Quick User Guide

iSolarCloud APP

Mobile Terminal Application
# Contents

1 About This Manual ................................................................. 1  
   1.1 Target Group .................................................................. 1  
   1.2 Symbols ......................................................................... 1  
   1.3 Introduction .................................................................... 1  

2 Product Description ............................................................... 2  
   2.1 APP Introduction ............................................................. 2  
   2.2 Networking Modes ........................................................... 2  
   2.3 APP Installation ............................................................... 3  

3 Operation Instruction ............................................................. 4  
   3.1 Login Interface ................................................................. 4  
      3.1.1 Server Setting ............................................................ 4  
      3.1.2 Help ....................................................................... 4  
   3.2 Remote Monitoring ........................................................... 4  
      3.2.1 Account Registration .................................................. 4  
      3.2.2 Login via Account ....................................................... 5  
      3.2.3 Wi-Fi Configuration ..................................................... 6  
      3.2.4 Creating Plant ............................................................ 8  
      3.2.5 Sharing and Deleting Plant .......................................... 9  
      3.2.6 Viewing Plant Information ......................................... 10  
      3.2.7 Device Initialization ..................................................... 12  
      3.2.8 Configuration ............................................................. 12  
      3.2.9 Viewing Fault Information ......................................... 16  
      3.2.10 Me ........................................................................ 16  
   3.3 Wi-Fi Login (Near End) ...................................................... 17  
      3.3.1 User Permission .......................................................... 17  
      3.3.2 Login ...................................................................... 18  
      3.3.3 Home .................................................................... 19  
      3.3.4 Chart ..................................................................... 20  
      3.3.5 More (User Permission) .............................................. 21
3.3.6 More (Admin Permission) ........................................................................................................ 22
3.4 Bluetooth Login (Near End) ........................................................................................................ 23
  3.4.1 User Permission ......................................................................................................................... 23
  3.4.2 Login ........................................................................................................................................ 24
  3.4.3 Home ....................................................................................................................................... 25
  3.4.4 Running Information ................................................................................................................ 26
  3.4.5 History Record ........................................................................................................................ 26
  3.4.6 More (User Permission) .......................................................................................................... 27
  3.4.7 More (Admin Permission) ........................................................................................................ 27

4 Appendix ............................................................................................................................................. 29
  4.1 Manual Description ...................................................................................................................... 29
  4.2 Contact Information .................................................................................................................... 29
1 About This Manual

1.1 Target Group

This manual is intended for distributor/installer, end user, and O&M personnel of PV residential system, energy storage system, commercial system, and microgrid.

1.2 Symbols

NOTE indicates additional information, emphasized contents or tips to help you solve problems or save time.

1.3 Introduction

This manual mainly describes how to install, configure, and operate the iSolarCloud APP.

Screenshots in this manual are based on the iSolarCloud APP V2.1.5. All icons and data displayed are for reference only, and the actual screens may differ.

Operation method is described by using the iOS system as an example. The method for the Android system is the same, except that the screens are somewhat different. The actual screens prevail.
2 Product Description

2.1 APP Introduction

The iSolarCloud APP is a mobile application used for managing PV plants. The APP can provide power plant operation analysis and mobile intelligent O&M services. It is designed with functions such as display of plant operation data, rapid plant access, remote parameter setting, quick fault positioning and notification, and power generation and revenue analysis, achieving convenient and efficient end-to-end operation and maintenance.

2.2 Networking Modes

Users can monitor plant device information either remotely or locally via the APP.

Login via Account and Password (Remote)

Establish communication connection between the communication module and home router or base station, so that the inverter can communicate with cloud server. The users can view inverter data or send instructions to control the inverter through the APP.

Direct Login (Near end)

Establish communication connection between the mobile phone and WiFi wireless communication module or Bluetooth module integrated into the inverter, achieving near-end maintenance on the inverter. The users can view inverter information and set parameters through the APP.

Bluetooth login is only applicable to SUNGROW inverters with built-in Bluetooth module. For whether the inverter is equipped with the Bluetooth module, consult the distributor/installer.
2.3 APP Installation

This section introduces how to download and install the iSolarCloud APP.

Prerequisites

- Mobile phone operating system: Android 4.4 or later; iOS 9.3 or later.
- The mobile phone can be normally connected to Wi-Fi or 2G/3G/4G network.
- The mobile phone has sufficient memory space for APP installation.
- The mobile phone has sufficient battery power.

Procedure

**Step1** Download the iSolarCloud App from Myapp (Android mainland China users), Google Play (Android users outside mainland China), or APP Store (iOS users). Alternatively, scan the following QR code and follow the instructions on the screen to download the APP.

![QR Code]

**Step2** Select the downloaded installation package and follow the instructions on the screen to complete the installation. After installation, the iSolarCloud icon will be displayed on the mobile phone screen.

![iSolarCloud Icon]
3 Operation Instruction

Images in this manual are for reference only, and the actual screens may differ.

3.1 Login Interface

3.1.1 Server Setting

When you first access the APP, a server selection box will pop up. Tap “Confirm” to connect the current address displayed on the screen, or tap “Switch” to select another one.

The current service address is:
Chinese server

Confirm Switch

It is recommended that mainland China user select "Chinese server", European and African users select "European server", and users in the other regions select "International server".

The service address accessed by the APP must be the same as that accessed by the Logger, and communication failure will occur if otherwise. If there are any problems, contact SUNGROW.

Users can switch the service address according to demands.

Procedure

**Step1** Tap the icon \[ \text{ } \] in the upper right corner of the login screen.

**Step2** Tap "Select server".

**Step3** Select the corresponding service address.

3.1.2 Help

Tap the button \[ \text{ } \] in the upper right corner of the login screen to view the corresponding user manual, FAQs, terms of service, etc.

3.2 Remote Monitoring

This section describes how to register an account, log into the iSolarCloud APP via the account and password, view plant information and set plant parameters.

3.2.1 Account Registration

Prerequisites

The service address is set to "European server" or "International server".
Introduction

The account distinguishes two user groups end user and distributor/installer.

The end user can view plant information, create plants, set parameters, share plants, etc.

The distributor/installer can help the end user to create plants, manage, install, or maintain plants, and manage users and organizations.

Procedure

**Step 1** Tap "Register" to enter the registration screen.

**Step 2** Select "End user" or "Distributor/installer" to enter the corresponding screen.

**Step 3** Fill in the registration information, including select server, email, verification code, password, confirm password, country (region), and time zone. The distributor/installer further has the permission to fill in the company name and the code of upper level distributor/installer.

**Step 4** Tick "Accept privacy protocol" and tap "Register", to finish the registration operation.

- European users and African users select "European server". Users other than mainland China users, European users and African users select "International server".
- At present, users selecting "Chinese server" cannot register accounts.
- The code of upper level distributor/installer can be obtained from the upper level distributor/installer. Only when your organization belongs to the upper level distributor/installer organization, can you fill in the corresponding code.
- When the country (region) is set to Brazil or Mexico, the field code of upper level distributor/installer must be filled in.

3.2.2 Login via Account

This section describes how to log into the iSolarCloud APP.

Prerequisites

- The iSolarCloud APP has been installed.
- You have already registered an account or have got the account and password from the distributor/installer or SUNGROW.

Procedure

**Step 1** Enter the account and password on the login screen.

**Step 2** Tap "Login" to enter the home screen.

In case you log into the APP for the first time, or the distributor/installer has not created plants for the end user, the home screen is as the following Fig 3-1 (Left). If you have created plants, the home screen is as the following Fig 3-1 Fig 3-1 (Right). For description of the home screen, refer to Table 3-1.
Table 3-1 Description of home screen

<table>
<thead>
<tr>
<th>Navigation bar</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Home</strong></td>
<td>The plant list shows plants created and plants shared to others. Users can create plants, share plants, view plant information and set plant parameters on this screen. For details, refer to &quot;3.2.4 Creating Plant – 3.2.8 Configuration&quot;</td>
</tr>
<tr>
<td><strong>Fault</strong></td>
<td>Tap &quot;Fault&quot; to view fault types and detailed fault information. For details, refer to &quot;3.2.9 Viewing Fault Information&quot;.</td>
</tr>
<tr>
<td><strong>Me</strong></td>
<td>Tap &quot;Me&quot; to perform operations such as Wi-Fi configuration, FAQ viewing, and personal setting. For details, refer to &quot;3.2.10 Me&quot;</td>
</tr>
</tbody>
</table>

3.2.3 Wi-Fi Configuration

The WiFi module can be connected to the home network, so that the inverter can communicate with the iSolarCloud server. Users can view inverter data or send instructions to control the inverter through the APP.

Prerequisites

- You have already got the account and password from the distributor/installer or SUNGROW.
- The inverter has been connected with the WiFi wireless communication module researched by SUNGROW.
- You have got the WiFi name and password of the home network.

Procedure

**Step1** Enter the account and password on the login screen and tap "Login", to enter the APP home
screen.

**Step 2** Tap “Me” on the navigation bar to enter the corresponding setting screen.

**Step 3** Tap “Wi-Fi config” to enter the corresponding screen.

**Step 4** Connect to the inverter Wi-Fi. For Android system, tap “Settings” to automatically enter the wireless network screen. For iOS system, manually switch to “Settings-WLAN”. Select the inverter Wi-Fi named in the form of “SG-WiFi module serial number”, where the serial number can be found on the side of the WiFi module.

**Step 5** Prompt information will pop up once you successfully connect to the inverter Wi-Fi.

**Step 6** Tap “Next” at the lower part of the screen to connect the inverter to the home network. Select the home network Wi-Fi and enter the password. The symbol “√” indicates a successful connection to the home network Wi-Fi.

**Step 7** Tap “Next”, and information indicating a successful connection to the home network will pop up. Tap “Complete” to finish the Wi-Fi configuration.
3.2.4 Creating Plant

This section describes the procedure of creating plants (adding Wi-Fi communication devices) through the APP.

The procedure of adding Logger1000, Logger3000, Eye communication device, and inverter is the same as that of the adding Wi-Fi communication device, but the screens are somewhat different. The actual screens prevail.

Prerequisites

- You have already got the account and password from the distributor/installer or SUNGROW.
- The inverter is normally connected to the communication device researched by SUNGROW.

Introduction

The end user assigns the plant to the distributor/installer for management and gets the distributor/installer code from the distributor/installer.

The distributor/installer who creates a plant for the end user needs to get the end user’s phone number or e-mail address.

In creating a plant, the mobile phone number/e-mail address is required, and each number/e-mail address can be registered only once.

Procedure

**Step 1** Enter the account and password on the login screen and tap "Login", to enter the APP home screen.

**Step 2** If there is no plant, tap "Create power plant"; and if there are plants, tap the icon in the upper right corner to enter the creating screen.

**Step 3** Tap "Add device" to add a device by scanning the QR code on the device or manually entering the device serial number, and tap "Confirm" to enter the device list screen.

**Step 4** Tap "Next" to fill in the plant information (see Table 3-2).

<table>
<thead>
<tr>
<th>Table 3-2 Description of plant parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parameter</strong></td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>Plant name*</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Plant type*</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Parameter</td>
</tr>
<tr>
<td>---------------------------------</td>
</tr>
<tr>
<td>Distributor/installer code</td>
</tr>
<tr>
<td>Owner's phone or Owner's email*</td>
</tr>
<tr>
<td>Battery type**</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Battery capacity**</td>
</tr>
<tr>
<td>Country (region)*</td>
</tr>
<tr>
<td>Plant time zone*</td>
</tr>
<tr>
<td>Plant address*</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Grid-connection date</td>
</tr>
</tbody>
</table>

Note: * Indicates fields that must be filled in.

** Applicable only to residential energy storage plant and microgrid.

The distributor/installer code must be filled in if the parameter "country (region)" is set to Brazil.

**Step 5** Tap "Complete" to finish plant creating.

**Step 6** Return to the APP home screen on which information of the newly created plant will be displayed.

3.2.5 Sharing and Deleting Plant

This section describes how to share and delete plants.

**Plant sharing**

End user can assign plants to other end users or distributor/installer for management.
Prerequisites

The end user has the permission to share plants, but the distributor/installer does not have the permission.

Procedure

Step 1 Select a to-be-shared plant on the home screen, swiping left (iOS) or pressing and holding (Android).

Step 2 Tap the icon 📜 (iOS) or "Share" (Android) to enter the "Share plant" screen.

Step 3 Tap "ADD Share" to enter the corresponding screen. Type of users to which plants are shared and corresponding permissions are shown in the following Table 3-3.

<table>
<thead>
<tr>
<th>Type</th>
<th>Permission</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designated user</td>
<td>Browser</td>
<td>User can only view plant data</td>
</tr>
<tr>
<td></td>
<td>Administrator</td>
<td>User can manage plant</td>
</tr>
<tr>
<td>Visitor</td>
<td>Browser</td>
<td>Visitor can only view plant data</td>
</tr>
</tbody>
</table>

Step 4 Tap "Confirm", after which the added new information will be displayed on the plant sharing screen.

Plant deletion

Delete the plant when it is connected abnormally or the corresponding onsite plant has been shut down.

Prerequisites

End user has the permission of deleting plants, and distributor/installer can delete plants assigned to the distributor/installer for management.

Procedure

Step 1 Select a to-be-deleted plant on the home screen, swiping left (iOS) or pressing and holding (Android).

Step 2 Tap the icon 🗑️ (iOS) or "Delete" (Android), to delete the plant.

3.2.6 Viewing Plant Information

This section describes how to view power generation information and information of plant devices.

Parameters displayed may vary with plant types, and actual screens prevail. Description is given by using residential PV plant as an example.

Plant information

Step 1 Tap a plant listed on the home screen to enter the plant detail screen. You will enter the "Device" tab by default.

Step 2 Switch to "Overview" tab, and you can view power generation information of the plant. See Table 3-4.
Table 3-4 Description of plant parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power flow chart</td>
<td>Including information such as PV power generation power and feed-in power, where the line with an arrow indicates energy flow between connected devices, and the arrow pointing indicates energy flow direction.</td>
</tr>
<tr>
<td>Current power</td>
<td>Present output power of the inverter</td>
</tr>
<tr>
<td>Power installed</td>
<td>Installed power of PV modules</td>
</tr>
<tr>
<td>Yield today</td>
<td>Today power yield of the inverter</td>
</tr>
<tr>
<td>Total yield</td>
<td>Accumulative power yield of the inverter</td>
</tr>
<tr>
<td>Today revenue</td>
<td>Today's revenue</td>
</tr>
<tr>
<td>Total revenue</td>
<td>Total revenue</td>
</tr>
<tr>
<td>Power generation chart</td>
<td>Including daily, monthly, and annual power generation histograms</td>
</tr>
<tr>
<td>Weather</td>
<td>Weather of today, tomorrow, and the day after tomorrow</td>
</tr>
<tr>
<td>Energy conservation and emission reduction</td>
<td>Including information such as SO₂ emission reduction, CO₂ emission reduction, equivalent trees planted, and mileage (car)</td>
</tr>
</tbody>
</table>

Device information

**Step 1** Tap a plant listed on the home screen to enter the plant detail screen.

**Step 2** You will enter "Device" tab by default, on which you can view all devices of the plant.

**Step 3** Optionally, tap the icon in the upper right corner to screen devices displayed. You can screen according to device state and device type.

**Step 4** Tap device name, and you will enter "General information" screen by default. Switch the tabs "Existing fault ", "Energy information", and "Settings" to access respective screen.

Parameters displayed may vary with device types, and actual screens prevail.
Description is given by using PV inverter as an example.

Table 3-5 Description of plant parameters

<table>
<thead>
<tr>
<th>Tab</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>General information</td>
<td>Display information such as power generation, phase voltage, phase current, and power factor.</td>
</tr>
<tr>
<td>Existing fault</td>
<td>Display fault lists including fault, alarm, prompt, and advice.</td>
</tr>
<tr>
<td>Energy information</td>
<td>Display inverter power change curve.</td>
</tr>
<tr>
<td>Settings</td>
<td>You can perform initial grid-connection setting on the inverter. Specifically, refer to “3.2.7 Device Initialization”.</td>
</tr>
<tr>
<td></td>
<td>You can further set system parameters, protection parameters and power control.</td>
</tr>
</tbody>
</table>
3.2.7 Device Initialization

Prerequisites
If the inverter has not been initialized, perform initial grid-connection setting.

If there are multiple inverters that have not been initialized, perform initial grid-connection setting on all of the multiple inverters.

Procedure

Step1 Tap a plant listed on the home screen to enter the plant detail screen.

Step2 You will enter "Device" tab by default. Tap the name of the device that needs to be initialized and switch to "Settings" tab.

Step3 Tap "Initial grid connection" to enter the corresponding screen.

Step4 Set initial grid-connection parameters. See Table 3-6.

Parameters displayed may vary with device types, and actual screens prevail. Description is given by using PV inverter as an example.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country (region)</td>
<td>Country (region) where the inverter is located at</td>
</tr>
<tr>
<td>Grid type</td>
<td>Type of grid</td>
</tr>
</tbody>
</table>

NOTICE

The parameter "country (region)" must be set to the country (region) where the inverter is installed at. Otherwise, the inverter may report errors.

Step5 Tap "Send down instruction" to finish the initial grid-connection setting.

3.2.8 Configuration

This section describes plant configuration, device configuration, device replacement, and tariff configuration.

Plant configuration
You can set plant name, plant type, etc.

Step1 Tap a plant listed on the home screen to enter the plant detail screen.

Step2 Tap the icon in the upper right corner of the detail screen, to enter the "Configuration" screen.

Step3 Select "Plant configuration" to enter the corresponding screen.

Step4 Fill in the plant information. See Table 3-7.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>End user</th>
<th>Distributor/installer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant name*</td>
<td>Name of the plant</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Plant type*</td>
<td>Type of the plant</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Including residential PV plant, residential energy storage plant, commercial PV plant, and microgrid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Battery type**</td>
<td>Type of the battery</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Including lithium battery and lead-acid battery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Battery capacity**</td>
<td>Capacity of the battery</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Distributor/installer code***</td>
<td>Fill in the distributor/installer code, so that the distributor/installer can view and manage the plant.</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Owner's phone or Owner's email*</td>
<td>The first time you fill in the end user’s mobile phone number, the system will create an account for the end user and send a text message to the end user. The Distributor/installer creates plants for the end user and can manage the plants by default.</td>
<td>×</td>
<td>✓</td>
</tr>
<tr>
<td>Power installed</td>
<td>Installed power of PV modules</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Creation date</td>
<td>Time of constructing the plant</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Grid-connection date</td>
<td>Time at which the plant starts feed-in operation</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Grid-connection type</td>
<td>Type of grid-connection</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Including 100% feed-in, self-consumption, surplus electricity feeds to grid, zero export and off-grid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time of connection</td>
<td>Time at which iSolarCloud starts to monitor the plant</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Image</td>
<td>Upload plant picture</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Country (region)*</td>
<td>Country (region) where the plant is located</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Plant time zone*</td>
<td>Time zone of the plant</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Plant zip</td>
<td>Zip code of the place where the plant is located</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Plant address*</td>
<td>Location of the plant, which can be added in two manners: manual input: enter the plant</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
### Parameter Description

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>location manually</td>
</tr>
<tr>
<td></td>
<td>Automatic obtaining: tap the icon</td>
</tr>
<tr>
<td></td>
<td>to automatically obtain current location or search for plant location,</td>
</tr>
<tr>
<td></td>
<td>and tap &quot;Confirm&quot;.</td>
</tr>
</tbody>
</table>

#### Delivery zip

- Zip code of the place of the receiver
- √
- √

#### Delivery address

- Address of receiver
- √
- √

**Note:**

- * indicates fields that must be filled in.
- ** applicable only to residential energy storage plant and microgrid.
- *** indicates fields that must be filled in for distributor/installer.

---

### Step 5

- Tap "Confirm" in the lower part of the screen to finish the plant configuration.

---

### Equipment configuration

- You can add or delete communication devices on the device configuration screen.

  - Add device

---

### Step 1

- Tap a plant listed on the home screen to enter the plant detail screen.

### Step 2

- Tap the icon in the upper right corner of the detail screen, to enter the "Configuration" screen.

### Step 3

- Select "Equipment configuration" to enter the corresponding screen.

### Step 4

- Tap the icon in the upper right corner of the screen.

### Step 5

- Scan the QR code on the communication module or manually input the serial number of the module. Tap "Confirm" after the QR code is recognized or the serial number input is correct.

### Step 6

- Tap "Confirm" to finish the adding operation.

---

- **It takes 1 to 10 minutes to establish communication connection after the communication device is added.** The newly added communication device will be displayed on the device configuration screen.

---

- Delete device

---

### Step 1

- Tap a plant listed on the home screen to enter the plant detail screen.

### Step 2

- Tap the icon in the upper right corner of the detail screen, to enter the "Configuration" screen.

### Step 3

- Select "Equipment configuration" to enter the corresponding screen.

### Step 4

- Select a to-be-deleted device, swiping left (iOS) or pressing and holding (Android).

### Step 5

- Tap the icon (iOS) or "Delete" (Android), to delete the device.

---

### Device replacement

- If plant device is faulty or it has been replaced on site, perform device replacement through the APP.

- You can replace communication device or inverter on the device replacement screen.

---

*SUNGROW*
**Procedure**

**Step 1** Tap a plant listed on the home screen to enter the plant detail screen.

**Step 2** Tap the icon in the upper right corner of the detail screen, to enter the "Configuration" screen.

**Step 3** Select "Device replacement" to enter the corresponding screen.

**Step 4** Tap "Continue".

**Step 5** Tap the icon “➕” under "Old device" to enter the "Add old device" screen. You can add old devices in the following two manners:

- Switch the "Communication device" tab and "Inverter" tab, and select desired to-be-replaced device from the device list under corresponding tab.
- Enter the inverter name or communication device serial number into the searching box.

**Step 6** Tap the icon ✔️ in the upper right corner of the screen after selecting the to-be-replaced device, so as to successfully add the device.

**Step 7** Tap the icon “➕” under "New device" to enter the "Add new device" screen.

**Step 8** Scan the QR code on the communication module or inverter, or manually input the serial number of the device, to add the new device.

**Step 9** Tap "Start replacement" after confirming that the old device and new device are desired ones. Device replacement is completed once the instruction delivered successfully.

When replacing an inverter, you can tick "Power generation compensation to new device", so that the total power generation of the replaced device will be used as a compensation value of the new inverter.

**Tariff**

Tariff is used for revenue calculation. This section describes how to set specific electricity price and TOU tariff.

**Procedure**

**Step 1** Tap a plant listed on the home screen to enter the plant detail screen.

**Step 2** Tap the icon in the upper right corner of the detail screen, to enter the "Configuration" screen.

**Step 3** Select "Tariff" to enter the corresponding screen. The electricity price can be set to a specific value or TOU tariff.
3 Operation Instruction

- Set electricity price
  1. Enter the price and select a price unit.
  2. Tap "Confirm".

- Set TOU tariff
  1. Select a price unit.
  2. Enable "TOU tariff".
  3. Tap "Add time segment", enter unit price, set start time and end time, and click "Confirm".
  4. Optionally, repeat the foregoing step to set TOU tariffs for multiple time segments within a day.
  5. Change unit price of other time segments which is 1 by default.
  6. Tap "Confirm".

Tap the time segment to enter the "Edit tariff" screen, on which you can modify and delete TOU tariff.
TOU tariff should cover 24 hours and be different in each time segment.

3.2.9 Viewing Fault Information

This section describes how to query fault types and view detailed fault information.

Procedure

**Step 1** Tap "Fault" to enter the corresponding screen, where the screen displays the fault list whose types are "Fault" and "Alarm" by default.

**Step 2** Enter fault name and select fault state, plant name, and fault type, to view corresponding fault list.

**Step 3** Tap the fault name to view detailed fault information.

3.2.10 Me

This section describes Wi-Fi configuration, FAQs, and personal setting.

Tap "Me", to enter the corresponding screen. Description of related parameters is shown in Table 3-8.

**Table 3-8 Parameter description**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wi-Fi configuration</td>
<td>For details, refer to &quot;3.2.3 Wi-Fi Configuration&quot;.</td>
</tr>
<tr>
<td>Code of upper level distributor/installer*</td>
<td>The code of upper level distributor/installer can be obtained from the upper level distributor/installer. Fill in the code of upper level distributor/installer, so that the upper level distributor/installer can view and manage your plants (except for shared plants).</td>
</tr>
<tr>
<td>FAQs</td>
<td>You can view frequently asked questions related to APP account, power plant, inverter, and communication module.</td>
</tr>
<tr>
<td>Setting</td>
<td>You can perform private settings. Tap &quot;Account and Security&quot; to bind the phone number or email address for retrieving password. You can change the password.</td>
</tr>
</tbody>
</table>
### 3.3 Wi-Fi Login (Near End)

In case of Wi-Fi direct login, a WiFi wireless communication module researched by SUNGROW is required.

The WiFi wireless communication module establishes a communication connection with the mobile phone through Wi-Fi, achieving near-end maintenance on the inverter. Users can view inverter information and set parameters through the APP.

> Parameters displayed may vary with inverter types, and actual screens prevail. Description is given by using PV inverter as an example.

#### 3.3.1 User Permission

In Wi-Fi direct connection mode, the user permission distinguishes two types "user permission" and "admin permission", and operators can select one according to their job responsibilities.

User permission: intended for the end user who has the permission to view inverter real-time power and power generation, to start/stop the inverter, and to upgrade firmware, etc.
Admin permission: intended for the O&M personnel who not only has the "user permission" but also the permission to perform advanced settings.

### 3.3.2 Login

**Prerequisites**
- The AC side of the inverter is energized.
- The Wi-Fi function of the mobile phone is enabled.
- The mobile phone is within the coverage of the wireless signal of the WiFi module.

**Procedure**

**Step 1** Enable the Wi-Fi function of the mobile phone, connect the phone to the Wi-Fi network named in the form "SG-WiFi module serial number" (the serial number is on the side of the WiFi module).

**Step 2** Return to the login screen after a successful connection, tap "Login inverter", and select "Wi-Fi" on the next screen.

**Step 3** User name is "User" by default. Enter login password and tap "Login".

![Login Instructions]

Enter "user" or "admin" in the username bar according to the current user permission. For details, refer to "3.3.1 User Permission".

Initial password is "pw1111".

**Step 4** If initialization setting is not performed on the inverter, you will enter the quick setting screen of initialization protection parameter after successful login. After finishing the quick setting, tap...
"Boot" in the upper right corner of the quick setting screen. The APP delivers the start instruction, and the inverter starts and operates.

![Initialization protection parameter](image)

**Fig 3-2** Initialization protection parameter

**注意**
The parameter "country (region)" must be set to the country (region) where the inverter is installed at. Otherwise, the inverter may report errors.

**Step5** You will enter the APP home screen after finishing the initialization setting.

### 3.3.3 Home

You will enter the home screen after login, as shown in Fig 3-3.

![Home](image)

**Fig 3-3** Home

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power flow chart</td>
<td>Indicate the PV power generation power, feed-in power, etc. The line with an arrow indicates energy flow between connected devices, and the arrow pointing indicates energy flow direction.</td>
</tr>
<tr>
<td>2</td>
<td>Current power</td>
<td>Present output power of the inverter</td>
</tr>
<tr>
<td>3</td>
<td>Power installed</td>
<td>Installed power of PV modules</td>
</tr>
<tr>
<td>4</td>
<td>Yield today</td>
<td>Today power yield of the inverter</td>
</tr>
<tr>
<td>5</td>
<td>Total yield</td>
<td>Accumulative power yield of the inverter</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>6</td>
<td>Navigation bar</td>
<td>Including menus of &quot;Home&quot;, &quot;Chart&quot;, and &quot;More&quot;</td>
</tr>
</tbody>
</table>

If the inverter runs abnormally, the fault icon ⚠ appears in the upper left corner of the screen. Users can tap the icon to view detailed fault information and corrective measures.

3.3.4 Chart

The APP displays power generation records in a variety of forms, including daily power generation graph, monthly power generation histogram, annual power generation histogram, and total power generation histogram.

Table 3-10 Description of power generation chart

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily power generation graph</td>
<td>Curve showing change of power between 5 am and 22 pm every day. (Each point on the curve corresponds to a power value).</td>
</tr>
<tr>
<td>Monthly power generation histogram</td>
<td>Display power generation of the current month and monthly equivalent hours.</td>
</tr>
<tr>
<td>Annual power generation histogram</td>
<td>Display power generation of the current year and annual equivalent hours.</td>
</tr>
<tr>
<td>Total power generation histogram</td>
<td>Display total power generation and total equivalent hours.</td>
</tr>
</tbody>
</table>

Step 6 Click "Chart" on the navigation bar to enter the screen showing daily power generation curve, as shown in the following Fig 3-4.

![Fig 3-4](Power_curve.png)

Step 7 Swipe the screen left to view monthly power generation histogram, annual power generation histogram, and total power generation histogram.
3.3.5 More (User Permission)

Tap "More" to enter the corresponding screen, on which you can perform Wi-Fi configuration, settings, update firmware, etc.

![More Screen](image)

**Fig 3-5  More**

Description of parameters on the "More" screen is as Table 3-11.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wi-Fi config</td>
<td>Tap &quot;Wi-Fi config&quot;. For details, refer to &quot;3.2.3 Wi-Fi Configuration&quot;.</td>
</tr>
<tr>
<td>Settings</td>
<td>Tap &quot;Settings&quot; to set inverter system parameters, operation parameters and protection parameters.</td>
</tr>
<tr>
<td>Update firmware</td>
<td>Tap &quot;Update firmware&quot; to upgrade the firmware of the inverter. For details, refer to &quot;3.3.5.2 Update firmware&quot;.</td>
</tr>
<tr>
<td>Software version</td>
<td>Tap &quot;Software version&quot; to view the version of the software.</td>
</tr>
</tbody>
</table>

3.3.5.1 Parameter Setting

**Step1** Tap "Settings" to enter the parameter setting screen.

**Step2** You can set inverter system parameters, running parameters and protection parameters.

![Parameter Setting Diagram](image)

Parameter ranges and default values will update from time to time, and the actual screens prevail. If there are any questions, contact SUNGROW.

3.3.5.2 Update firmware

This section describes how to upgrade inverter firmware.

**Prerequisite**

The user has the permission of upgrading firmware.

**Procedure**

**Step1** Obtain firmware upgrade package. You can obtain the upgrade package in the following two manners:
- Tap the icon 📀 in the upper right corner of the login screen and select "Firmware download", to enter the "File list" tab by default. Select the desired upgrade package (.zip).
  - Tap the icon ⬇️. The downloaded package can be found in the "Downloaded" tab.
- Contact distributor/installer or SUNGROW to obtain the firmware upgrade package (.zip).
  - Store the upgrade package in the specified folder.

**Step2** - Android root directory /iscFiles

**Step3** - iOS: Connect the mobile phone to the computer through a data cable, find iSolarCloud APP via iTunes, iMazing, or iTools, and copy the upgrade package to the folder "Documents/update".

**Step4** Log into the iSolarCloud APP. Specifically, refer to "3.3.2 Login".

**Step5** Tap "More" on the navigation bar and select "Update firmware" to enter the corresponding interface.

**Step6** Select the desired upgrade package and tap "Confirm" on the pop-up dialog box.

**Step7** Wait for package uploading, after which the upgrade ends.

### 3.3.6 More (Admin Permission)

Tap "More" to enter the corresponding screen, on which you can perform Wi-Fi configuration, parameter setting, advanced setting, firmware upgrading, etc.

![Fig 3-6 More](image)

**Table 3-12** Parameter description

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wi-Fi config</td>
<td>Tap &quot;Wi-Fi config&quot;. For details, refer to &quot;3.2.3 Wi-Fi Configuration&quot;.</td>
</tr>
<tr>
<td>Settings</td>
<td>Tap &quot;Settings&quot; to set inverter system parameters, operation parameters and protection parameters.</td>
</tr>
<tr>
<td>Advanced settings</td>
<td>Tap &quot;Advanced settings&quot; to set &quot;Parameter address&quot;, &quot;Data type&quot;, and &quot;Set value&quot;.</td>
</tr>
<tr>
<td>Update firmware</td>
<td>Tap &quot;Update firmware&quot; to upgrade the firmware of the inverter. For details, refer to &quot;3.3.5.2 Update firmware&quot;.</td>
</tr>
<tr>
<td>Software version</td>
<td>Tap &quot;Software version&quot; to view the version of the software.</td>
</tr>
</tbody>
</table>

### 3.3.6.1 Parameter Setting

**Step1** Tap "Settings" to enter the parameter setting screen.
**Step 2** You can set inverter system parameters, operation parameters, protection parameters, etc.

Parameter ranges and default values will update from time to time, and the actual screens prevail. If there are any questions, contact SUNGROW.

### 3.3.6.2 Advanced Settings

**Step 3** Tap "Advanced settings" to enter the advanced setting screen.

**Step 4** Set parameter address, data type and set value.

**Step 5** Tap "Send down instruction".

### 3.4 Bluetooth Login (Near End)

The WiFi wireless communication module establishes a communication connection with the mobile phone through Bluetooth, achieving near-end maintenance on the inverter. Users can view inverter information and set parameters through the APP.

Parameters displayed may vary with inverter types, and actual screens prevail.

### 3.4.1 User Permission

In Bluetooth direct connection mode, the user permission distinguishes two types "user permission" and "admin permission", and operators can select one according to their job responsibilities.

User permission: intended for the end user who has the permission to view inverter running state and power generation, to start/stop the inverter, and to change password, etc.
3.4.2 Login

Prerequisites

- The AC side of the inverter is energized.
- The mobile phone is within 5m away from the inverter and there are no obstructions in between.
- The Bluetooth function of the mobile phone is enabled.

Procedure

**Step1** Open the APP, tap "Login inverter", and select "Bluetooth" on the next screen, after which the Bluetooth search screen automatically pops up.

**Step2** Select the to-be-connected inverter according to the serial number on the nameplate on the side of the inverter. Alternatively, tap the icon "扫一扫" to scan the QR code on the side of the inverter to establish Bluetooth connection.

**Step3** User name is "user" by default. Enter the login password and tap "Login".
Step 4 If initialization setting is not performed on the inverter, you will enter the quick setting screen of initialization protection parameter after successful login. After finishing the quick setting, tap "Boot" in the upper right corner of the quick setting screen. The APP delivers the start instruction, and the inverter starts and operates.

![Initialization protection parameter](image)

**Fig 3-7 Initialization protection parameter**

**NOTICE**

The parameter "country (region)" must be set to the country (region) where the inverter is installed at. Otherwise, the inverter may report errors.

Step 5 You will enter the APP home screen after finishing the initialization setting.

### 3.4.3 Home

You will enter the home screen after login, as shown in Fig 3-8.

![Home](image)

**Fig 3-8 Home**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Date and time</td>
<td>The system date and time of the inverter</td>
</tr>
<tr>
<td>2</td>
<td>Inverter state</td>
<td>The current operating state of the inverter</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>-----</td>
<td>------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>3</td>
<td>Power flow chart</td>
<td>Indicate the PV power generation power, feed-in power, etc. The line with an arrow indicates energy flow between connected devices, and the arrow pointing indicates energy flow direction.</td>
</tr>
<tr>
<td>4</td>
<td>Power</td>
<td>Present output power of the inverter</td>
</tr>
<tr>
<td>5</td>
<td>Power yield</td>
<td>Today power yield and accumulative power yield of the inverter</td>
</tr>
<tr>
<td>6</td>
<td>Power curve</td>
<td>Curve showing change of power between 5 am and 22 pm every day. (Each point on the curve is the percentage of inverter current power to rated power)</td>
</tr>
<tr>
<td>7</td>
<td>Navigation bar</td>
<td>Including menus of &quot;Home&quot;, &quot;Run-info&quot;, &quot;His-record&quot;, and &quot;More&quot;</td>
</tr>
</tbody>
</table>

If the inverter runs abnormally, the fault icon appears in the lower right corner of the inverter icon on the power load chart. Users can tap the icon to view detailed fault information and corrective measures.

3.4.4 Running Information

Tap "Run-info" on the navigation bar to enter the running information screen. Running information includes input, output, grid voltage, grid current, environment, and more.

![Run-info](image)

**Fig 3-9** Run-info

3.4.5 History Record

Tap "His-record" on the navigation bar to enter the history record screen on which you can view alarm records, energy records and event record.
Viewing alarm records

**Step 1** Tap "Alarm records" to enter the corresponding screen.

**Step 2** Tap the icon " calendars " to select a time segment and view records within this period.

**Step 3** Select a record and tap it to view detailed fault information, including alarm level, occurrence time, alarm ID, and repair advice.

Viewing energy records

**Step 1** Tap "Energy records" to enter the power curve screen.

**Step 2** Tap the time bar on the top of the screen to select a time segment and view the corresponding power curve.

**Step 3** Swipe the screen left to view daily power generation histogram, monthly power generation histogram and annual power generation histogram.

Viewing event record

**Step 1** Tap "Event record" to view the event record list.

**Step 2** Tap the icon " calendars " to select a time segment and view event records within this period.

### 3.4.6 More (User Permission)

Tap "More" to enter the corresponding screen, on which you can set parameters and change password.

#### 3.4.6.1 Setting Parameter

**Step 1** Tap "Settings" to enter the parameter setting screen.

**Step 2** Tap "System parameters" to enter the corresponding screen on which you can send start/stop instruction to the inverter and view ARM version and MDSP version.

#### 3.4.6.2 Modify Password

**Step 1** Tap "Modify password" to enter the corresponding screen.

**Step 2** Enter new password and tap "Confirm" to finish changing the password, where the new password must consist of 6 characters, a combination of letters and digits.

### 3.4.7 More (Admin Permission)

Tap "More" to enter the corresponding screen, on which you can set parameters, download logs,
upgrade firmware, and change password.

![Image of settings screen]

Description of parameters on the "More" screen is as Table 3-14.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Settings</td>
<td>Tap &quot;Settings&quot; to set inverter system parameters, operation parameters and protection parameters, etc.</td>
</tr>
<tr>
<td>Download the log</td>
<td>Tap &quot;Log download&quot; to download general log and fault recording log.</td>
</tr>
<tr>
<td>Update firmware</td>
<td>For details, refer to &quot;3.3.5.2 Update firmware&quot;. Note: Select the desired upgrade package (.sgu).</td>
</tr>
<tr>
<td>Modify password</td>
<td>For details, refer to &quot;3.4.6.2 Modify Password&quot;.</td>
</tr>
</tbody>
</table>

3.4.7.1 Parameter Setting

**Step1** Tap "Settings" to enter the parameter setting screen.

**Step2** Set inverter system parameters, operation parameters, protection parameters, and power control.

Parameter ranges and default values will update from time to time, and the actual screens prevail. If there are any problems, contact SUNGROW.

3.4.7.2 Download the log

**Step1** Tap "Download the log" to enter the corresponding screen.

**Step2** Tap the icon "↓" to download the conventional logs and fault recording logs (.log file).
4 Appendix

4.1 Manual Description

The information contained in this document is the property of Sungrow Power Supply Co., Ltd. (referred to as "SUNGROW" hereinafter). Publishing its content, either partially or in full, requires the written permission of SUNGROW. Any internal company copying of the document for the purposes of evaluating the product or its correct implementation is allowed and does not require permission.

All rights reserved including the pictures, symbols, and identifiers used in this manual. Any reproduction or disclosure, even partially, of the contents of this manual is strictly prohibited without prior written authorization of SUNGROW.

The content of the manual will be periodically updated or revised as per the product development. It is probably that there are changes in manuals for the subsequent module edition. Refer to the actual product, and obtain the latest version at www.sungrowpower.com or from the sales department.

4.2 Contact Information

Should you have any question about this product, please contact us.

<table>
<thead>
<tr>
<th>China (HQ)</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sungrow Power Supply Co., Ltd</td>
<td>Sungrow Australia Group Pty. Ltd.</td>
</tr>
<tr>
<td>Hefei</td>
<td>Sydney</td>
</tr>
<tr>
<td>+86 551 65327834</td>
<td>+61 2 9922 1522</td>
</tr>
<tr>
<td><a href="mailto:service@sungrowpower.com">service@sungrowpower.com</a></td>
<td><a href="mailto:service@sungrowpower.com.au">service@sungrowpower.com.au</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Brazil</th>
<th>France</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sungrow Do Brasil</td>
<td>Sungrow France – Siege Social</td>
</tr>
<tr>
<td>Sao Paulo</td>
<td>Paris</td>
</tr>
<tr>
<td>+55 11 2366 1957</td>
<td></td>
</tr>
<tr>
<td><a href="mailto:latam.service@sa.sungrowpower.com">latam.service@sa.sungrowpower.com</a></td>
<td><a href="mailto:service.france@sungrow.co">service.france@sungrow.co</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Germany</th>
<th>Greece</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sungrow Deutschland GmbH</td>
<td>Service Partner – Survey Digital</td>
</tr>
<tr>
<td>München</td>
<td></td>
</tr>
<tr>
<td>+49 89 324 914 761</td>
<td>+30 2106044212</td>
</tr>
<tr>
<td><a href="mailto:service.germany@sungrow.co">service.germany@sungrow.co</a></td>
<td><a href="mailto:service.greece@sungrow.co">service.greece@sungrow.co</a></td>
</tr>
<tr>
<td>Country</td>
<td>Company Name</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>India</td>
<td>Sungrow (India) Private Limited</td>
</tr>
<tr>
<td>Italy</td>
<td>SungrowItaly</td>
</tr>
<tr>
<td>Japan</td>
<td>Sungrow Japan K.K.</td>
</tr>
<tr>
<td>Korea</td>
<td>Sungrow Power Korea Limited</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Sungrow SEA</td>
</tr>
<tr>
<td>Philippines</td>
<td>Sungrow Power Supply Co., Ltd</td>
</tr>
<tr>
<td>Thailand</td>
<td>Sungrow Thailand Co., Ltd.</td>
</tr>
<tr>
<td>Spain</td>
<td>Sungrow Ibérica S.L.U.</td>
</tr>
<tr>
<td>Romania</td>
<td>Service Partner - Elerex</td>
</tr>
<tr>
<td>Turkey</td>
<td>Sungrow Deutschland GmbH</td>
</tr>
</tbody>
</table>