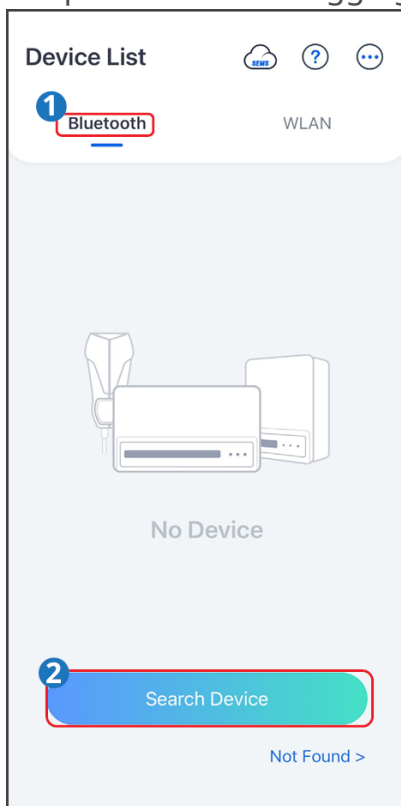
**Step 1 :** Ensure that the charger is power on and works properly.

**Step 2 :** Select **Bluetooth** tab on the SolarGo app homepage.

**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.

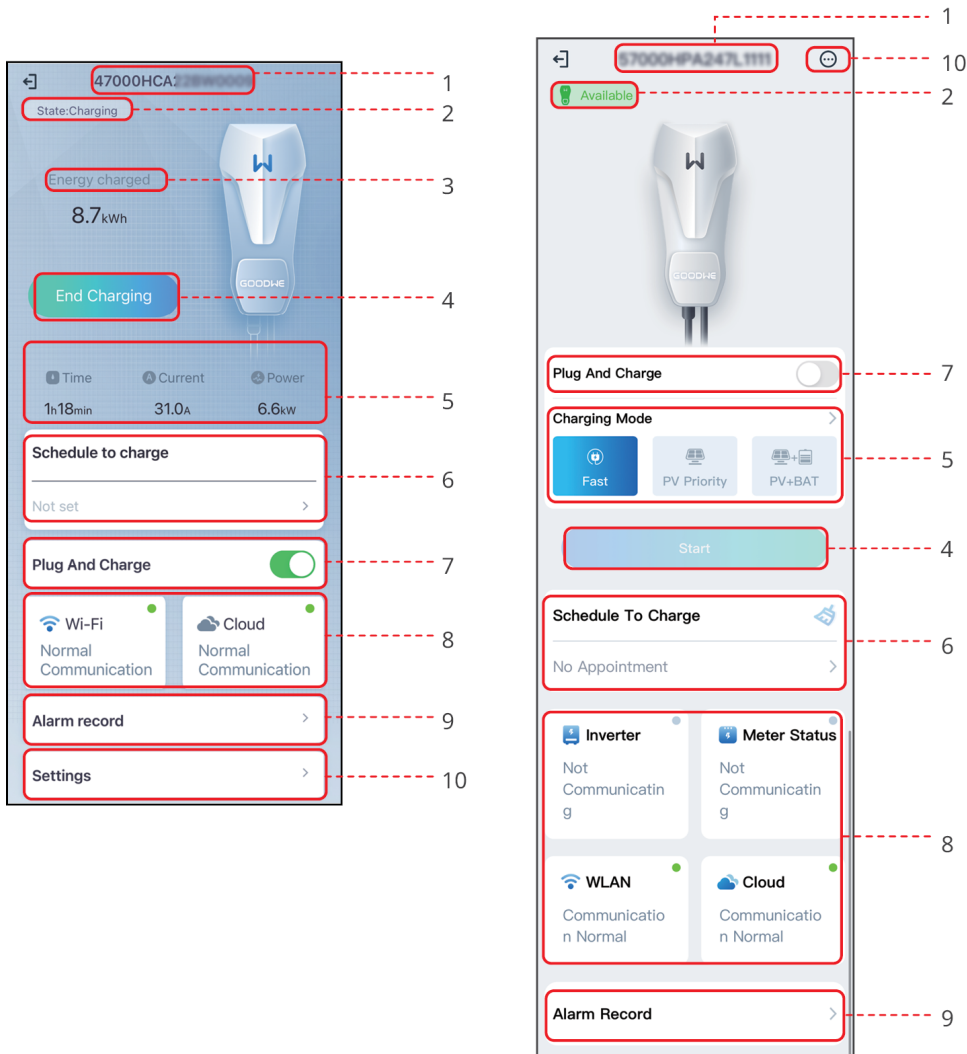
**Step 4 :** Enter the login password to enter the device details page. Initial password: goodwe2022.

**Step 5 (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

## 5.2 GUI Introductions to AC Charger



SLG00CON0102

No.	Name/Icon	Description
1	Serial Number	Serial number of the connected inverter.
2	Device Status	Indicates status of the charger, such as Idle (plugged),Charing, etc.

No.	Name/Icon	Description
3	Charging Status	<ul style="list-style-type: none"> <li>Charging status, such as The charging gun is plugged and ready to charge, Energy Charged ***kWh, etc.</li> <li>Displays information including:charged energy, time, current, and power during charging.</li> </ul>
4	Start/ End Charging	<ul style="list-style-type: none"> <li>Start Charging: Start charging the EV.</li> <li>End Charging: Stop charging the EV.</li> </ul>
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	<ul style="list-style-type: none"> <li>Inverter: Check whether the charger and inverter are communicating normally.</li> <li>Electricity meter: Check whether the charger and the electricity meter are communicating normally.</li> <li>WiFi: whether the charger is communicating with the router.</li> <li>Cloud: whether the charger is communicating with the Cloud.</li> </ul>
9	Alarm Record	Check alarms.
10	Settings	Set the parameters of the charger

## 5.3 Setting the Charger (HCA Series)

### 5.3.1 Setting Charging Mode

Set the Charging Mode and decide whether to enable Schedule to Charge or Plug

And Charge before charging the EV.

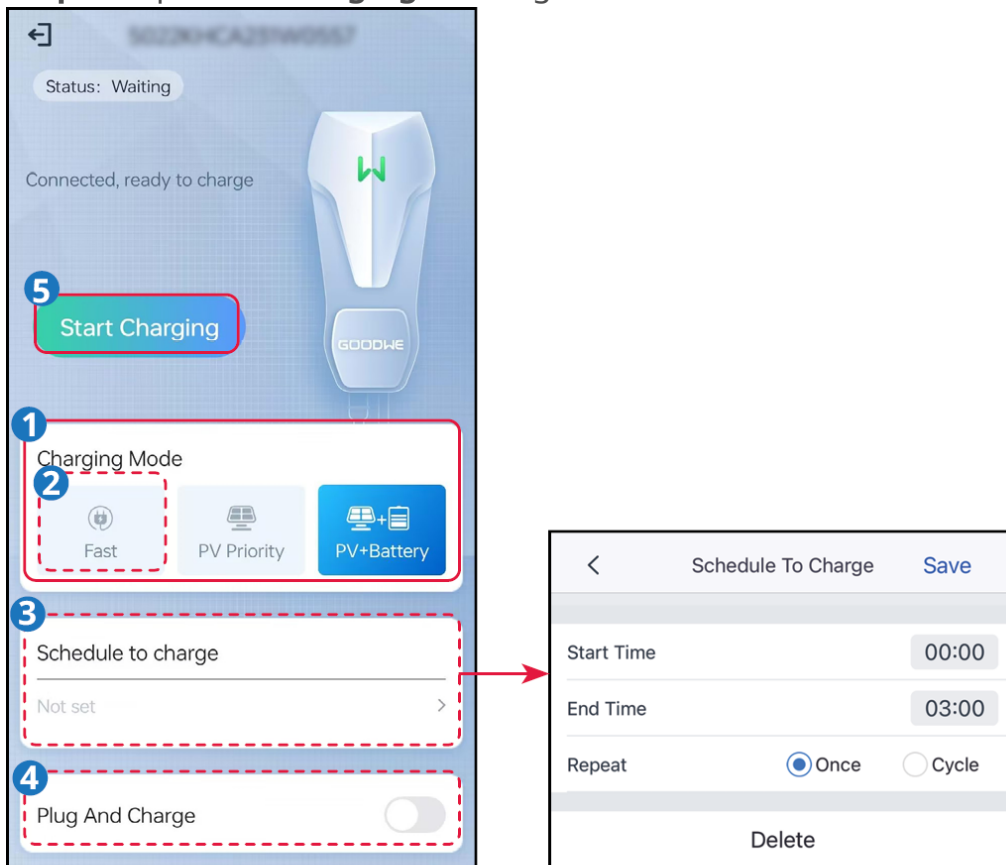
**Step 1:** Select **Fast**, **PV priority** or **PV + Battery** to set **Charging Mode**.

**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	<p>Select the charging mode for EV.</p> <ul style="list-style-type: none"> <li>• Fast: Charge the EV at the rated power of the charger.</li> <li>• 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.</li> <li>• 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.</li> </ul>
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	<p>Start charging the EV using the charger when all the settings are completed.</p> <ul style="list-style-type: none"> <li>• Start Charging: Start charging the EV.</li> <li>• End Charging: Stop charging the EV.</li> </ul>

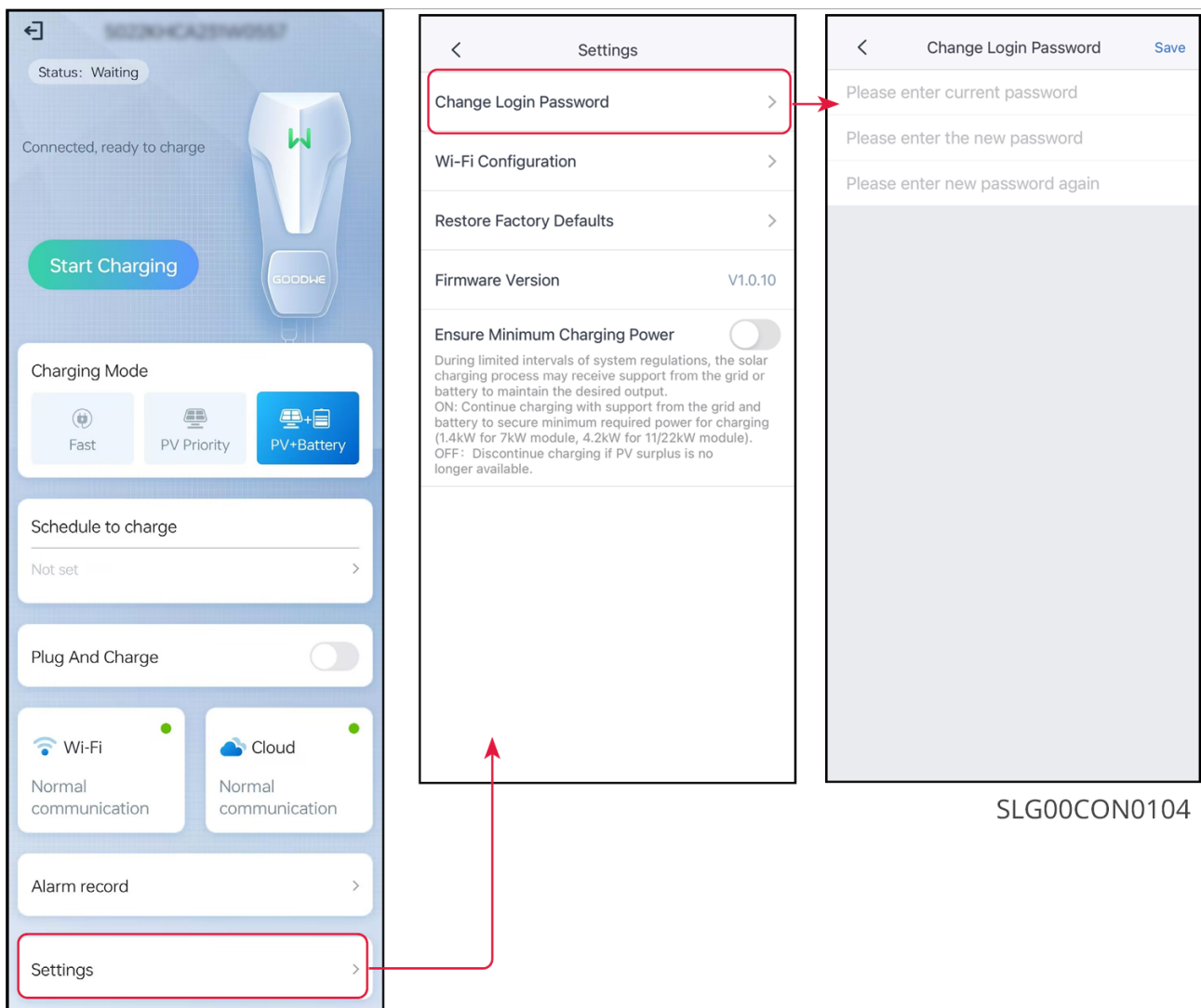
### 5.3.2 Changing the Password

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.

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



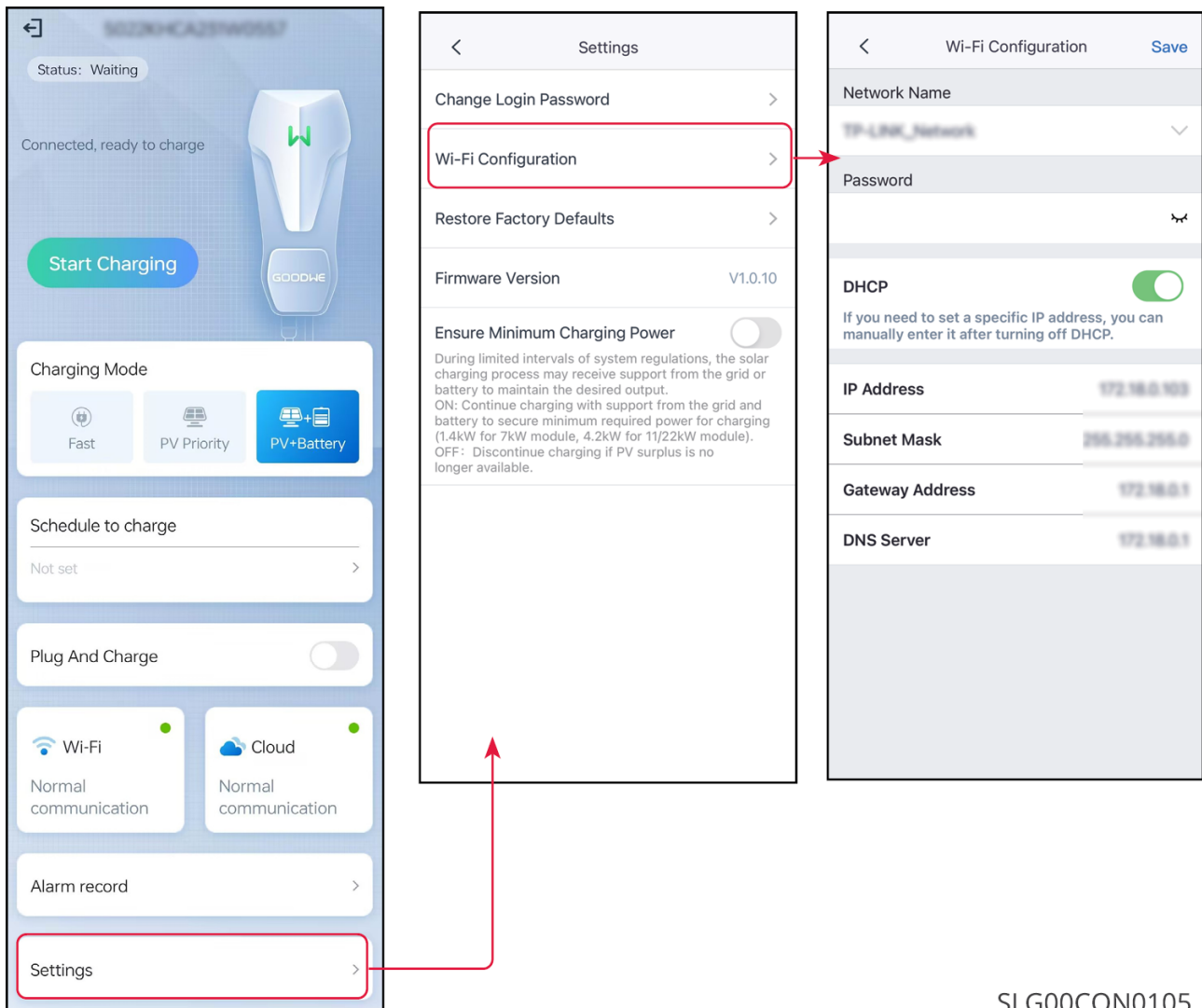
### 5.3.3 Configuring WiFi

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.



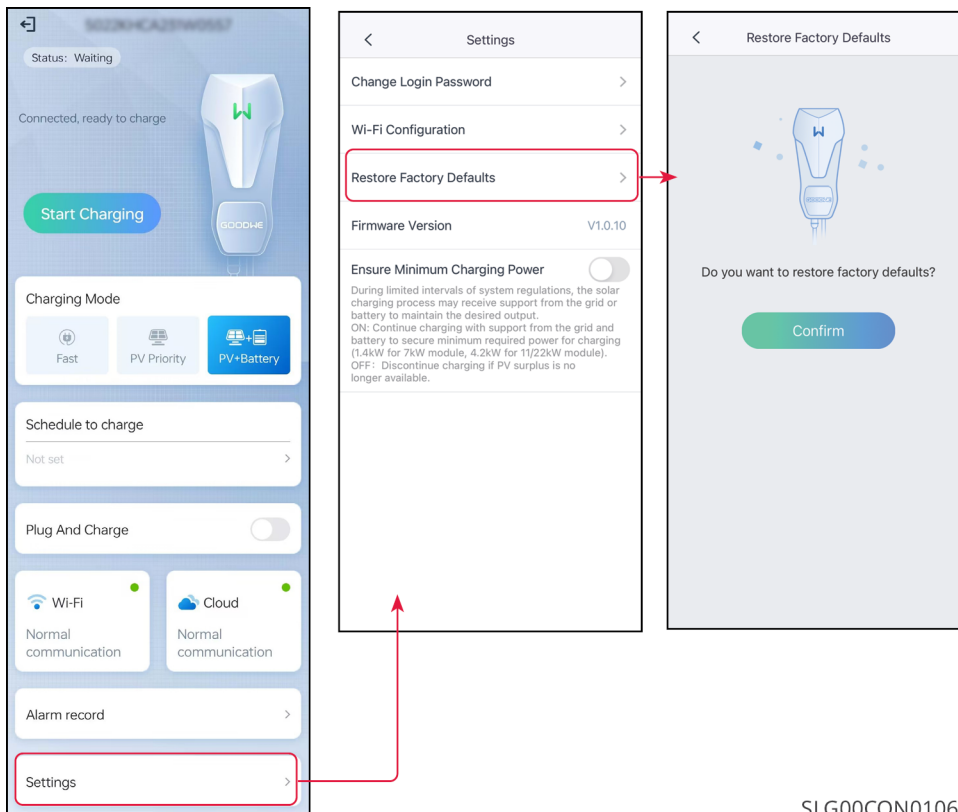
SLG00CON0105

### 5.3.4 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

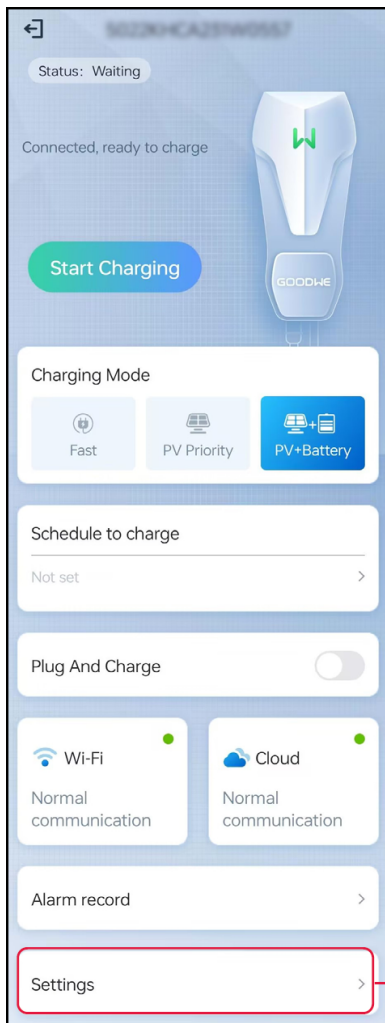
### 5.3.5 Setting the Minimum Charging Power

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

## 5.4 Setting the Charger (HCA G2 Series)

### 5.4.1 Setting the Charger

## 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):** To reserve charging in advance. Tap **Schedule To Charge**. 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.

Schedule To Charge
Save

Start Time		End Time	
21	57	21	57
22	58	22	58
23	59	23	59
00	00	00	00
01	01	01	01
02	02	02	02
03	03	03	03

Charging Mode

Fast
PV Priority
PV+BAT

Repeat

Once
Everyday

Always Re-initiate

ON: Use maximum power to draw power from the grid within the selected period. If it has been charged using photovoltaic/energy storage in the previous period, it will not start again. If possible, use the off-peak charging intermittent mode every time and try to restart charging at the charging pile at night. The success of the restart time depends on the car.

57000H4PA247L1111

Available

Plug And Charge

Charging Mode

Fast
PV Priority
PV+BAT

Start

Schedule To Charge

No Appointment

Inverter

Not Communicating

Meter Status

Not Communicating

Charging Mode

Fast
PV Priority
PV+BAT

Power

0.0
0.0

Range[1.4,7.0]kW

The EV is charging at set power. Charging power will be lower than setting if Dynamic Load Control is present and running.

SOC

0
0

Range[0,100]%

When Residential Battery's SOC  $\leq$  set SOC, the Battery will stop charging the EV charger.

Max. Energy

0.0
0.0

Unit:kWh

Approximately Equal To0.0km

When the set maximum charging level is reached, the electric vehicle will stop charging.

SLG00CON108

No.	Parameters	Description
	Fast:	The charger uses electricity from power grid, PV, or batteries to charge electric vehicles. The output power of the charger defaults to the nominal output power of the charger.
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 $\leq$ set SOC.
3	Max. Energy	The charger will stop charging the EV when the Max. Energy is reached.

No.	Parameters	Description
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 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 $\leq$ 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.

## 5.4.2 Setting the WiFi Communication

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.

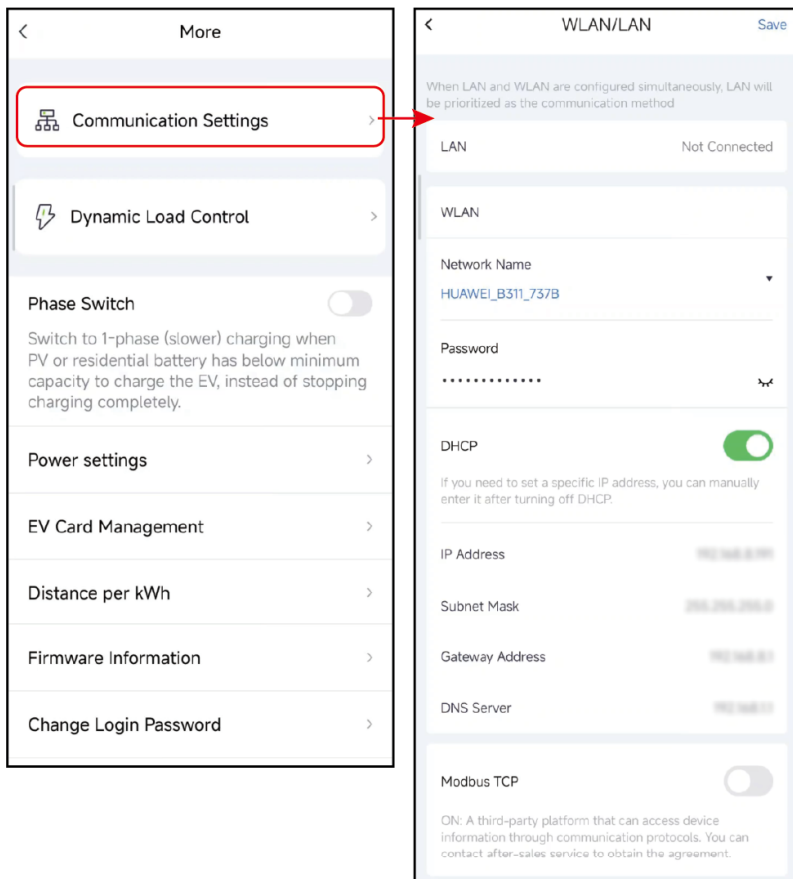
**Step 2:** Tap **Network Name** and select the right network. Enter the Password of the selected network.

**Step 3:** Enable or disable **DHCP** based on actual needs.

**Step 4 :** Configure IP Address, Subnet Mask, Gateway Address, and DNS Server according to the router or switch information when DHCP is disabled.

**Step 5:** (Optional) Enable Modbus TCP if third-party monitoring is required.

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



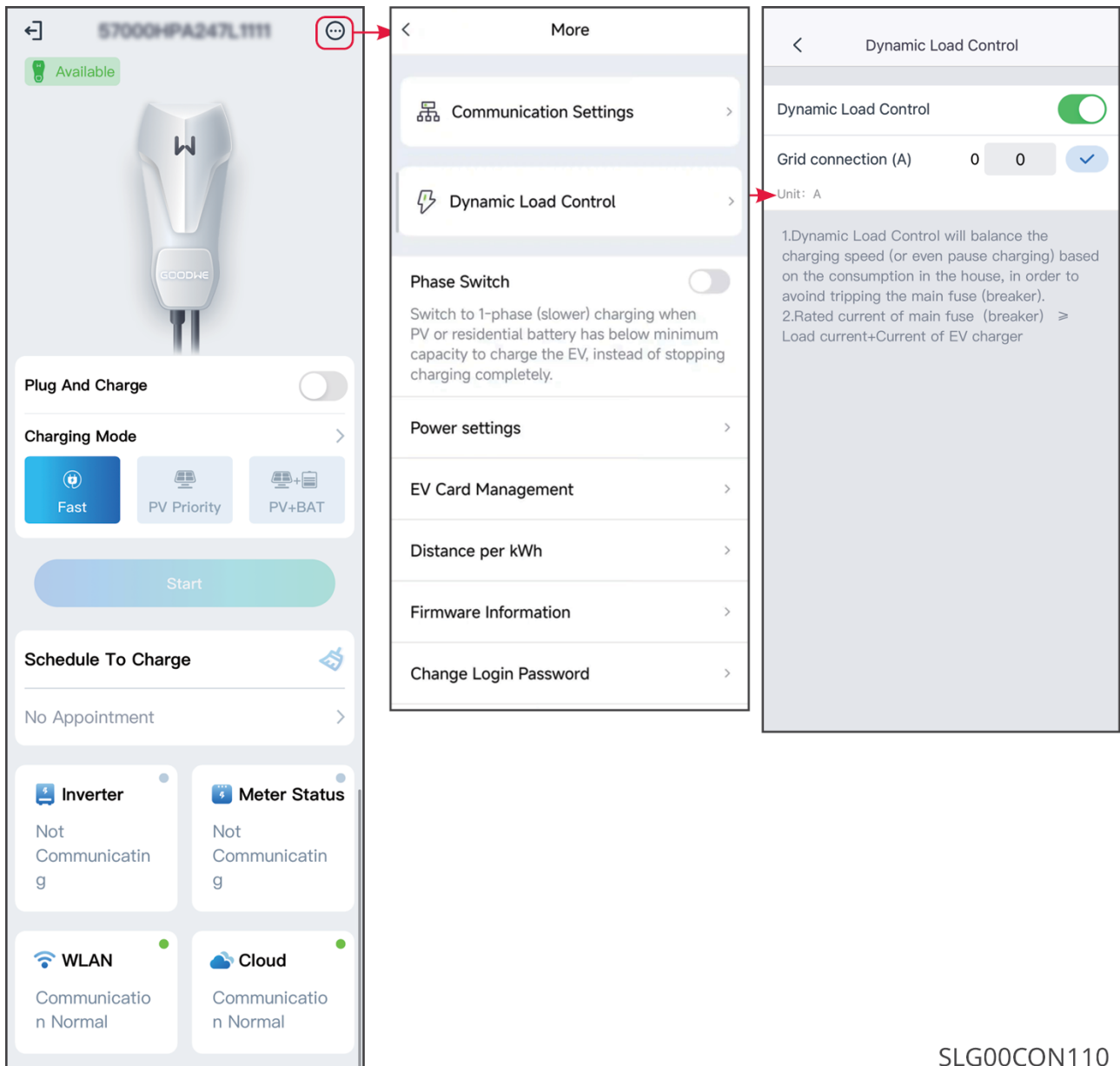
SLG00CON0109

### 5.4.3 Setting 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

## 5.4.4 Switching Single-phase and Three-phase Modes

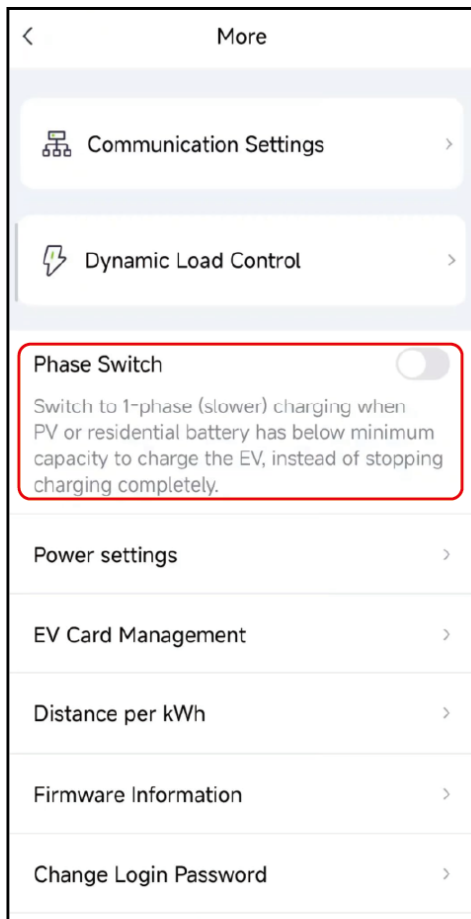
### NOTICE

- Only three-phase charger support single-three-phase switching function.
- The waiting time for single-phase three-phase switching is approximately 3 minutes.

**Step 1:** Tap  and enter the settings interface.

**Step 2:** Turn on or off the single-phase/three-phase switching function according to actual needs .

- On: When the input power is lower than 4.2, the charger automatically switches to single-phase charging mode to avoid buying electricity from the grid or shutting down. The charging power in single-phase charging mode is 1.4KW.
- OFF: The EV charger is in three-phase charging state.

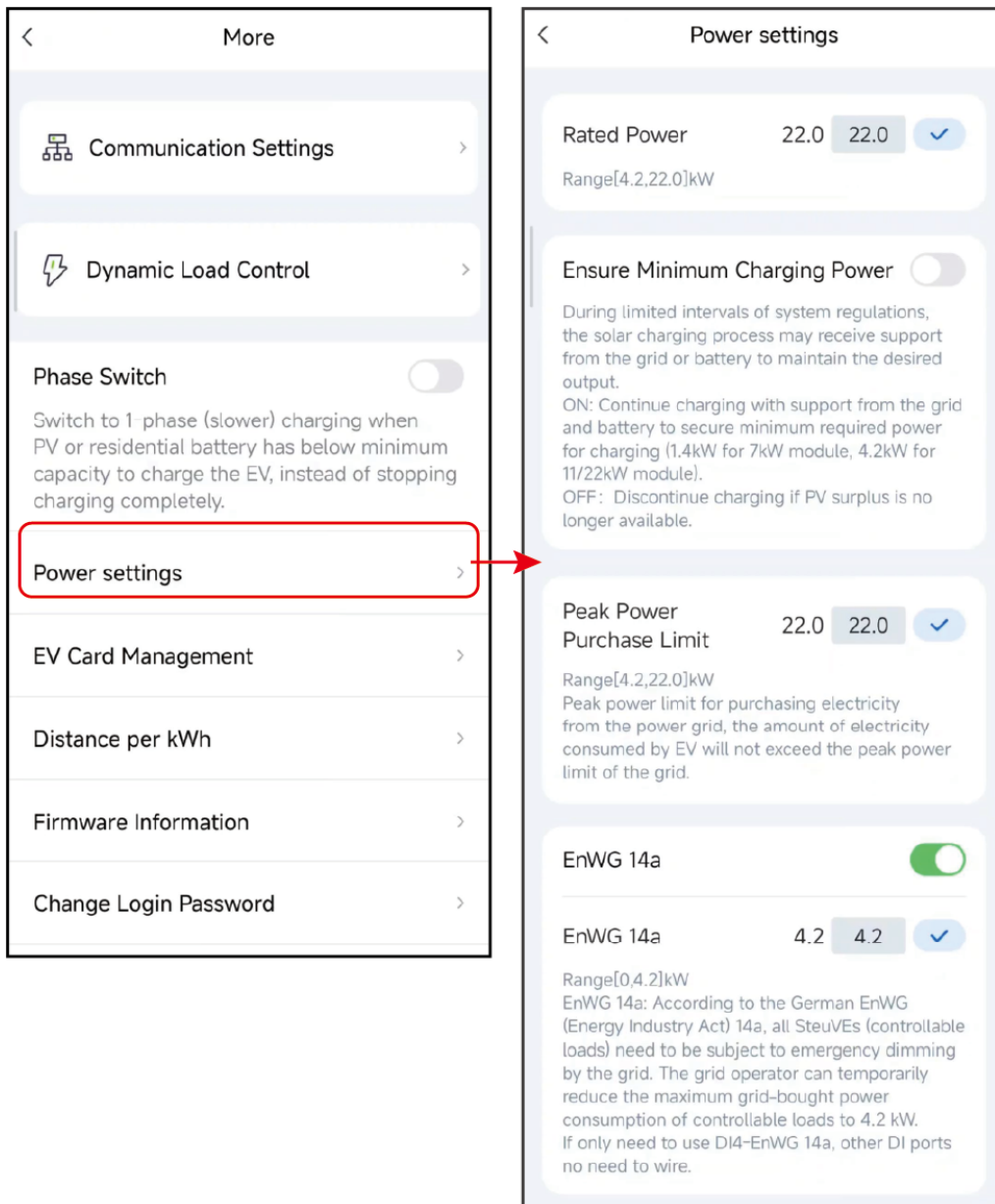


SLG00CON0111

### 5.4.5 Setting the Power Parameters

**Step 1:** Tap  > **Power Setting** to enter Settings Interface.

**Step 2:** Setting Power Parameters accordin to actual needs.



SLG00CON0112

No.	Parameters	Description
1	Restrict Output Power	Set the output power upper limit.



No.	Parameters	Description
2	Ensure minimum charging power	In <b>PV charging</b> and <b>Pv+battery</b> charging modes, after the charger is started, when the energy of the PV or battery is insufficient, if the minimum charging power is turned on, the grid or battery will supplement the energy to maintain the minimum power required for charging.
3	Peak limit for electricity purchase	The maximum power that can be purchased from the grid.
4	EnWG 14a	According to the grid standards of some countries or regions, the EnWG 14a function needs to be enabled to ensure that the power purchased by a single device from the grid does not exceed 4.2kW. Set the electricity purchase limit value according to actual needs.

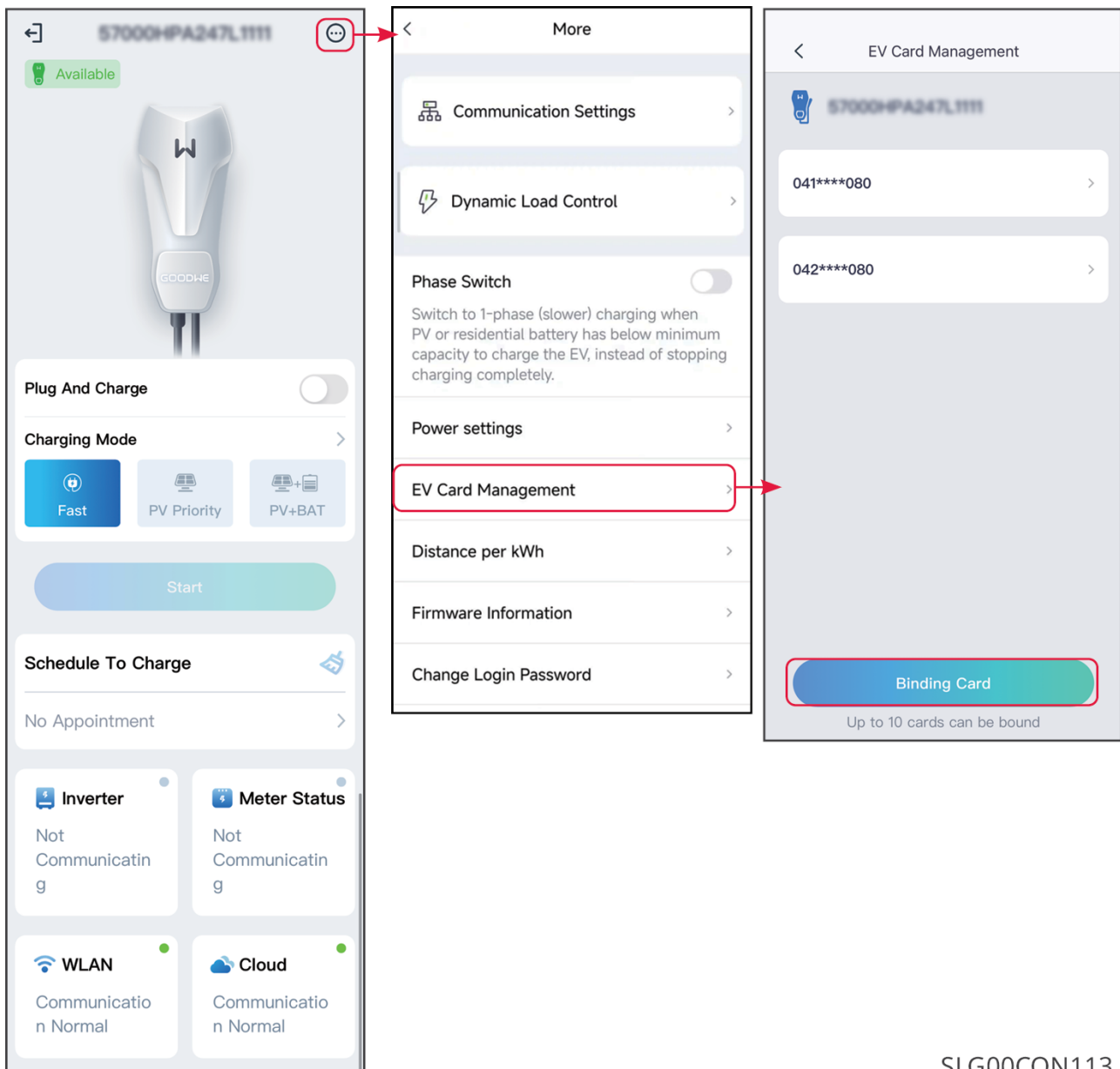
### 5.4.6 Managing the Charger Card

#### NOTICE

- After binding the card, tap the card to start charging the EV.
- Each Charger can be bound to up to 10 RFID cards.

**Step 1:** Tap  > **EV Card Management**.

**Step 2:** Add or delete RFID cards according to actual needs.



SLG00CON113

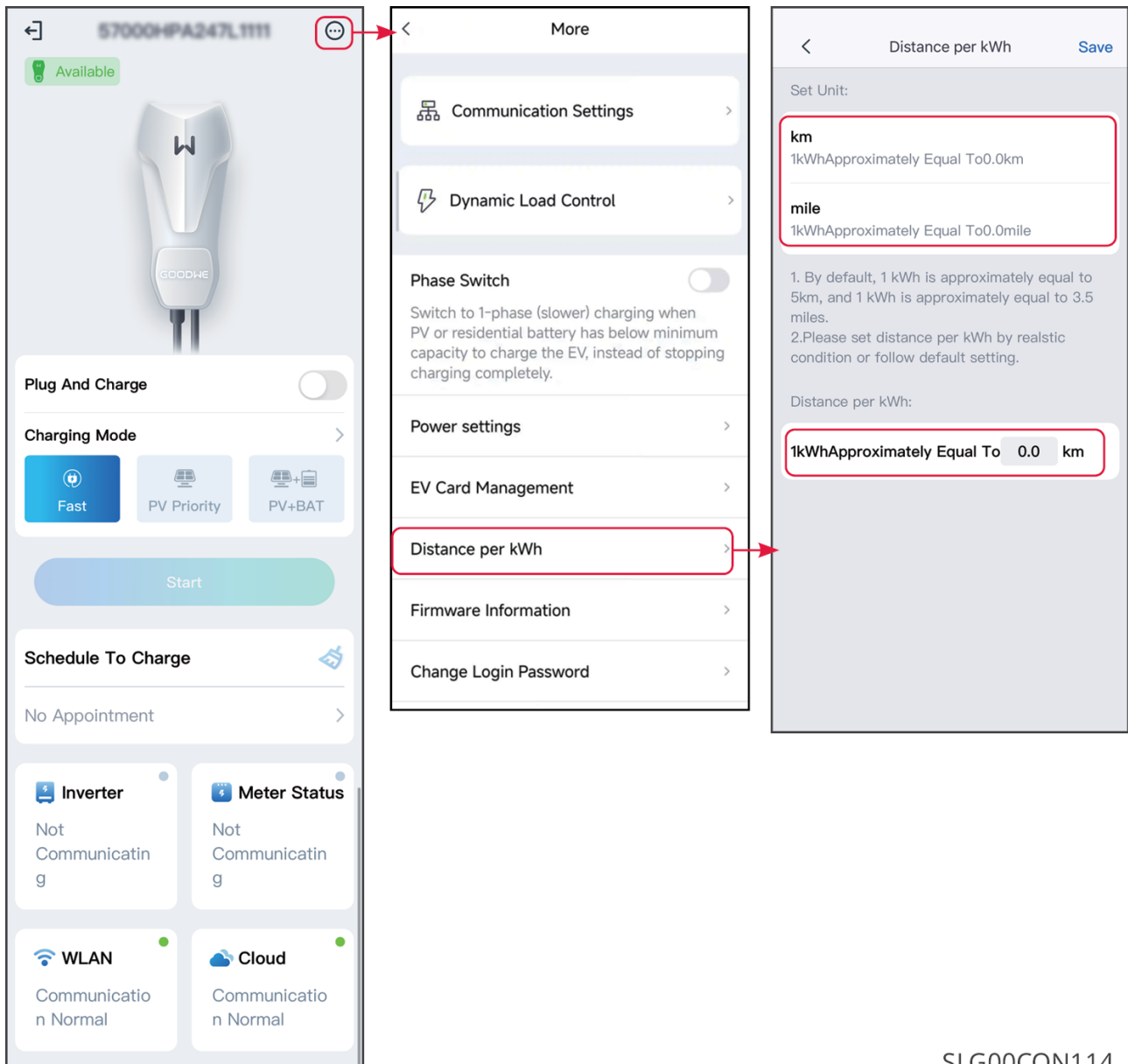
## 5.4.7 Setting the Distance per kWh

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.



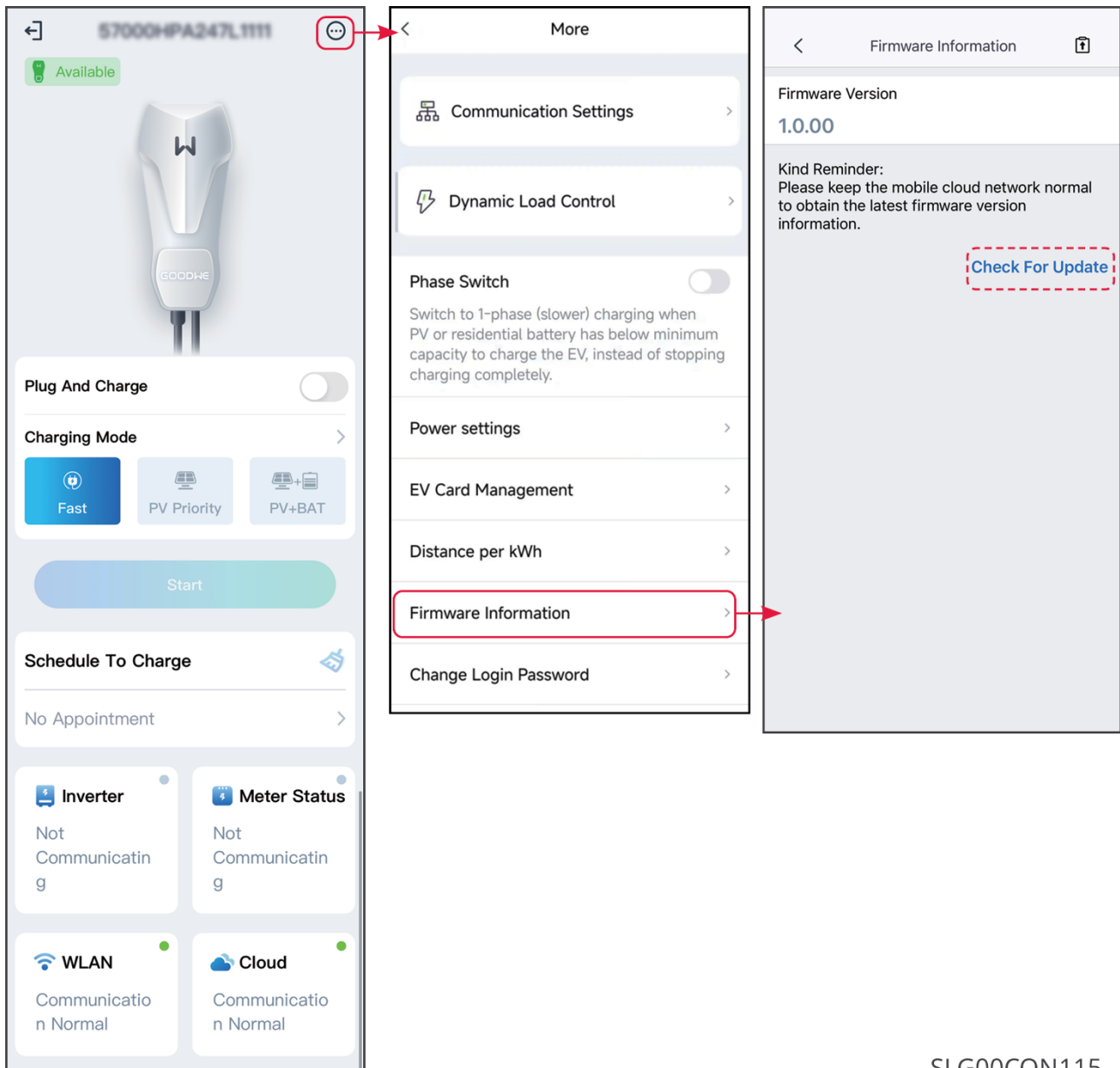
SLG00CON114

## 5.4.8 Checking Firmware Information/Upgrading Firmware Version

Through the firmware information, you can view or upgrade the firmware version of the charger.

**Step 1:** Tap  > **Firmware Information** to enter the firmware information query interface.

**Step 2:** (Optional) Tap Check For Update, to check whether there is a latest version to be updated. Tap follow prompts to complete the upgrade.



SLG00CON115

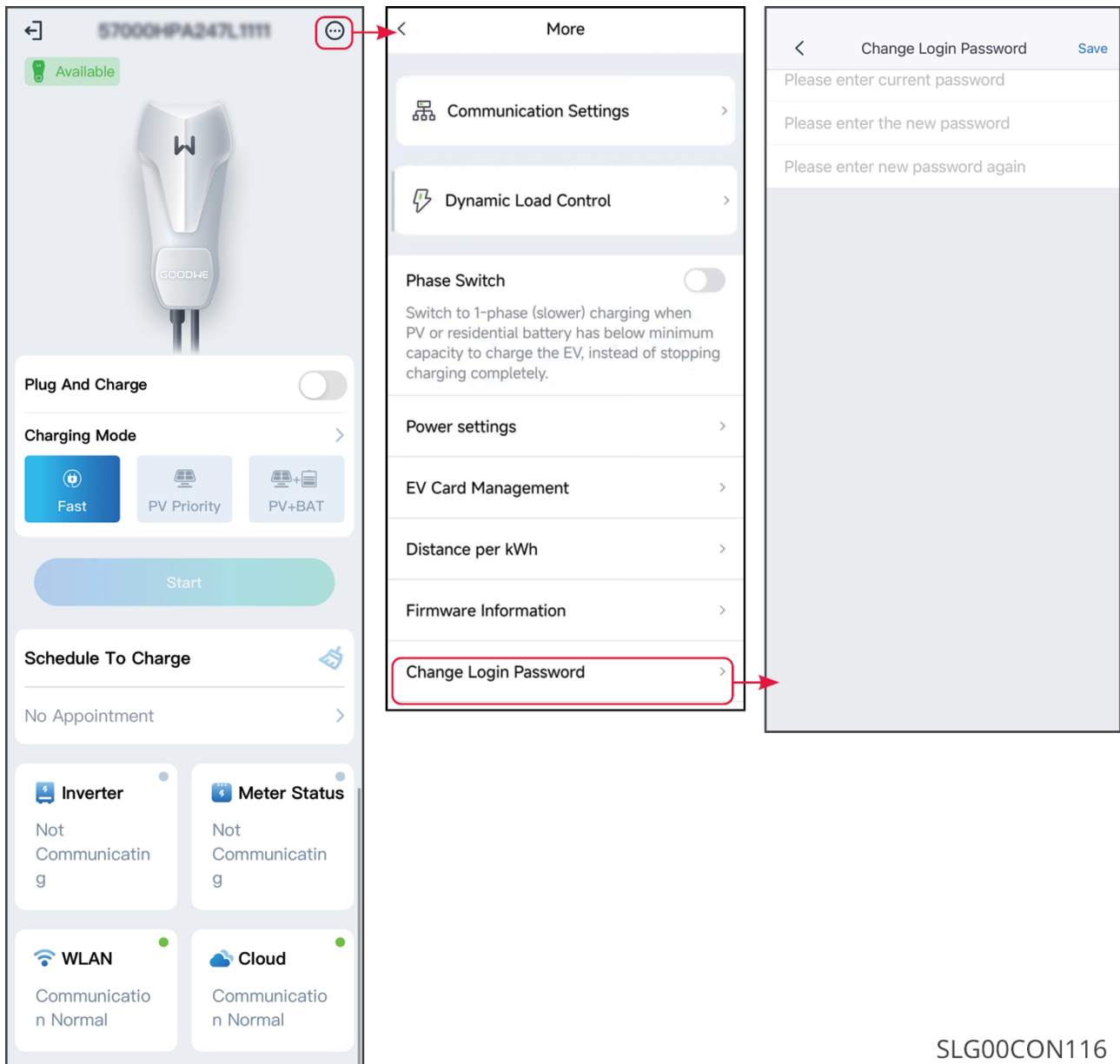
## 5.4.9 Changing the Password

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

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

Step 2: Enter the current password and new password.

Step 3: Tap Save to complete the settings.



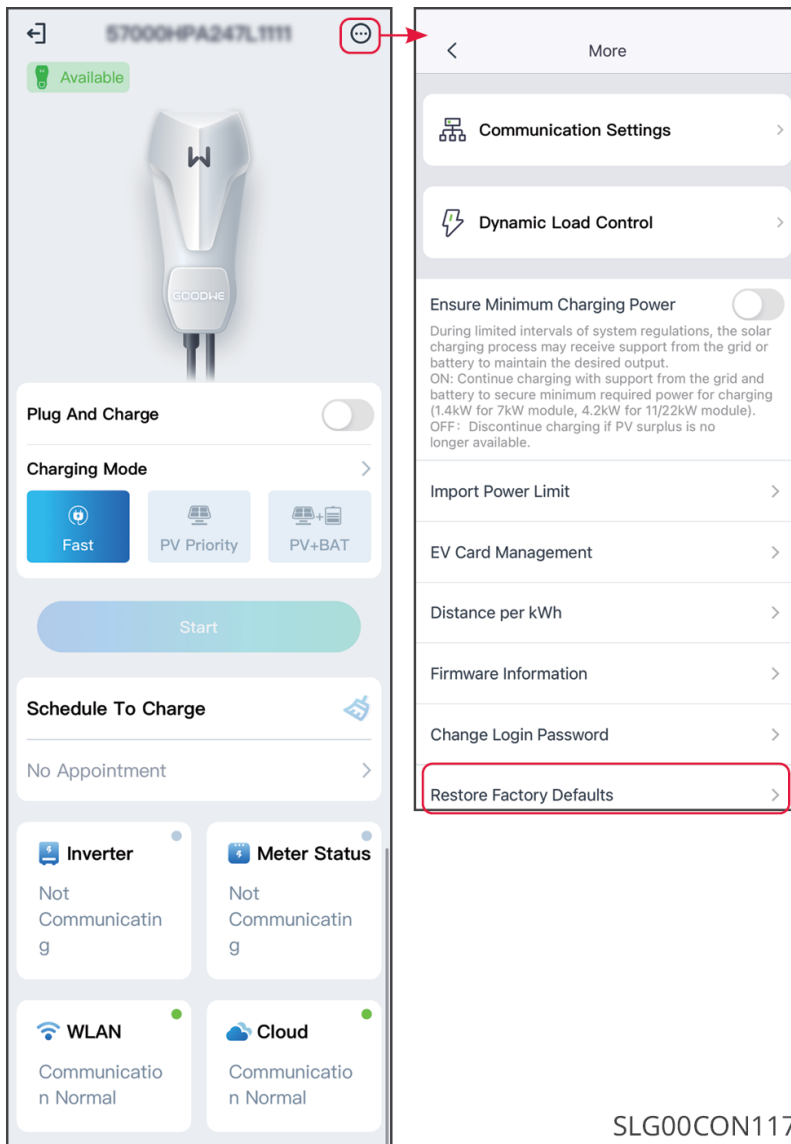
SLG00CON116

### 5.4.10 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.



SLG00CON117

## 6 Troubleshooting

### 6.1 App Troubleshooting

No.	Fault	Cause	Solutions
1	Cannot install the app	The smart phone operating system version is too low. The smart phone prevents installing the app.	Upgrade the phone operating system. 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.	Make sure that the WiFi module works normally. Refresh the device list. If the signal is still missing, restart the app.

### 6.2 Inverter Alarms

No.	Alarm	Causes	Solutions
1	SPI Fail	<ul style="list-style-type: none"> <li>The exception is caused by an external fault.</li> <li>Control board of the inverter cannot work properly.</li> </ul>	<ul style="list-style-type: none"> <li>Restart the inverter. If the inverter recovers, the problem is accidental and does not affect system working.</li> <li>If the problem persists, contact the after-sales service.</li> </ul>
2	EEPROM R/W Fail	<ul style="list-style-type: none"> <li>The exception is caused by an external fault.</li> <li>Control board of the inverter cannot work properly.</li> </ul>	<ul style="list-style-type: none"> <li>Restart the inverter. If the inverter recovers, the problem is accidental and does not affect system working.</li> <li>If the problem persists, contact the after-sales service.</li> </ul>
3	Fac Fail	<ul style="list-style-type: none"> <li>Wrong safety code.</li> <li>Unstable grid frequency.</li> </ul>	<ul style="list-style-type: none"> <li>Check the safety code. If not, turn off the AC power supply, change the safety settings, and then reconnect.</li> <li>Check whether the AC frequency(Fac) is within the normal range.</li> <li>If the problem occurs occasionally, the utility grid may be abnormal temporarily.</li> </ul>
4	AFCI Fault	<ul style="list-style-type: none"> <li>The PV string cables are in poor contact.</li> <li>The insulation between the PV string and ground is abnormal.</li> </ul>	<ul style="list-style-type: none"> <li>Check whether the PV cables are connected poorly.</li> <li>If the problem persists, contact the after-sales service.</li> </ul>



No.	Alarm	Causes	Solutions
5	Night SPS Fault	The equipment cannot work properly.	<ul style="list-style-type: none"> <li>Restart the equipment.</li> <li>Upgrade the software version to solve the problem.</li> </ul>
6	L-PE Fail	The live wire of the inverter output terminal is connected improperly.	<ul style="list-style-type: none"> <li>Check the wiring of the grid.</li> <li>If the problem persists, contact the after-sales service.</li> </ul>
7	Relay Chk Fail	<ul style="list-style-type: none"> <li>The relay is abnormal or short-circuited.</li> <li>The control circuit is abnormal.</li> <li>The AC cable is connected improperly, like a virtual connection or short circuit.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>Restart the equipment.</li> </ul>
8	N-PE Fail	<ul style="list-style-type: none"> <li>The N and PE cables are connected improperly.</li> <li>The N wire of the inverter output terminal is connected improperly.</li> </ul>	<ul style="list-style-type: none"> <li>Make sure that the N and PE cables are connected correctly.</li> <li>Make sure that the output cable is connected correctly.</li> <li>If the problem persists, contact the after-sales service.</li> </ul>
9	ARC Fail-HW	The power limit function is abnormal. (For Australia)	<ul style="list-style-type: none"> <li>Make sure that the grid and smart meter are connected correctly.</li> <li>If the problem persists, contact the after-sales service.</li> </ul>

No.	Alarm	Causes	Solutions
10	PV Reverse Fault	The PV strings are connected reversely.	<ul style="list-style-type: none"> <li>• Make sure that the PV strings are connected correctly.</li> <li>• If the problem persists, contact the after-sales service.</li> </ul>
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.	<ul style="list-style-type: none"> <li>• Restart the inverter. If the inverter recovers, the problem is accidental and does not affect system working.</li> <li>• If the problem persists, contact the after-sales service.</li> </ul>
14	Isolation Fail	<ul style="list-style-type: none"> <li>• The PV panels are connected improperly.</li> <li>• The DC cable is broken.</li> <li>• The N and PE cables are connected improperly.</li> <li>• The system is in a moist environment like rainy days, early morning or sunset.</li> </ul>	<ul style="list-style-type: none"> <li>• Disconnect and connect the PV strings in turn to find the one caused error.</li> <li>• Check whether the DC cable is broken.</li> <li>• 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.</li> <li>• Make sure that the PV modules are grounded properly.</li> </ul>

No.	Alarm	Causes	Solutions
15	Vac Fail	<ul style="list-style-type: none"> <li>• Wrong safety code.</li> <li>• Unstable grid frequency.</li> <li>• Improper AC cable specifications, like too long or too thin.</li> <li>• The AC cable is connected improperly.</li> </ul>	<ul style="list-style-type: none"> <li>• Check the safety code. If not, turn off the AC power, change the safety settings, and then reconnect.</li> <li>• Make sure that the voltage of each phase (Between L1&amp;N, L2&amp;N, L3&amp;N) is within a normal range.</li> <li>• Make sure the grid voltage is stable.</li> </ul>
16	EFan Fail	<ul style="list-style-type: none"> <li>• The external fan is blocked.</li> <li>• or connected improperly.</li> </ul>	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.	<ul style="list-style-type: none"> <li>• Measure whether the open circuit voltage of the PV string is higher than the max DC input voltage of the inverter.</li> <li>• If the voltage is high, remove some panels connected to make sure that the open circuit voltage meets the requirement.</li> </ul>
18	Overtemp.	<ul style="list-style-type: none"> <li>• The ambient temperature is too high.</li> <li>• The inverter is installed in a place with poor ventilation.</li> </ul>	<ul style="list-style-type: none"> <li>• Cool down the ambient temperature.</li> <li>• Make sure that the installation meets the environment requirements listed in the inverter user manual.</li> <li>• Power off the inverter and restart 15 minutes later.</li> </ul>

No.	Alarm	Causes	Solutions
19	IFan Fail	<ul style="list-style-type: none"> <li>• The internal fan is blocked.</li> <li>• The internal fan is connected improperly.</li> </ul>	<ul style="list-style-type: none"> <li>• Restart the inverter. If the inverter recovers, the problem is accidental and does not affect system working.</li> <li>• If the problem persists, contact the after-sales service.</li> </ul>
20	DC Bus High	<ul style="list-style-type: none"> <li>• The PV string voltage exceeds the maximum DC input voltage of the device.</li> <li>• Control board of the inverter cannot work properly.</li> </ul>	<ul style="list-style-type: none"> <li>• Measure whether the open circuit voltage of the PV string is higher than the max DC input voltage of the inverter.</li> <li>• If the voltage is high, remove some panels connected to make sure that the open circuit voltage meets the requirement.</li> </ul>
21	Residual current protection	<ul style="list-style-type: none"> <li>• The N and PE cables on the AC side are connected improperly.</li> <li>• The system is in a moist environment like rainy days, early morning or sunset.</li> </ul>	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	<ul style="list-style-type: none"> <li>• Utility grid power fails.</li> <li>• The AC cable is disconnected.</li> <li>• AC breaker fails or the AC breaker is off.</li> <li>• The AC terminal is not connected.</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure that the utility grid is available.</li> <li>• Measure the AC voltage using a multimeter.</li> <li>• Check whether the breaker is broken.</li> <li>• Check whether the AC cable is connected properly.</li> <li>• Ensure that the grid is connected and AC breaker turned ON.</li> <li>• Disconnect the AC output switch and DC input switch, then connect them 5 minutes later.</li> </ul>
23	AC HCT Fail	<ul style="list-style-type: none"> <li>• The exception is caused by an external fault.</li> <li>• Control board of the inverter cannot work properly.</li> </ul>	<ul style="list-style-type: none"> <li>• Restart the inverter. If the inverter recovers, the problem is accidental and does not affect system working.</li> <li>• If the problem persists, contact the after-sales service.</li> </ul>
24	Relay Dev Fail	<ul style="list-style-type: none"> <li>• The exception is caused by an external fault.</li> <li>• Control board of the inverter cannot work properly.</li> </ul>	<ul style="list-style-type: none"> <li>• Restart the inverter. If the inverter recovers, the problem is accidental and does not affect system working.</li> <li>• If the problem persists, contact the after-sales service.</li> </ul>

No.	Alarm	Causes	Solutions
25	GFCI Fail	<ul style="list-style-type: none"> <li>The exception is caused by an external fault.</li> <li>Control board of the inverter cannot work properly.</li> </ul>	<ul style="list-style-type: none"> <li>Restart the inverter. If the inverter recovers, the problem is accidental and does not affect system working.</li> <li>If the problem persists, contact the after-sales service.</li> </ul>
26	DC SPD Fail	Lighting strike	<ul style="list-style-type: none"> <li>Improve the lightning protection facilities around the inverter.</li> <li>Replace the inverter with a new one if it cannot work anymore.</li> </ul>
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	<ul style="list-style-type: none"> <li>The exception is caused by an external fault.</li> <li>Control board of the inverter cannot work properly.</li> </ul>	<ul style="list-style-type: none"> <li>Restart the inverter. If the inverter recovers, the problem is accidental and does not affect system working.</li> <li>If the problem persists, contact the after-sales service.</li> </ul>
29	AC HCT Chk Fail	The sampling of the AC HCT is abnormal.	<ul style="list-style-type: none"> <li>Restart the inverter. If the inverter recovers, the problem is accidental and does not affect system working.</li> <li>If the problem persists, contact the after-sales service.</li> </ul>

No.	Alarm	Causes	Solutions
30	GFCI Chk Fail	The sampling of the GFCI HCT is abnormal.	<ul style="list-style-type: none"> <li>Restart the inverter. If the inverter recovers, the problem is accidental and does not affect system working.</li> <li>If the problem persists, contact the after-sales service.</li> </ul>

## 6.3 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 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	

No.	Alarm	Troubleshooting
16	High battery discharge temperature	<ul style="list-style-type: none"> <li>• The battery is overloaded. You are recommended to reduce loads.</li> <li>• If the problem persists, contact the after-sales service.</li> </ul>
17	Low battery charge temperature	The ambient temperature is too low to run the battery.
18	Low battery discharge temperature	



## 7 Appendix

### 7.1 Safety Country

No.	Safety Code	No.	Safety Code
Europe			
1	IT-CEI 0-21	43	CZ-C
2	IT-CEI 0-16	44	CZ-D
3	DE LV with PV	45	RO-A
4	DE LV without PV	46	RO-B
5	DE-MV	47	RO-D
6	ES-A	48	GB-G98
7	ES-B	49	GB-G99-A
8	ES-C	50	GB-G99-B
9	ES-D	51	GB-G99-C
10	ES-island	52	GB-G99-D
11	BE	53	NI-G98
12	FR	54	IE-16/25A
13	FR-island-50Hz	55	IE-72A
14	FR-island-60Hz	56	IE-ESB
15	PL-A	57	IE-EirGrid
16	PL-B	58	PT-D
17	PL-C	59	EE
18	PL-D	60	NO
19	NL-16/20A	61	FI-A
20	NL-A	62	FI-B
21	NL-B	63	FI-C
22	NL-C	64	FI-D
23	NL-D	65	UA-A1
24	SE-A	66	UA-A2
25	SE MV	67	EN 50549-1
26	SK-A	68	EN 50549-2

No.	Safety Code	No.	Safety Code
27	SK-B	69	DK-West-B-MVHV
28	SK-C	70	DK-East-B-MVHV
29	HU	71	DK-West-C-MVHV
30	CH	72	DK-East-C-MVHV
31	CY	73	DK-West-D-MVHV
32	GR	74	DK-East-D-MVHV
33	DK-West-A	75	FR-Reunion
34	DK-East-A	76	BE-LV (>30kVA)
35	DK-West-B	77	BE-HV
36	DK-East-B	78	CH-B
37	AT-A	79	NI-G99-A
38	AT-B	80	NI-G99-B
39	BG	81	NI-G99-C
40	CZ-A-09	82	NI-G99-D
41	CZ-B1-09	83	IE-LV
42	CZ-B2-09	84	IE-MV
Globe			
1	60Hz-Default	5	IEC 61727-50Hz
2	50Hz-Default	6	IEC 61727-60Hz
3	127Vac-60Hz-Default	7	Warehouse
4	127Vac-50Hz-Default		
America			
1	Argtna	30	US-ISO-NE-480Vac
2	US-208Vac	31	US-ISO-NE-208Vac-3P
3	US-240Vac	32	US-ISO-NE-220Vac-3P
4	Mexico-220Vac	33	US-ISO-NE-240Vac-3P
5	Mexico-440Vac	34	PR-208Vac
6	US-480Vac	35	PR-240Vac
7	US-208Vac-3P	36	PR-480 Vac
8	US-220Vac-3P	37	PR-208Vac-3P
9	US-240Vac-3P	38	PR-220Vac-3P

No.	Safety Code	No.	Safety Code
10	US-CA-208Vac	39	PR-240Vac-3P
11	US-CA-240Vac	40	Cayman
12	US-CA-480Vac	41	Brazil-220Vac
13	US-CA-208Vac-3P	42	Brazil-208Vac
14	US-CA-220Vac-3P	43	Brazil-230Vac
15	US-CA-240Vac-3P	44	Brazil-240Vac
16	US-HI-208Vac	45	Brazil-254Vac
17	US-HI-240Vac	46	Brazil-127Vac
18	US-HI-480Vac	47	Brazil-ONS
19	US-HI-208Vac-3P	48	Barbados
20	US-HI-220Vac-3P	49	Chile-BT
21	US-HI-240Vac-3P	50	Chile-MT
22	US-Kauai-208Vac	51	Colombia
23	US-Kauai-240Vac	52	Colombia<0.25MW 1P
24	US-Kauai-480Vac	53	Colombia<0.25MW 3P
25	US-Kauai-208Vac-3P	54	IEEE 1547-208Vac
26	US-Kauai-220Vac-3P	55	IEEE 1547-20Vac
27	US-Kauai-240Vac-3P	56	IEEE 1547-240Vac
28	US-ISO-NE-208Vac	57	IEEE 1547-230/400Vac
29	US-ISO-NE-240Vac		
Oceania			
1	Australia-A	4	Newzealand
2	Australia-B	5	Newzealand:2015
3	Australia-C	6	NZ-GreGrid
Asia			
1	China A	25	JP-420Vac-50Hz
2	China B	26	JP-420Vac-60Hz
3	China's high pressure	27	JP-480Vac-50Hz
4	China's highest pressure	28	JP-480Vac-60Hz
5	China Power Station	29	Sri Lanka

No.	Safety Code	No.	Safety Code
6	China 242 Shandong	30	Singapore
7	China 242 Hebei	31	Israel-OG
8	China PCS	32	Israel-LV
9	Taiwan	33	Israel-MV
10	Hongkong	34	Israel-HV
11	China 242 Northeast	35	Vietnam
12	Thailand-MEA	36	Malaysia-LV
13	Thailand-PEA	37	Malaysia-MV
14	Mauritius	38	DEWA-LV
15	Korea	39	DEWA-MV
16	India	40	Saudi Arabia
17	India-CEA	41	JP-690Vac-50Hz
18	Pakistan	42	JP-690Vac-60Hz
19	Philippines	43	Srilanka
20	Philippines-127Vac	44	IEC 61727-127Vac-50Hz
21	JP-50Hz	45	IEC 61727-127Vac-60Hz
22	JP-60Hz	46	JP-550Vac-50Hz
23	JP-440Vac-50Hz	47	JP-550Vac-60Hz
24	JP-440Vac-60Hz	48	India-Higher
Africa			
1	South Africa-LV	4	Ghana
2	South Africa-B-MV	5	Ghana-HV
3	South Africa-C-MV		

## 7.2 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 $S_{rated}$	44 % supplying	0%	0%	60 % absorbin g
Australia B	Voltage	205V	220V	235V	255V
	Inverter reactive power level (Q) % of $S_{rated}$	30 % supplying	0%	0%	40 % absorbin g

Region	Default value	U1	U2	U3	U4
Australia C	Voltage	215V	230V	240V	255V
	Inverter reactive power level (Q) % of $S_{rated}$	44 % supplying	0%	0%	60 % absorbing
New Zealand	Voltage	207V	220V	235V	244 V
	Inverter reactive power level (Q) % of $S_{rated}$	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 $S_{rated}$	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

Region	Default value	U3	U4
	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%	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

#### Upper connection and reconnection frequency ( $f_{URF}$ )

Region	$f_{URF}$
Australia A	50.15 Hz

Australia B	50.15 Hz
Australia C	50.50 Hz
New Zealand	50.15 Hz

### Setting steps:

**Step 1:** Set the safety code to Australia A/B/C/New Zealand on Quick Settigs page based on actual needs.

**Step 2:** Set the frequency parameters accordingly.

<

Grid Code  
(Safety Code)

Save

Europe

Australia

Oceania

America

Asia

Africa

Others

Australia A

Australia A\_1

Australia B

Australia C

Australia D

New Zealand

Others

<

Connection Parameters

Ramp Up:

Upper Voltage

110.4

110.4

✓

Range[80,140]%Vn

Lower Voltage

85.2

85.2

✓

Range[15,100]%Vn

Upper Frequency

50.15

50.15

✓

Range[50,65]Hz

Lower Frequency

47.50

47.50

✓

Range[45,60]Hz

Observation Time

60

60

✓

Range[30,30000]s

Soft Ramp Up Gradient

16.7

16.7

✓

Range[0,60000]%Pn/min

Reconnection:

Upper Voltage

110.4

110.4

✓

Range[80,140]%Vn

Lower Voltage

85.2

85.2

✓

Range[15,100]%Vn

Upper Frequency

50.15

50.15

✓

Range[50,65]Hz

Lower Frequency

47.50

47.50

✓

Range[45,60]Hz

Observation Time

60

60

✓

Range[30,30000]s

Reconnection Gradient

16.7

16.7

✓

Range[0,60000]%Pn/min

SLG00CON0144



<

Grid Code  
(Safety Code)

Save

Europe

Australia

▼

Oceania

Australia A

○

America

Australia A\_1

○

Asia

Australia B

✔

Africa

Australia C

○

Others

Australia D

○

New Zealand

>

Others

>

<

Connection Parameters

Ramp Up:

Upper Voltage

110.4

110.4

✔

Range[80,140]%Vn

Lower Voltage

85.2

85.2

✔

Range[15,100]%Vn

Upper Frequency

50.15

50.15

✔

Range[50,65]Hz

Lower Frequency

47.50

47.50

✔

Range[45,60]Hz

Observation Time

60

60

✔

Range[30,30000]s

Soft Ramp Up Gradient

✔

Soft Ramp Up Gradient

16.7

16.7

✔

Range[0,6000]%Pn/min

Reconnection:

Upper Voltage

110.4

110.4

✔

Range[80,140]%Vn

Lower Voltage

85.2

85.2

✔

Range[15,100]%Vn

Upper Frequency

50.15

50.15

✔

Range[50,65]Hz

Lower Frequency

47.50

47.50

✔

Range[45,60]Hz

Observation Time

60

60

✔

Range[30,30000]s

Reconnection Gradient

✔

Reconnection Gradient

16.7

16.7

✔

Range[0,6000]%Pn/min

SLG00CON0146

<

Grid Code  
(Safety Code)

Save

Europe

Australia

▼

Oceania

Australia A

○

America

Australia A\_1

○

Asia

Australia B

○

Africa

Australia C

✔

Others

Australia D

○

New Zealand

>

Others

>

<

Connection Parameters

Ramp Up:

Upper Voltage

110.4

110.4

✔

Range[80,140]%Vn

Lower Voltage

85.2

85.2

✔

Range[15,100]%Vn

Upper Frequency

50.50

50.50

✔

Range[50,65]Hz

Lower Frequency

47.50

47.50

✔

Range[45,60]Hz

Observation Time

60

60

✔

Range[30,30000]s

Soft Ramp Up Gradient

✔

Soft Ramp Up Gradient

16.7

16.7

✔

Range[0,6000]%Pn/min

Reconnection:

Upper Voltage

110.4

110.4

✔

Range[80,140]%Vn

Lower Voltage

85.2

85.2

✔

Range[15,100]%Vn

Upper Frequency

50.50

50.50

✔

Range[50,65]Hz

Lower Frequency

47.50

47.50

✔

Range[45,60]Hz

Observation Time

60

60

✔

Range[30,30000]s

Reconnection Gradient

✔

Reconnection Gradient

16.7

16.7

✔

Range[0,6000]%Pn/min

SLG00CON0145

## 8 Contact Information

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