Wi-Fi Smart Card and
SolarPower App
User's Manual

Table of Contents

1. Introduction

Wi-Fi Smart Card can enable wireless communication between inverter and monitoring platform. Users have complete and remote monitoring and controlling experience for inverter when combining Wi-Fi Smart Card with SolarPower APP, available for both iOS and Android based device.

The major functions of this APP:

- Delivers device status during normal operation.
- Allows to configure device setting after installation.
- Notifies users when a warning or alarm occurs.
- Allows users to query inverter history data.

2. Unpack and Overview

2.1 Packing list

Before installation, please inspect the unit. Be sure that nothing inside the package is damaged. You should have received the following items inside of package:

- Wi-Fi Smart Card x 1
- User's Manual x 1

2.2   Product overview
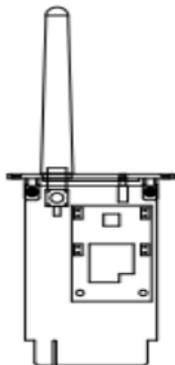
1. Antenna
2. Inverter connection status LED
   OFF: Inverter does not provide power to Wi-Fi Smart Card.
   ON: Inverter provides power to Wi-Fi Smart Card successfully.
3. PWR: To indicate if the power is on.
   COM: To indicate if communication between Wi-Fi Smart Card and Inverter is normal.
   NET: To indicate if Wi-Fi Smart Card is connected to router.
   SRV: To indicate if Wi-Fi Smart Card is connected to the internet.

3.   Wi-Fi Smart Card Installation

Please follow below steps to install Wi-Fi Smart Card:

Step 1: Remove the cover of the intelligent slot.

Step 2: Insert the Wi-Fi smart card into the slot.
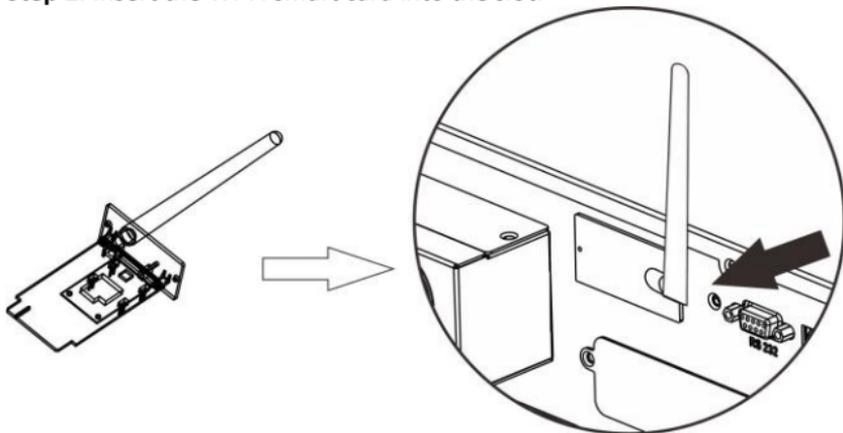
4. SolarPower App

4-1   Download and install APP

> ***Operating system requirement for your smart phone:***
> iOS system supports iOS 9.0 and above
>
> Android system supports Android 5.0 and above

Please scan the following QR code with your smart phone and download SolarPower App.

Android system   iOS system

Or you may find "SolarPower Wi-Fi" app from the Apple® Store or "SolarPower" in Google® Play Store.


4-2   Initial Setup

Step 1: Registration at first time

After the installation, please tap the shortcut icon to access this APP on your mobile screen. In the screen, tap "Register" to access "User Registration" page. Fill in all required information and scan the Wi-Fi

Smart Card PN by tapping icon. Or you can simply enter Wi-Fi Smart Card PN directly. Then, tap "Register" button.
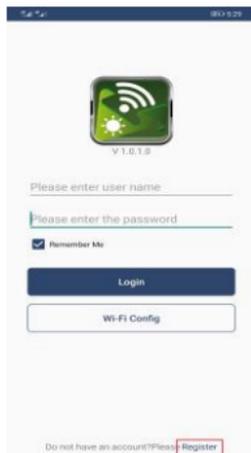
Then, a "Registration success" window will pop up. Tap "Go now" to continue setting local Wi-Fi network connection.
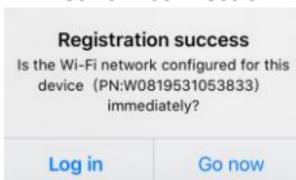
Step 2: Local Wi-Fi Network Configuration

Now, you are in "Wi-Fi Config" page. There are detailed setup procedure listed in "How to connect?" section and you may follow it to connect Wi-Fi.


① How to connect?

1. Enter the iPhone system 'Settings-Wi-Fi';
2. Select the same Wi-Fi as the Wi-Fi Module PN to connect;
3. After the connection is successful, return to the APP for network configuration.

Confirm Connected Wi-Fi Module

Enter the "Settings→Wi-Fi" and select connected Wi-Fi name. The connected Wi-Fi name is the same to your Wi-Fi PN number and enter default password "12345678".

Then, return to SolarPower APP and tap "Confirm Connected Wi-Fi Module" button when Wi-Fi Model is connected successfully.

Step 3: Wi-Fi Network settings

Tap 🛜 icon to select your local Wi-Fi router name (to access the internet) and enter password.
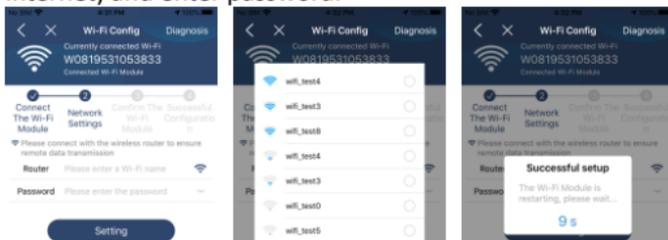
Step 4: Tap "Confirm" to complete the Wi-Fi configuration between the Wi-Fi Smart Card and the Internet.
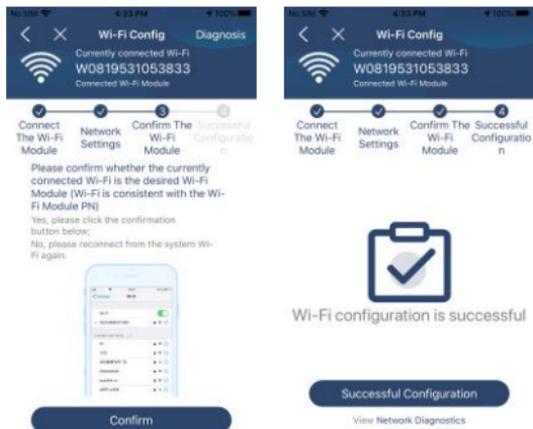
If the connection fails, please repeat Step 2 and 3.

Step 5: Diagnose Function

If the module is not monitoring properly, please tap "Diagnosis" on the top right corner of the screen for further details. It will show repair suggestion. Please follow it to fix the problem. Then, repeat the steps in the chapter 4.2 to re-set network setting. After all setting, tap "Rediagnosis" to re-connect again.

4-3. Login and APP Main Function

After finishing the registration and local Wi-Fi configuration, enter registered name and password to login.

Note: Tick "Remember Me" for your login convenience afterwards.
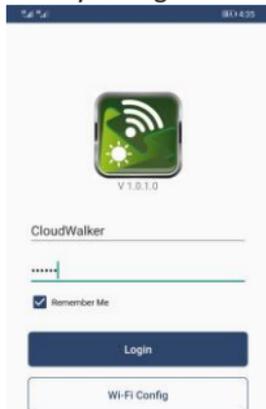
5. SolarPower APP Operation

5-1. Overview

After login is successfully, you can access "Overview" page to have overview of your monitoring devices, including operation status (normal, offline, alarm, and fault) as below diagram.

5-2. Devices

Tap the icon [Devices icon], you can enter Device List page. You can review all of the devices in "Device List". You also can add or delete Wi-Fi Smart Card in this page.

Add device   **Delete device**
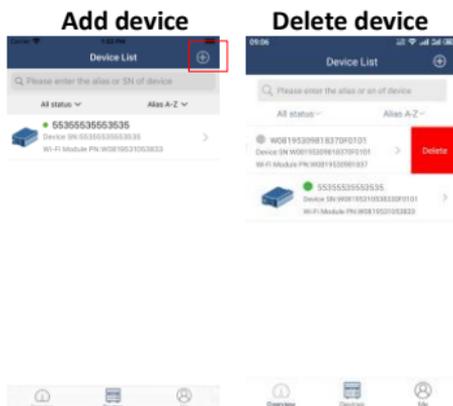
Tap ⊕ icon on the top right corner and enter part number by scanning bar code to add Wi-Fi Smart Card. This part number is printed on the Wi-Fi Smart Card surface, or manually enter it. Tap "Confirm" to add Wi-Fi Smart Card in the Device list.
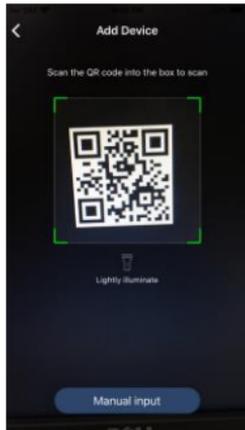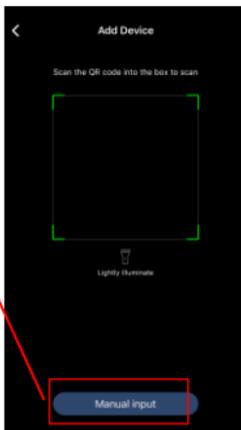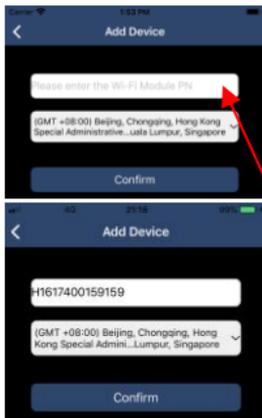
5-3. ME

In ME page, users can modify "My information", including 【User's Photo】,【Account security】,【About】,【Clear cache】 and【Log-out】, shown as below diagrams.
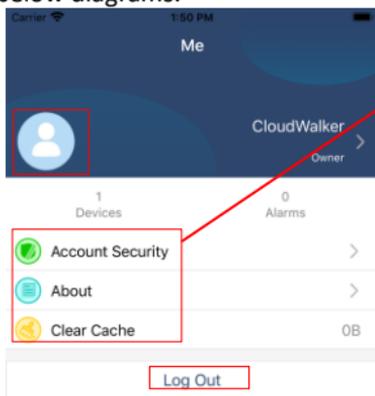
5-4. Device List

In Device List page, you can pull down to refresh the device information and then tap any device you want to check up for its real-time status and related information as well as to change parameter settings. Please refer to the parameter setting list.
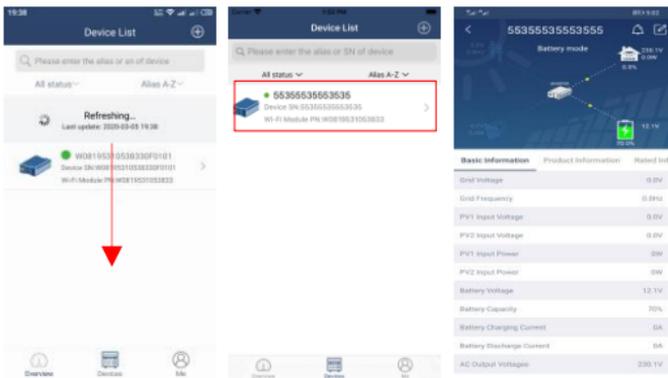
5-5. Monitoring Information and Parameter Setting

Device Mode

On the top of screen, there is a dynamic power flow chart to show live operation. It contains five icons to present PV power, inverter, load, utility and battery. Based on your inverter status, there will be【Standby Mode】, 【Line Mode】 and【Battery Mode】.

【**Standby Mode**】Inverter will not power the load until "ON" switch is pressed. Qualified utility or PV power can charge battery in standby mode.

【**Line Mode**】 Inverter will power the load from the utility with or without PV power. Qualified utility or PV power can charge battery.

【**Battery Mode**】Inverter will power the load from the battery with or without PV power. Only PV power can charge battery at this mode.

9

Device Alarm and Name Modification

In this page, tap the icon on the top right corner to enter the device alarm page. Then, you can review alarm history and detailed information.

After tapping the icon on the top right corner, a blank input column will pop up. Then, you can edit the name for your device and tap "Confirm" to complete name modification.
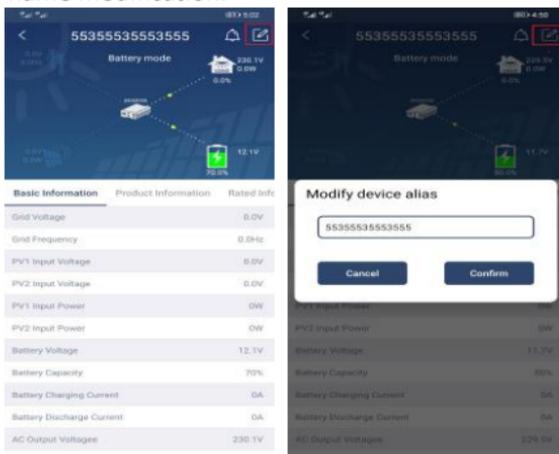
Device Information Data

Users can check up 【Basic Information】, 【Product Information】, 【Rated information】, 【History】 and 【Wi-Fi Smart Card Information】 by swiping left.

Swipe left

【**Basic Information**】displays basic information of the inverter, including AC voltage, AC frequency, PV input voltage, Battery voltage, Battery capacity, Charging current, Discharging current, Output voltage, Output frequency, Output apparent power, Output active power and Load percent. Please slide up to see more basic information.

【**Production Information**】displays Model type (Inverter type), Main CPU version, Bluetooth CPU version and secondary CPU version.

【**Rated Information**】 displays information of Nominal AC voltage, Nominal AC current, Rated battery voltage, Nominal output voltage, Nominal output frequency, Nominal output current, Nominal output apparent power and Nominal output active power. Please slide up to see more rated information.

【**History**】displays the records of unit information and setting.

【**Wi-Fi Smart Card Information**】displays of Wi-Fi Smart Card PN, status and firmware version.

Parameter Setting

This page is to activate some features and set up parameters for inverters. Please be noted that the listing in "Parameter Setting" page in below diagram may differ from the models of monitored inverters. Here is briefly illustrate partial setting:【Output Setting】,【Battery Parameter Setting】, 【Enable/ Disable items】,【Others Settings】,【Restore to the defaults】 Please refer to product manual when necessary.
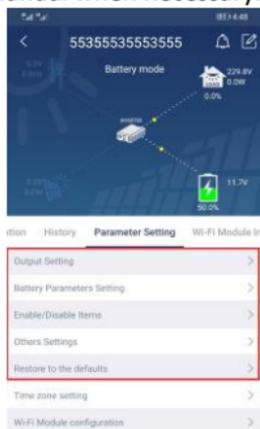
There are three ways to modify setting and they vary according to each parameter.

   a) Listing options to change values by tapping one of it.

   b) Activate/Shut down functions by clicking "Enable" or "Disable" button.

   c) Changing values by clicking arrows or entering the numbers directly in the column.

Each function setting is saved by clicking "Set" button.

Please refer to below parameter setting list for an overall description and be noted that the available parameters may vary depending on different models. Please always see the original product manual for detailed setting instructions.

Parameter setting list:

Item		Description
Output Setting	Output Source Priority	Output source priority selection
	Input Voltage Range	Input voltage range selection
	AC Output Rating Voltage	To set output rating voltage
	AC Output Rating Frequency	To set output rating frequency
Battery Parameters Setting	Battery Type	Select connected battery type
	Battery Cut-off Voltage	Set battery cut-off voltage
	Bulk Charging Voltage	Set battery bulk charging voltage
	Battery Float Voltage	Set battery floating charging voltage
	Max Charging Current	To configure total charging current for solar and utility chargers.
	Max AC Charging Current	Set maximum utility charging current
	Charging Source Priority	To configure charger source priority
	Back To Grid Voltage	Set battery voltage to stop discharging when grid is available
	Back To Discharge Voltage	Set battery voltage to stop charging when grid is available

Item		Description
Enable/Disable Items	Overload Auto Restart	If disabled, the unit won't be restarted after overload occurs.
	Overload Temperature Auto Restart	If disabled, the unit won't be restarted after over-temperature fault is solved.
	Overload Bypass	If enabled, the unit will enter bypass mode when overload occurs.
	Beeps While Primary Source Interrupt	If enabled, buzzer will alarm when primary source is abnormal.
	Buzzer	If disabled, buzzer won't be on when alarm/fault occurred.
	Backlight	If disabled, LCD backlight will be off when panel button is not operated for 1 minute.
	LCD Screen Return To Default Display	If selected, no matter how users switch display screen, it will automatically return to default display screen (Input voltage /output voltage) after no button is pressed for 1 minute.
	Fault Code Record	If enabled, fault code will be recorded in the inverter when any fault happens.
Others Settings	Solar Supply Priority	Set solar power as priority to charge the battery or to power the load.
	Reset PV Energy Storage	If clicked, PV energy storage data will be reset.
	Start Time For Enable AC Charge Working	The setting range of start charging time for AC charger is from 00:00 to 23:00. The increment of each click is 1 hour.
	Ending Time For Enable AC Charge Working	The setting range of stop charging time for AC charger is from 00:00 to 23:00. The increment of each click is 1 hour.
	Scheduled Time For AC Output On	The setting range of scheduled time for AC output on is from 00:00 to 23:00. The increment of each click is 1 hour.

Item		Description
Others Settings	Scheduled Time For AC Output Off	The setting range of scheduled time for AC output off is from 00:00 to 23:00. The increment of each click is 1 hour.
	Country Customized Regulations	Select inverter installed area to meet local regulation.
	Set Date Time	Set date time.
Restore to the defaults	This function is to restore all settings back to default settings.	