iSolarCloud APP

Mobile Terminal Application



iSolarCloud-V215-QUEN-Ver11-201906

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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.



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.





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.



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 ⁽²⁾ 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 *** 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

- Step1 Tap "Register" to enter the registration screen.
- Step2 Select "End user" or "Distributor/installer" to enter the corresponding screen.
- **Step3** 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.
- Step4 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

- Step1 Enter the account and password on the login screen.
- **Step2** 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 followingFig 3-1 Fig 3-1 (Right). For description of the home screen, refer to Table 3-1.

3 Operation Instruction



Fig 3-1 Home screen

Table 3-1 Description of home screen

Navigation bar	Description
	The plant list shows plants created and plants shared to others.
Home	Users can create plants, share plants, view plant information and set plant parameters on this screen. For details, refer to "3.2.4 Creating Plant ~ 3.2.8 Configuration"
Fault	Tap "Fault" to view fault types and detailed fault information. For details, refer to "3.2.9 Viewing Fault Information".
Me	Tap "Me" to perform operations such as Wi-Fi configuration, FAQ viewing, and personal setting. For details, refer to "3.2.10 Me".

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 Wi-Fi 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.

- Step2 Tap "Me" on the navigation bar to enter the corresponding setting screen.
- Step3 Tap "Wi-Fi config" to enter the corresponding screen.
- **Step4** 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.

Settings WLAN	
WLAN	
✓ Home Network	£ ≈ (j)
CHOOSE A NETWORK	
A1801162119	a 🗢 (i)
MikroTik-D539F7	? (i)
SG-A1802061864	হ 🚺
SG-A1802080088	∻ (i)
SG-A1810040420	? (i)

Step5 Prompt information will pop up once you successfully connect to the inverter Wi-Fi.

	SG-A1810040420 🗢 📮
\odot	The phone has successfully connected the inverter Wi-Fi
	SG-A1810040420 Recheck

Step6 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.

Inverter connect to home network	
Please select the home network connection for the inverter	0
Home Network 🗸	(T)
A1801162119	(Time in the second sec
wifi_Toy_Test	(in the second s

Step7 Tap "Next", and information indicating a successful connection to the home network will pop up. Tap "Complete" to finish the Wi-Fi configuration.





- Alternatively, you can tap the icon 🧔 in the upper right corner on the login screen and select Wi-Fi configuration to configure the Wi-Fi.
- Disconnect the mobile phone from the inverter Wi-Fi to ensure the phone can normally access the Internet. Then connect the mobile phone to the home network, or enable the "Mobile data".

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

- **Step1** Enter the account and password on the login screen and tap "Login", to enter the APP home screen.
- **Step2** 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.
- **Step3** 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.
- Step4 Tap "Next" to fill in the plant information (see Table 3-2).

Table 3-2 Description of plant parameters

Parameter	Description	End user	Distributor/installer
Plant name*	Name of the plant Device serial number (default)	\checkmark	\checkmark
Plant type*	Type of the plant Including residential PV plant, residential energy storage plant, commercial PV plant, and microgrid	\checkmark	\checkmark

Parameter	Description	End user	Distributor/installer
Distributor/insta ller code	Fill in the distributor/installer code, so that the distributor/installer can view and manage the plant.	\checkmark	×
Owner's phone or Owner's email*	The first time you fill in the end user's mobile phone number or e-mail address, the system will create an account for the end user and send a text message or email to × √ the end user.		\checkmark
	The Distributor/installer creates plants for the end user and can manage the plants by default.		
	Type of the battery		
Battery type**	Including lithium battery and lead-acid battery	\checkmark	\checkmark
Battery capacity**	Capacity of the battery	\checkmark	\checkmark
Country (region)*	Country (region) where the plant is located at	\checkmark	\checkmark
Plant time zone*	Time zone of the plant	\checkmark	\checkmark
	Location of the plant, which can be added in two manners:		
Plant addross*	Manual input: enter the plant location manually	./	.1
Fiant address	Automatic obtaining: tap the icon	V	V
	to automatically obtain current location or search for plant location, and tap "Confirm".		
Grid-connection date	Time at which the plant starts feed-in operation	\checkmark	√

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.

Step5 Tap "Complete" to finish plant creating.

Step6 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

- **Step1** Select a to-be-shared plant on the home screen, swiping left (iOS) or pressing and holding (Android).
- **Step2** Tap the icon CiOS) or "Share" (Android) to enter the "Share plant" screen.
- **Step3** 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 3-3 Description of sharing permission

Туре	Permission	Description
Designated user	Browser	User can only view plant data
	Administrator	User can manage plant
Visitor	Browser	Visitor can only view plant data

Step4 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

Step1 Select a to-be-deleted plant on the home screen, swiping left (iOS) or pressing and holding (Android).

Step2 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

- Step1 Tap a plant listed on the home screen to enter the plant detail screen. You will enter the "Device" tab by default.
- **Step2** Switch to "Overview" tab, and you can view power generation information of the plant. See Table 3-4.

Table 3-4 Description of plant parameter	S
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Parameter	Description
Power flow chart	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.
Current power	Present output power of the inverter
Power installed	Installed power of PV modules
Yield today	Today power yield of the inverter
Total yield	Accumulative power yield of the inverter
Today revenue	Today's revenue
Total revenue	Total revenue
Power generation chart	Including daily, monthly, and annual power generation histograms
Weather	Weather of today, tomorrow, and the day after tomorrow
Energy conservation and emission reduction	Including information such as SO_2 emission reduction, CO_2 emission reduction, equivalent trees planted, and mileage (car)

Device information

- **Step1** Tap a plant listed on the home screen to enter the plant detail screen.
- Step2 You will enter "Device" tab by default, on which you can view all devices of the plant.
- **Step3** Optionally, tap the icon in the upper right corner to screen devices displayed. You can screen according to device state and device type.
- **Step4** 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

Tab	Description
General information	Display information such as power generation, phase voltage, phase current, and power factor.
Existing fault Display fault lists including fault, alarm, prompt, and advice.	
Energy information Display inverter power change curve.	
Cottings	You can perform initial grid-connection setting on the inverter. Specifically, refer to "3.2.7 Device Initialization".
Settings	You can further set system parameters, protection parameters and power control.

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 3-6 Description of initial grid-connection parameters

Parameter	Description
Country (region)	Country (region) where the inverter is located at
Grid type	Type of grid

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.

Parameter	Description	End user	Distributor/installe
Plant name*	Name of the plant	\checkmark	\checkmark
Plant type*	Type of the plant Including residential PV plant, residential energy storage plant, commercial PV plant, and microgrid		
Battery type**	Type of the battery Including lithium battery and lead-acid battery	V	V
Battery capacity**	Capacity of the battery		\checkmark
Distributor/insta ller code ***	Fill in the distributor/installer code, so that the distributor/installer can view and manage the plant.		\checkmark
Owner's phone or Owner's email*	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	×	
Power installed	manage the plants by default. Installed power of PV modules	√	√
Creation date	Time of constructing the plant	√	√
Grid-connection date	Time at which the plant starts feed-in operation	\checkmark	\checkmark
Grid-connection type	Type of grid-connection Including 100% feed-in, self-consumption, surplus electricity feeds to grid, zero export and off-grid	\checkmark	\checkmark
Time of connection	Time at which iSolarCloud starts to monitor the plant		\checkmark
Image	Upload plant picture		\checkmark
Country (region)*	Country (region) where the plant is located at		\checkmark
Plant time zone*	Time zone of the plant		\checkmark
Plant zip	Zip code of the place where the plant is located		\checkmark
	Location of the plant, which can be		

 Table 3-7 Description of plant parameters

Parameter	Description	End user	Distributor/installer
	location manually		
	Automatic obtaining: tap the icon to automatically obtain current location or search for plant location, and tap "Confirm".		
Delivery zip	Zip code of the place of the receiver		\checkmark
Delivery address	Address of receiver	\checkmark	\checkmark

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.

Step5 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
- **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 "Equipment configuration" to enter the corresponding screen.
- **Step4** Tap the icon + in the upper right corner of the screen.
- **Step5** 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.
- **Step6** 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
- **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 "Equipment configuration" to enter the corresponding screen.
- Step4 Select a to-be-deleted device, swiping left (iOS) or pressing and holding (Android).
- **Step5** 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.

Procedure

- 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 "Device replacement" to enter the corresponding screen.
- Step4 Tap "Continue".

Device replacement
() device carefully. Wrong replacement will cause data loss.
Old device
+
Add old device to be replaced
New device
Add replacement the new device
Start replacement

- Step5 Tap the icon "^①" 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.
- **Step6** Tap the icon \checkmark in the upper right corner of the screen after selecting the to-be-replaced device, so as to successfully add the device.
- **Step7** Tap the icon "⁽¹⁾" under "New device" to enter the "Add new device" screen.
- **Step8** Scan the QR code on the communication module or inverter, or manually input the serial number of the device, to add the new device.
- **Step9** 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

- Step1 Tap a plant listed on the home screen to enter the plant detail screen.
- **Step2** Tap the icon (2) in the upper right corner of the detail screen, to enter the "Configuration" screen.
- **Step3** 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

- Step1 Tap "Fault" to enter the corresponding screen, where the screen displays the fault list whose types are "Fault" and "Alarm" by default.
- Step2 Enter fault name and select fault state, plant name, and fault type, to view corresponding fault list.
- **Step3** 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.

Та	ble	3-8	Parameter	descri	ption
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Parameter	Description
Wi-Fi configuration	For details, refer to "3.2.3 Wi-Fi Configuration".
Code of upper level distributor/installer *	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).
FAQs	You can view frequently asked questions related to APP account, power plant, inverter, and communication module.
Setting	You can perform private settings. Tap "Account and Security" to bind the phone number or email address for retrieving password. You can change the password.

Parameter	Description
	Tap "Privacy" to delete personal information or determine whether to receive notifications. If you turn on "Delete personal information", the system will delete the personal information, so that you cannot retrieve password, log into the system or edit plant via the personal information. Instead, you can only log into the system via user ID. If you turn off "Allow notifications", you will not receive system notifications after parameter setting.
	Tap "Report push" and "Add" to enter the corresponding screen. Tap "Add", fill in receiver e-mail address, select the desired type of reports ("Daily Report", "Weekly Report", "Monthly Report" and "Annual Report"), and tap the icon view in the upper right corner of the screen. You can view information such as revenue, power generation, energy conservation and emission reduction.
	Tap "Declaration" to view system declaration terms.
	Tap "About" to view system version and service line.
	Tap "Website" to jump to SUNGROW official website and view more information.

Note: * only applicable to distributor/installer account.

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.

Quick User Guide



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

- **Step1** 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).
- Step2 Return to the login screen after a successful connection, tap "Login inverter", and select "Wi-Fi" on the next screen.
- Step3 User name is "User" by default. Enter login password and tap "Login".



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".

Step4 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.

<	Initialize protection parameter	Boot
Cour Unco	ntry (region) nfigured	

Fig 3-2 Initialization protection parameter



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.

Δ	SG8KTL-M SN:A20180404999			
Fault shutdown				
0 W	-2-	@	_	1
Current power		0		2
Power installed		0 w 8.0 kW		2
Yield today				5
		0.0 kWh	•—	4
Total yield		9,022,745 kWh	•—	5
Home	Chart	e== Mare		6



Table 3-9	Function	description	of home screen
Table 5-5	runction	ucscription	of nonic scieen

No.	Name	Description
1	Power flow chart	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.
2	Current power	Present output power of the inverter
3	Power installed	Installed power of PV modules
4	Yield today	Today power yield of the inverter
5	Total yield	Accumulative power yield of the inverter

Quick User Guide

No.	Name	Description
6	Navigation bar	Including menus of "Home", "Chart", and "More"

If the inverter runs abnormally, the fault icon **A** 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

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

Step6 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

Step7 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	
A20180404999	
🚇 WI-Fi config	>
😥 Settings	>
G Update firmware	>
C Software version	>
Logout	

Fig 3-5 More

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

able 3-11 Parameter description	
Parameter	Description
Wi-Fi config	Tap "Wi-Fi config". For details, refer to "3.2.3 Wi-Fi Configuration".
Settings	Tap "Settings" to set inverter system parameters, operation parameters and protection parameters.
Update firmware	Tap "Update firmware" to upgrade the firmware of the inverter. For details, refer to "3.3.5.2 Update firmware".
Software version	Tap "Software version" to view the version of the software.

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 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:

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• Tap the icon ② in the upper righter 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 $\stackrel{\checkmark}{\longrightarrow}$. 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.

More	
A20180404999	
🕐 Wi-Fi config	>
🔯 Settings	>
ig Advanced settings	>
🕝 Update firmware	>
C Software version	>
Logout	

Fig 3-6 More

Description of parameters on the "More" screen is as Table 3-12.

Table 3-12	ieter description	
Parameter	Description	
Wi-Fi config	Tap "Wi-Fi config". For details, refer to "3.2.3 Wi-Fi Configuration".	
Settings	Tap "Settings" to set inverter system parameters, operation parameters and protection parameters.	
Advanced settin	Tap "Advanced settings" to set "Parameter address", "Data type", and "Set value".	
Update firmware	Tap "Update firmware" to upgrade the firmware of the inverter. For details, refer to "3.3.5.2 Update firmware".	
Software versior	Tap "Software version" to view the version of the software.	

3.3.6.1 Parameter Setting

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



Step2 You can set inverter system parameters, operation parameters, protection parameters, etc.

3.3.6.2 Advanced Settings

- Step3 Tap "Advanced settings" to enter the advanced setting screen.
- Step4 Set parameter address, data type and set value.
- Step5 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 Operation Instruction



Admin permission: intended for O&M personnel who has not only the "user permission" but also the permission to set running and protection parameters, upgrade firmware, download running logs, 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 "="" 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".



Enter "user" or "admin" in the username bar according to the current user permission. For details, refer to "3.4.1 User Permission".

The initial password is "pw1111" which should be changed for the consideration of account security.

Step4 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.

<	Initialize protection parameter	Boot
Cour Unco	ntry (region) nfigured	>

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.

Step5 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.



Fig 3-8 Home

 Table 3-13
 Function description of home screen

No.	Name	Description
1	Date and time	The system date and time of the inverter
2	Inverter state	The current operating state of the inverter

No.	Name	Description
3	Power flow chart	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.
4	Power	Present output power of the inverter
5	Power yield	Today power yield and accumulative power yield of the inverter
6	Power curve	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)
7	Navigation bar	Including menus of "Home", "Run-info", "His-record", and "More"

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	*
Input		^
Total DC power 80.74 kW		
MPPT1 voltage 641 V		
MPPT1 current 23.6 A		
MPPT2 voltage 640 V		
MPPT2 current 31.5 A		
MPPT3 voltage 642 V		
MPPT3 current 31.4 A		
MPPT4 voltage 640 V		
MPPT4 current 39.3 A		
Output		^
PF 1.000		
AC frequency		
Home Run-i	nfo His-record	More

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.

Quick User Guide



Viewing alarm records

- **Step1** Tap "Alarm records" to enter the corresponding screen.
- **Step2** Tap the icon "¹ to select a time segment and view records within this period.
- Step3 Select a record and tap it to view detailed fault information, including alarm level, occurrence time, alarm ID, and repair advice.

Viewing energy records

- **Step1** Tap "Energy records" to enter the power curve screen.
- **Step2** Tap the time bar <a>(2019-03-13) on the top of the screen to select a time segment and view the corresponding power curve.
- **Step3** Swipe the screen left to view daily power generation histogram, monthly power generation histogram and annual power generation histogram.

Viewing event record

- Step1 Tap "Event record" to view the event record list.
- **Step2** Tap the icon "" 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

- **Step1** Tap "Settings" to enter the parameter setting screen.
- **Step2** 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

- **Step1** Tap "Modify password" to enter the corresponding screen.
- **Step2** 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,

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upgrade firmware, and change password.

More	*
🔅 Settings	
📋 Download the log	
😈 Update firmware	
Modify password	
Logout	

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

Table 3-14	arameter description		
Parameter	Description		
Settings	Tap "Settings" to set inverter system parameters, operation parameters and protection parameters, etc.		
Download the lo	Tap "Log download" to download general log and fault recording log.		
Update firmware	For details, refer to "3.3.5.2 Update firmware". e Note: Select the desired upgrade package (.sgu).		
Modify passwor	d For details, refer to "3.4.6.2 Modify Password".		

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.



0

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 " $\stackrel{!}{\leftarrow}$ " to download the conventional logs and fault recording logs (.log file).

4 Appendix

4.1 Manual Description

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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.

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