SolisCloud Monitoring System

User Manual

V1.0

Ginlong Technologies Co., Ltd.

Version record

NO.	Ver.	History	Date	Remarks
1	V1.0	Initial verson	20/12/25	

Contents

1. About

1.1 Copyright (space)

The copyright of this manual belongs to Ginlong Technology Co., Ltd. It is not allowed to copy or extract at will without any knowledge or permission from Ginlong and any other forms of infringement. Ginlong reserves the final right to interpret this manual and the infringements will be held accountable. If the functions or interfaces of SolisCloud have been modified, please refer to the latest version as prevail.

1.2 Manual Content

This manual introduces the functions and operation procedures of SolisCloud platform to satisfy the requirements of users for convenient operation and management.

1.3 Scope

SolisCloud is suitable for users who purchase Solis Dataloggers which are used to monitor PV plants and upload data to the SolisCloud system. Users can log into the SolisCloud App or Website to view relevant data in the platform, thereby visually analyzing and managing photovoltaic power plants.

1.4 Requirements

Website: **www.soliscloud.com**
Attentions for visiting web:
1. The browser is compatible with IE browser V9.0 or above.
2. The recommend display resolution is 1920 x 1080.
Mobile Phone App: **SolisCloud**
Download: Search and download SolisCloud App in the App Store for IOS system or Google Store for Android system.

1.5 For Readers

This manual is mainly for professionals and users who need to access, manage, and maintain SolisCloud platform. Technicians and users need to have the basic network knowledge and be familiar with Solis products.

2. Guideline

2.1 Description on Platforms

2.1.1 Solis Home/Solis Pro (Old Platform)

Solis Home/ Solis Pro are the first generation of the Solis monitoring platform.
Solis Home is for end users to check the operation status of their plants. Solis Pro is for installers/distributors to operate and maintain multiple systems for the duration of their life cycle. This includes smart management and device monitoring.

2.1.2 SolisCloud

SolisCloud is the second generation of Solis monitoring platform. It combines the login system of first generation platform and provides the plant owners/organizations with different login management. SolisCloud is the latest generation intelligent PV monitoring and maintenance system which integrates real-time monitoring, accurate message push, alarm system, smart O&M, remote upgrade/control, visualized large screen display and statistical analysis. It can monitor the operation status of the inverters, automatically calculate the generation/efficiency status of the device and the plants and help the maintenance engineers to quickly locate the problem and solve the problem on site. It has the advanced framework with secured data, convenient operation and a highly functional display.

2.2 Description on Users

2.2.1 Solis Home User

When using the SolisCloud platform for the first time, enter the account and password previously used for Solis Home App. The SolisCloud Monitoring platform will migrate all of your Solis Home profile and all original data. Everything on your account will be displayed within 2 hours.

2.2.2 SolisCloud User

Directly register the account on SolisCloud as a plant owner.
Please refer to 3.1Register for details.

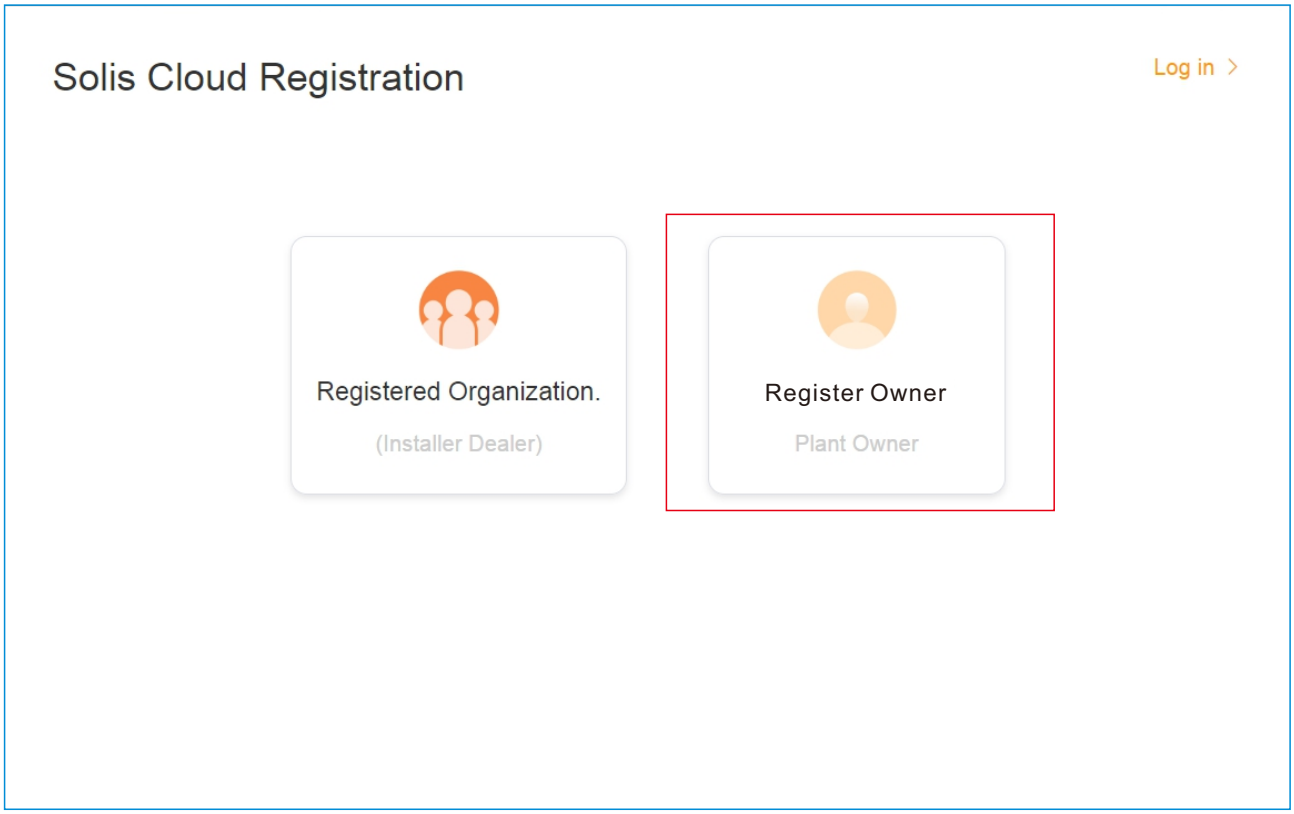
3. Normal Operation

3.1 Register

Please register an account when using SolisCloud for the first time. It requires an account to log in. Detailed steps as follows:

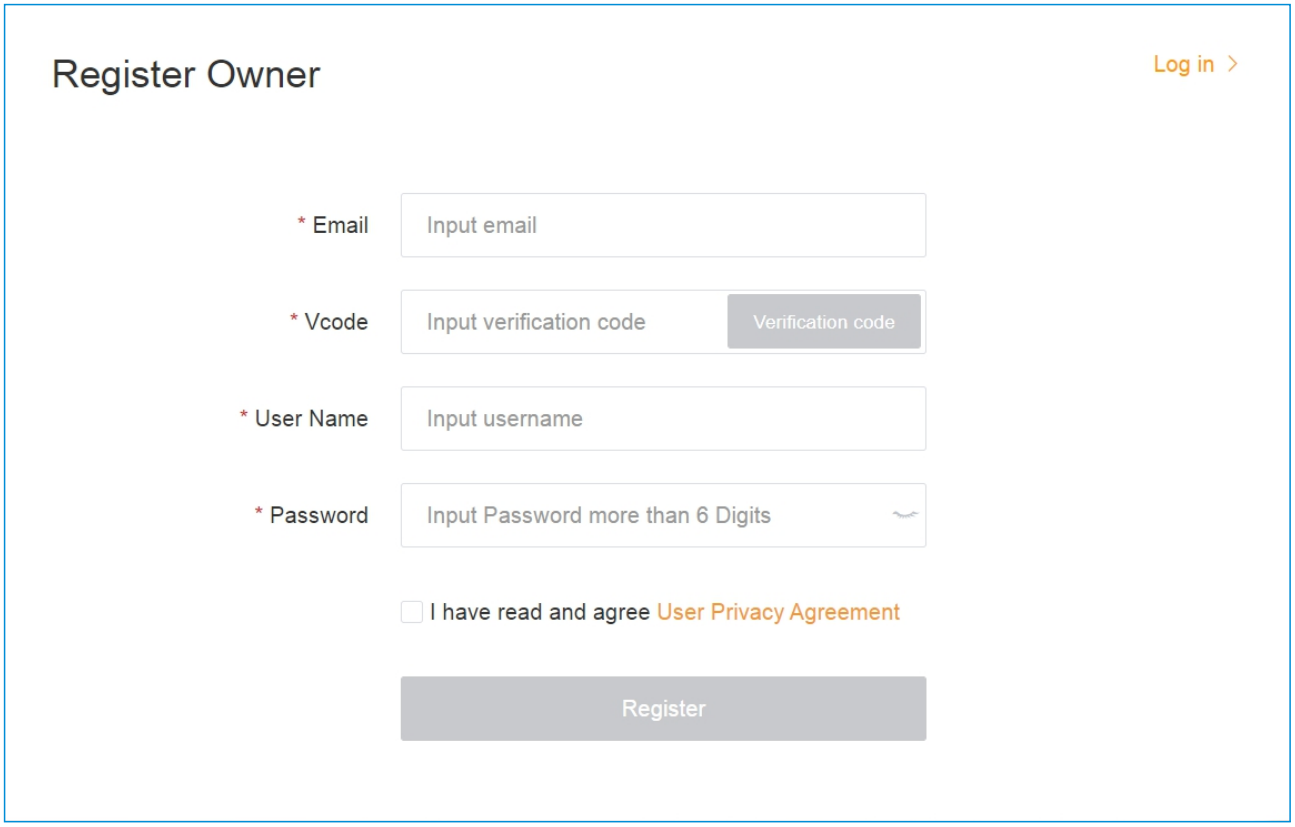
1. Open the web browser and input www.soliscloud.com. Press “ENTER” to turn to Soliscloud login page and click [Sign Up Now].

2. When plant owner is registering the account, please select [Register Owner].



3. Normal Operation

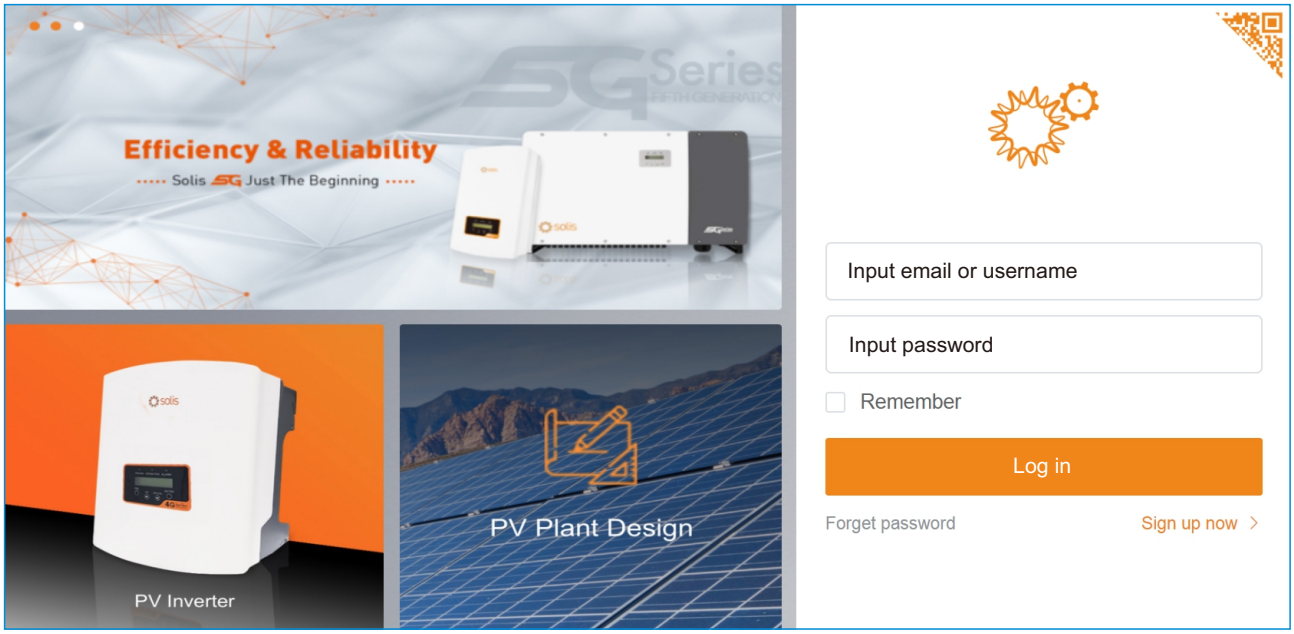
3. Fill in the correct information with email address and review the user privacy agreement. Then finish the registration.



3. Normal Operation

3.2 Log in

For users that have finished the registration or already have the account setup, please enter the email address or username and password to log in. You may click the [Remember] option to save the data in the browser.



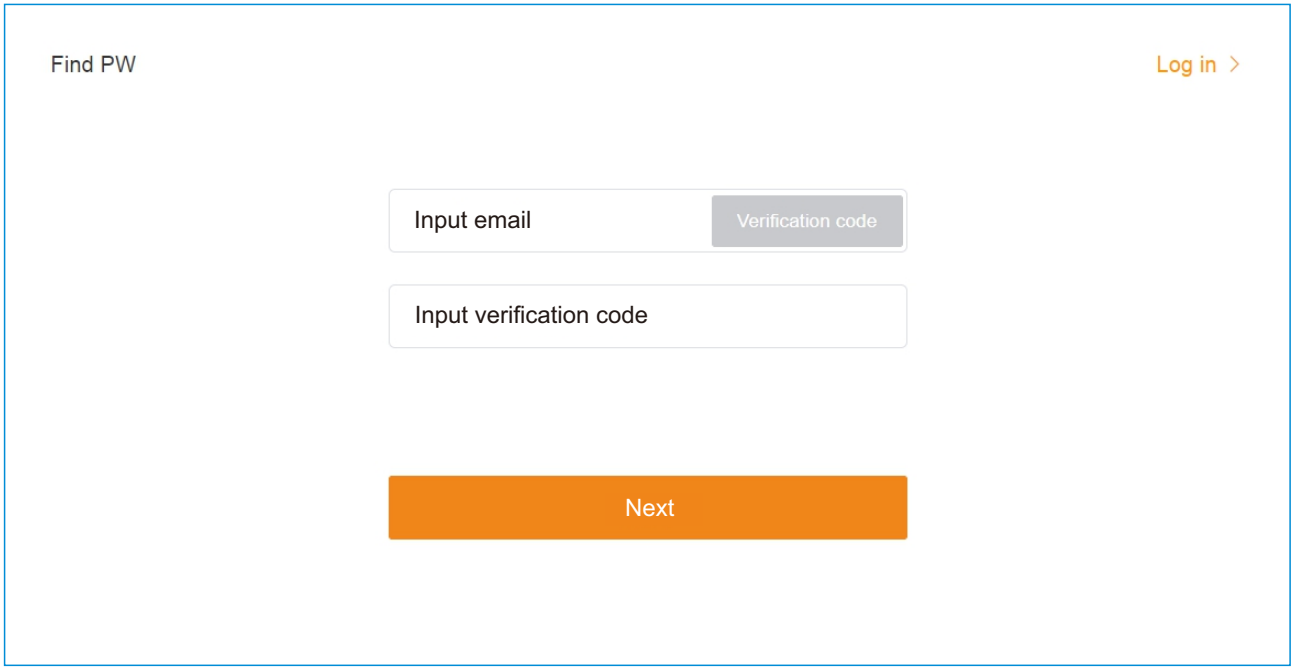
3.3 Retrieve Password

Users can click [Forget Password] to retrieve password of their account. Detailed operation as follows:

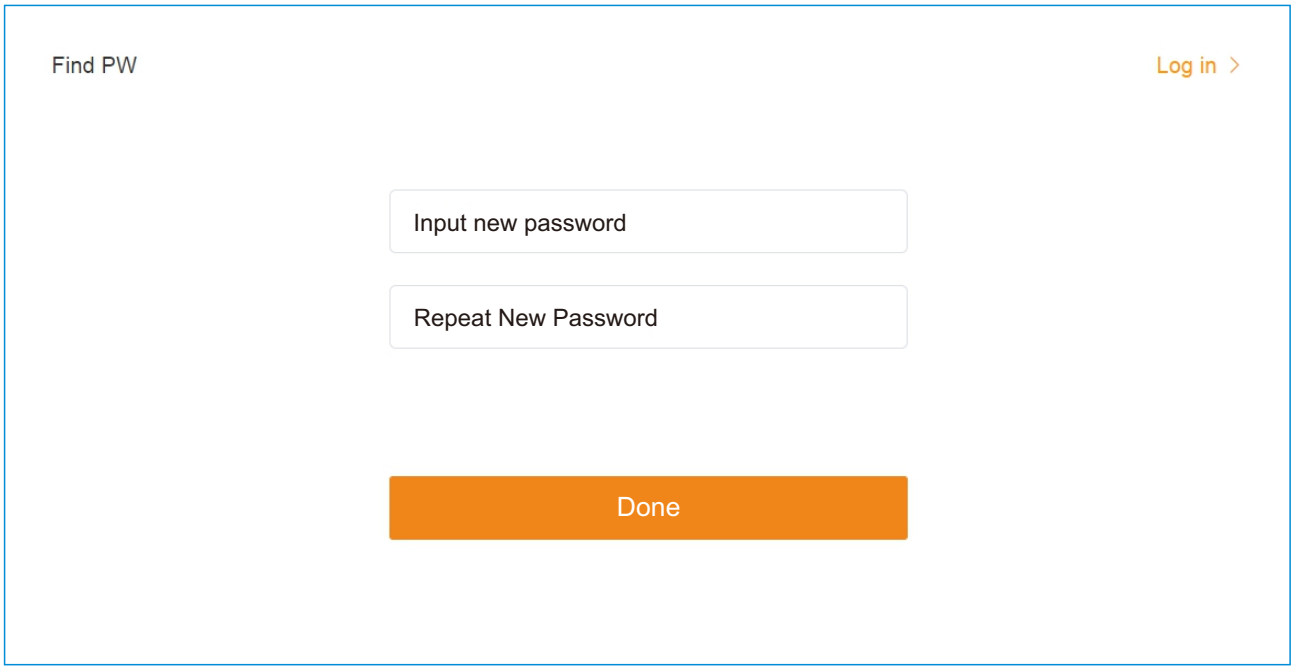
1. Click [Forget Password] to enter the page to retrieve password.

3. Normal Operation

2. Use the email address to recover your password, enter the verification code and click [Next]. It must be the same email address as the one during registration.



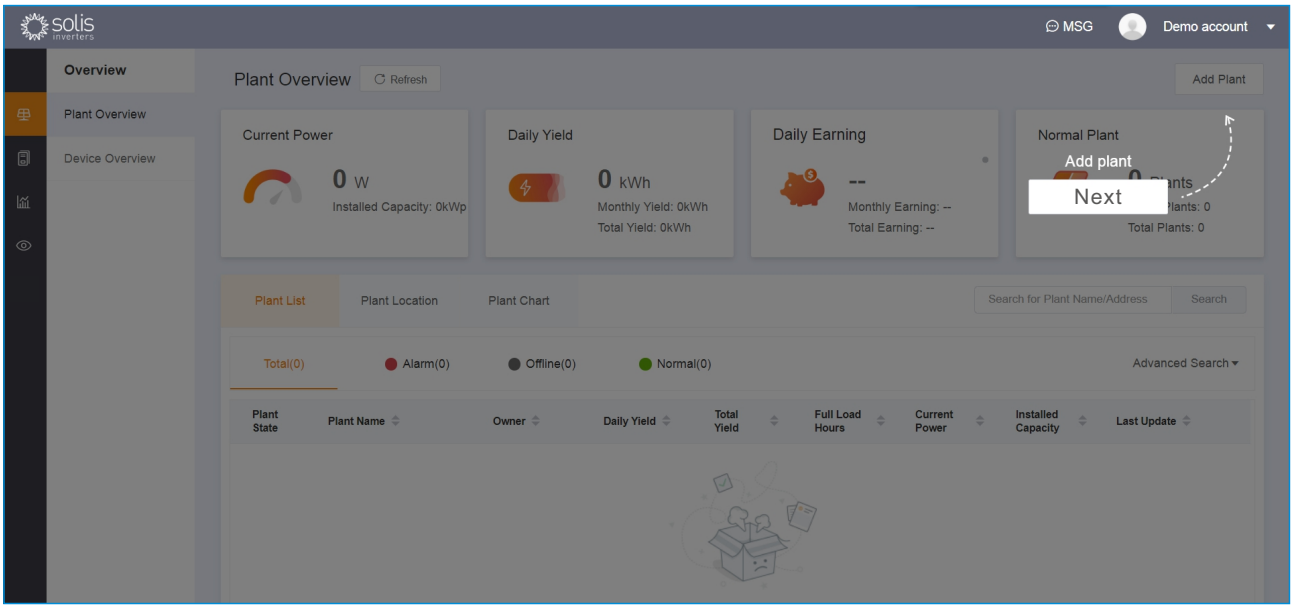
3. Set the new password and confirm the new password. Then click [Complete] to enter the main page.



3. Normal Operation

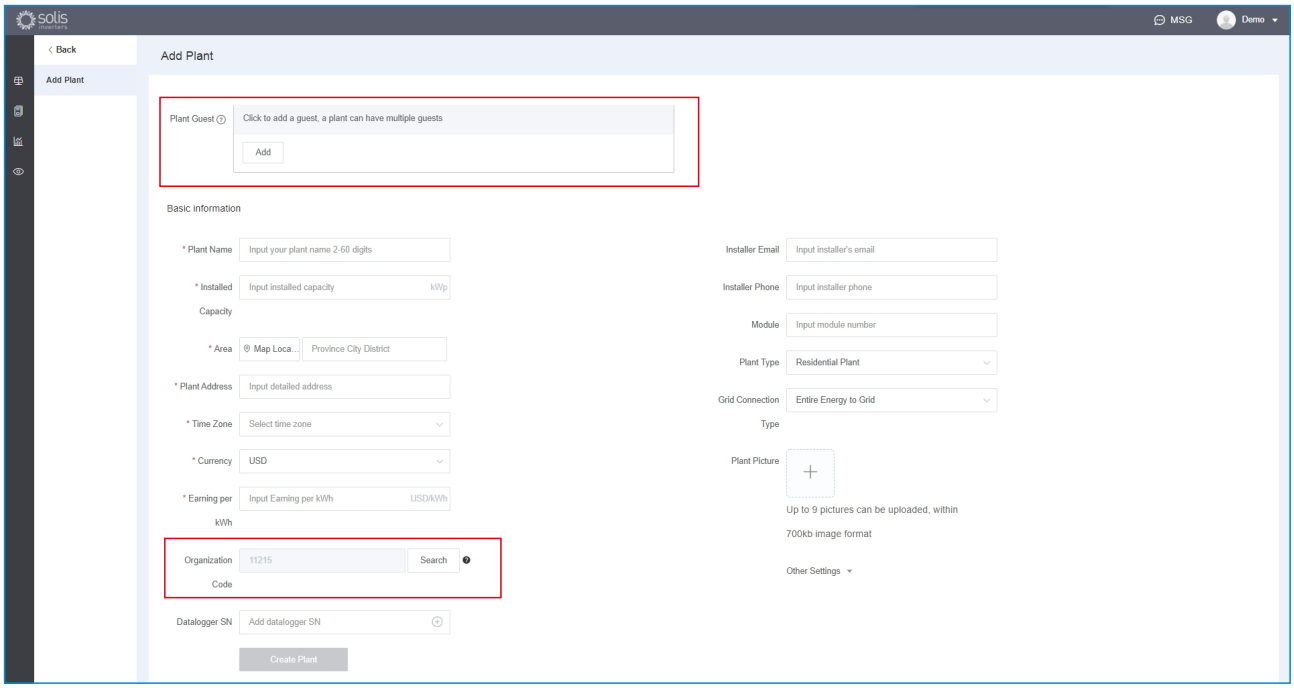
3.4 Add Plant

Users will need to add a plant when logging into SolisCloud platform for the first time. The procedure for adding a power station is to click [Add Plant] to enter the plant creation interface.



3.4.1 Plant Creation Interface

Plant Creation Interface contains three parts: Associated Organization, Add Guest, and Basic information.

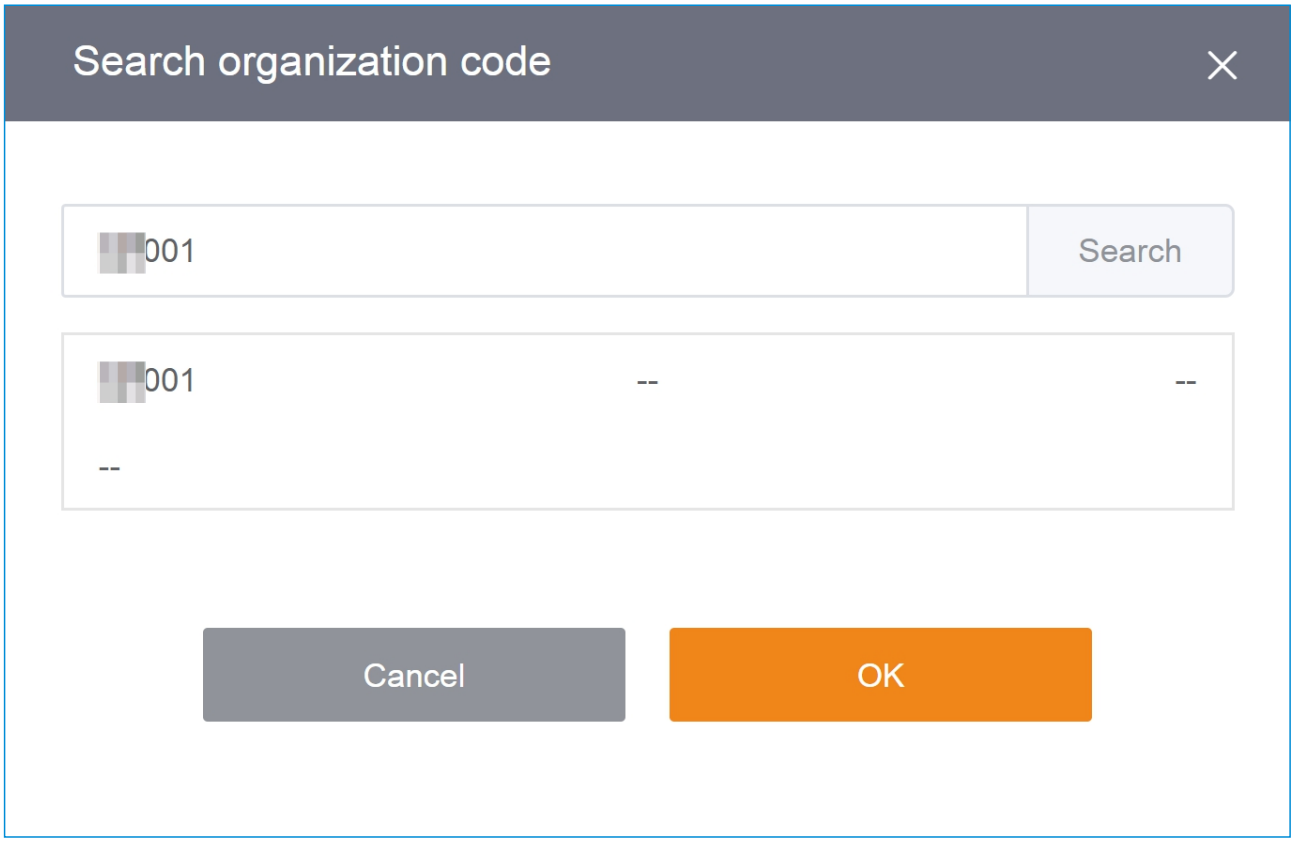


3. Normal Operation

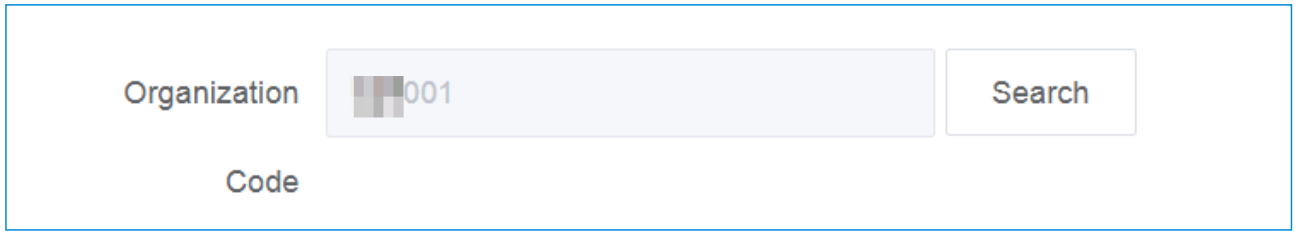
3.4.1.1 Associate Plant with Organization

This function is used to associate the plant with a certain organization in order to allow the organization to monitor and maintain the plant. Detailed steps as follows:

1. Add the organization in [Add Plant] or [Modify Plant Information] and click the [Find] key on the right side of [Organization Code] to input the code of associated organization, then enter organization code to [Search] and [Confirm] the correct information to finish the association operation.



2. After successfully associated, [Organization Code] will display the corresponding associated information.



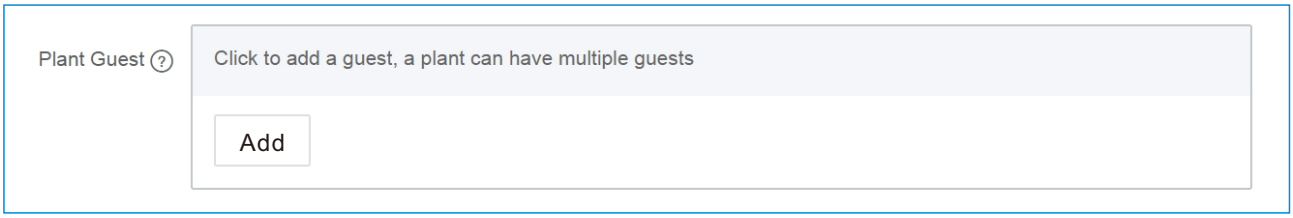
3. Normal Operation

3.4.1.2 Add Guest

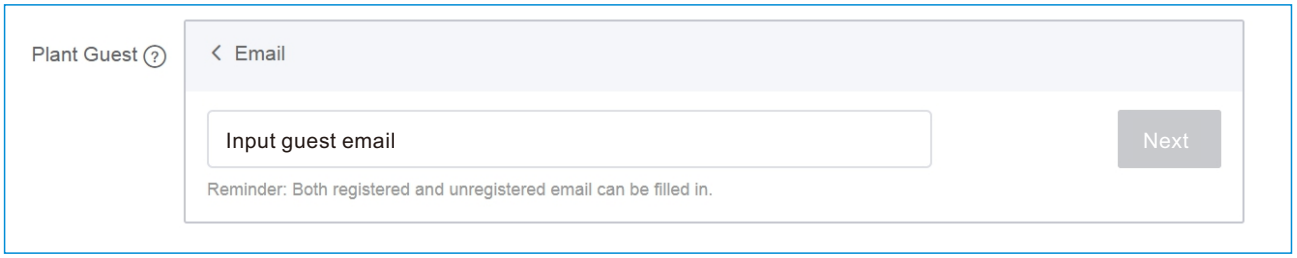
Add Guest:

1. Guest Authority: Guest have the authority to view plants but cannot edit any plant information.
2. Requirement: Add new guests which want to check the plant data and one plant may have multiple guests.
3. Steps:

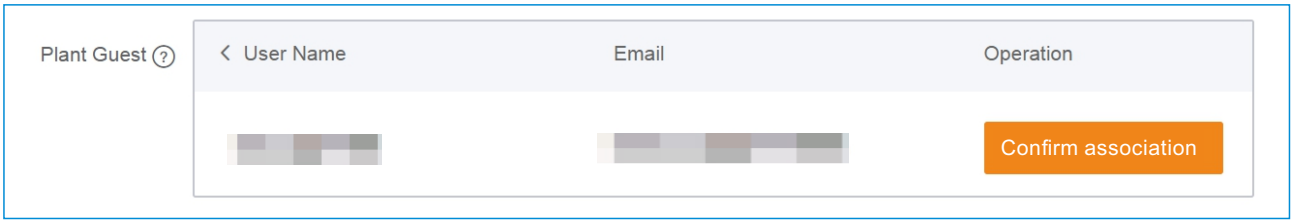
(1) Click [New Guest] button in [Plant Guest] bar.



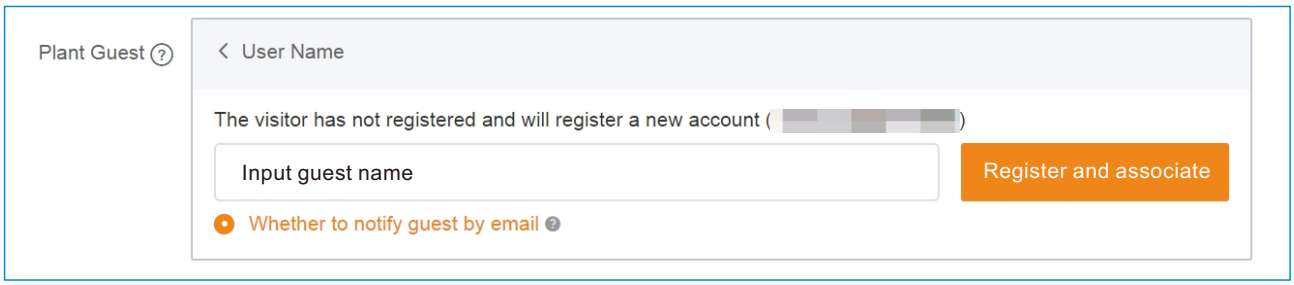
(2) Fill in the email of guests and click [Next].



(3) It will display the username or email of the guest if the guest has been registered in SolisCloud, please click [Confirm Association] to complete.



(4) If the guest has not been registered, the system will ask to input the username for the guest and click [Register and Associate] to finish. Then, the system will create the account for the guest and send account username and password to the guest's email address.



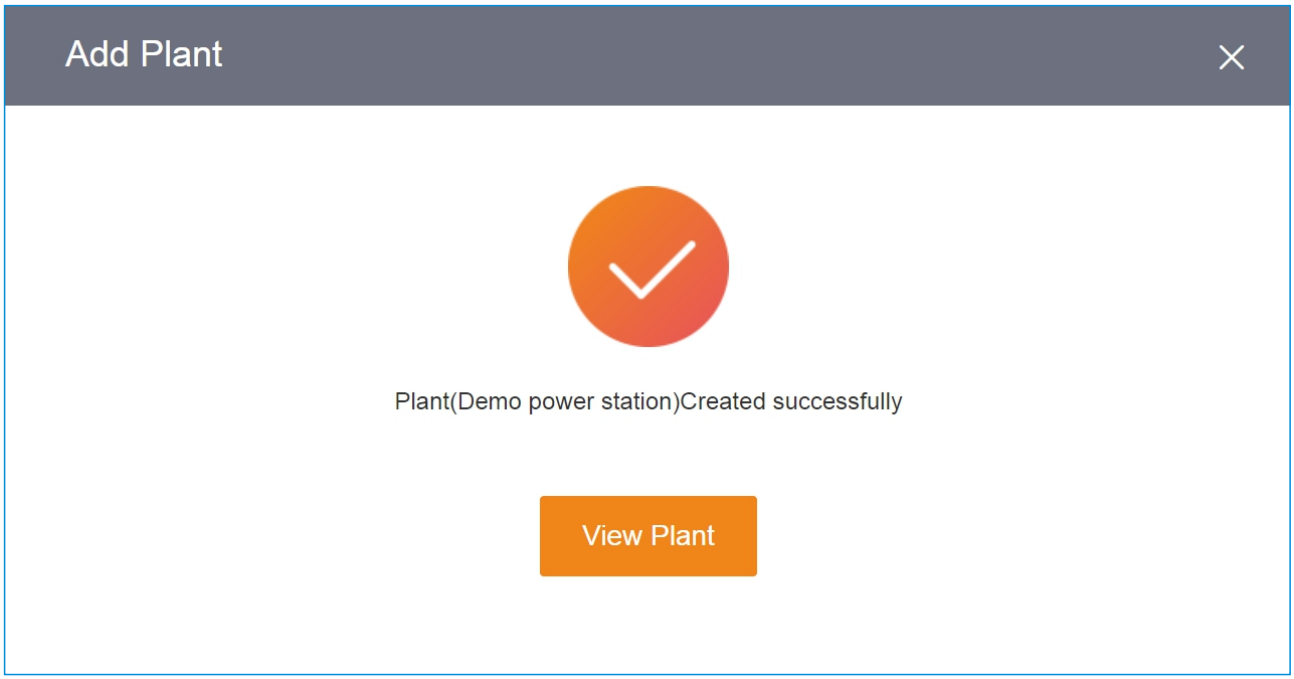
3. Normal Operation

3.4.1.3 Basic Plant Information

Required Info:
[Plant Name] Define the plant name within 2-60 characters or number;
[Total Module Capacity] Total installed capacity of the plant;
[Area] The area where the plant is located. Use the map function to locate your address;
[Plant Address] Detailed address of plant, system will fill the address automatically if the Area is selected through map positioning;
[Earning per kWh] Electricity price per kWh sold to Grid.
Optional Info:
[Datalogger SN] Datalogging device serial number;
[Module Number] Total number of installed PV modules in the plant;
[Plant Type] Select plant type: Residential Plant, Commercial Plant, Ground-Mounted Plant, Storage Plant;
[Grid Connection Type] Select Grid Connection Type: Entire Energy to Grid, Surplus Energy to Grid, Off-Grid;
[Plant Picture] Users can upload no more than 9 pictures within 700kb format.

3.4.2 Create Successfully

Please click [Create Plant] to add plant successfully after completed all information and the display interface is as follows:



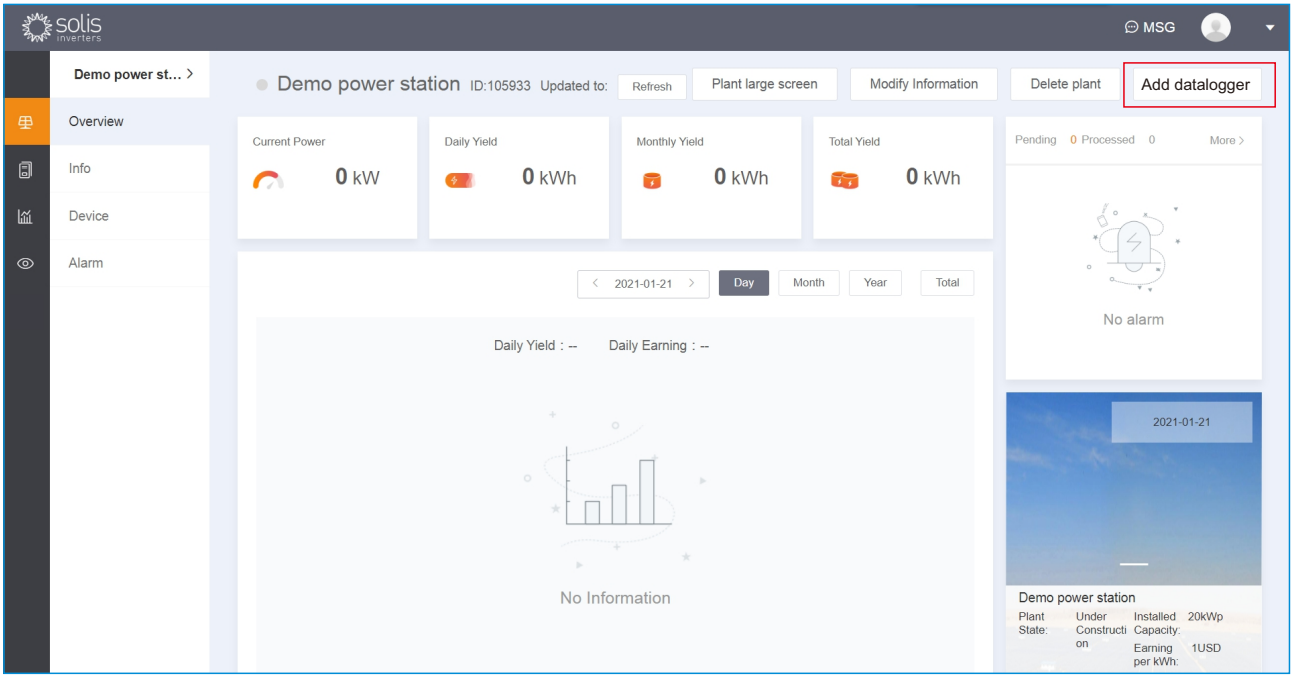
3. Normal Operation

3.5 Add Datalogger

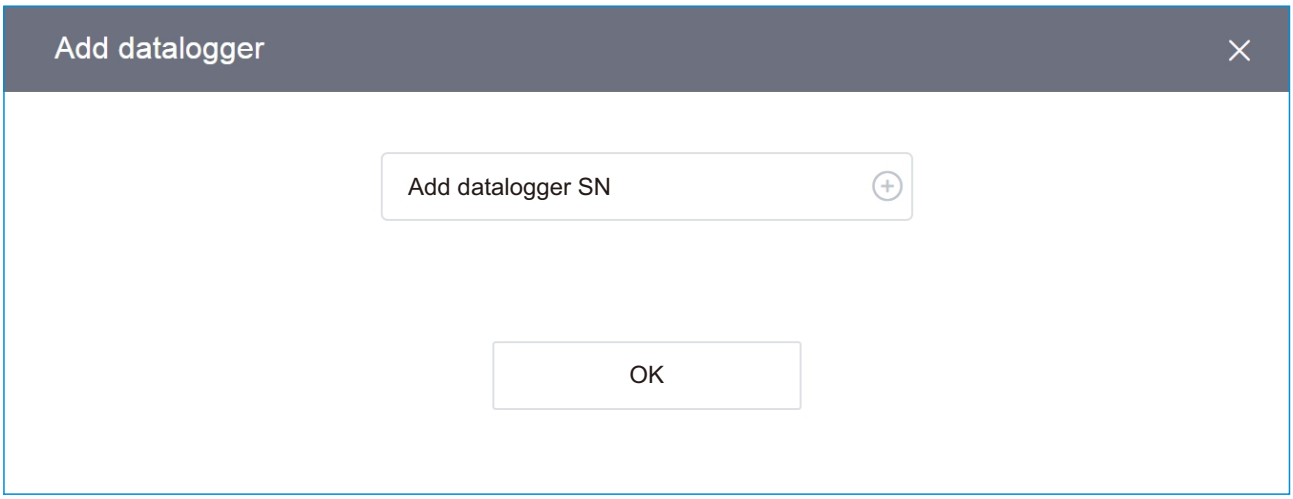
Users can add dataloggers after the plant has been created successfully. The information collected by logger(s) will be uploaded into the SolisCloud platform to view and manage the PV plant.

The specific steps are as follows:

1. Please click [Add Datalogger] in the upper right corner of [Plant Overview] for the plants that need to add dataloggers.



2. Please click [Confirm and Add] to finish the operation after entering the Serial Number of the datalogger.

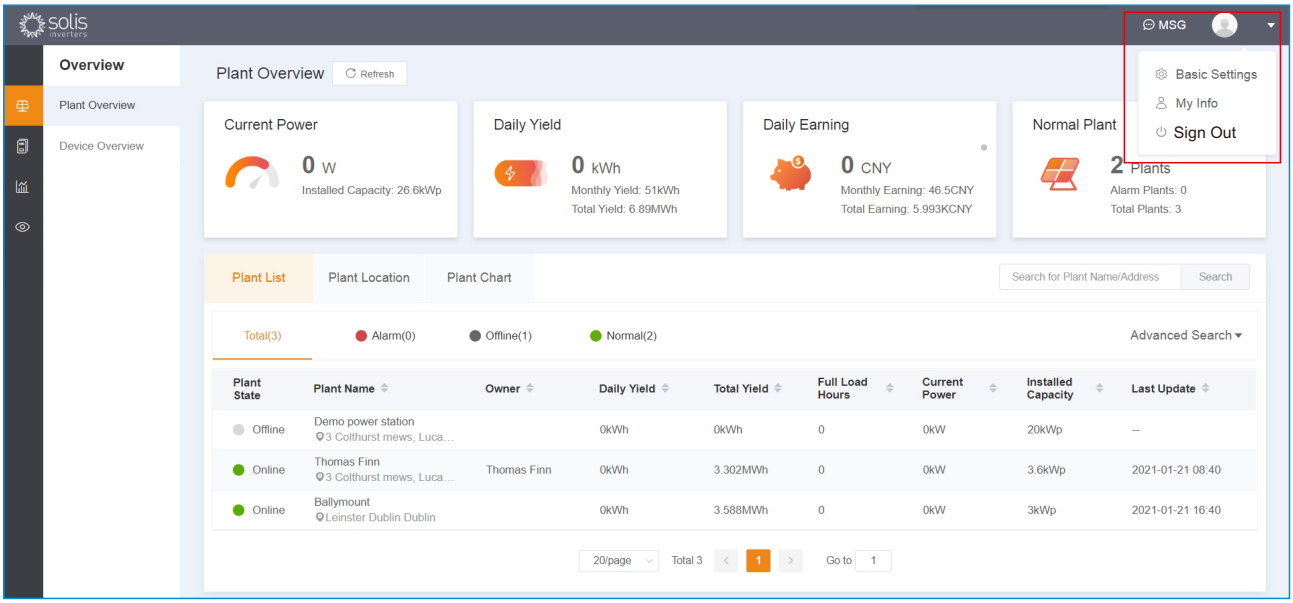


Note: Datalogger can be added through scanning QR code by SolisCloud APP.

3. Normal Operation

3.6 Log Out

Please click the account icon in the upper right corner if you want to logout after completing operation. After logout, the main interface will return to the login page and users need to enter the correct account with password to enter again.

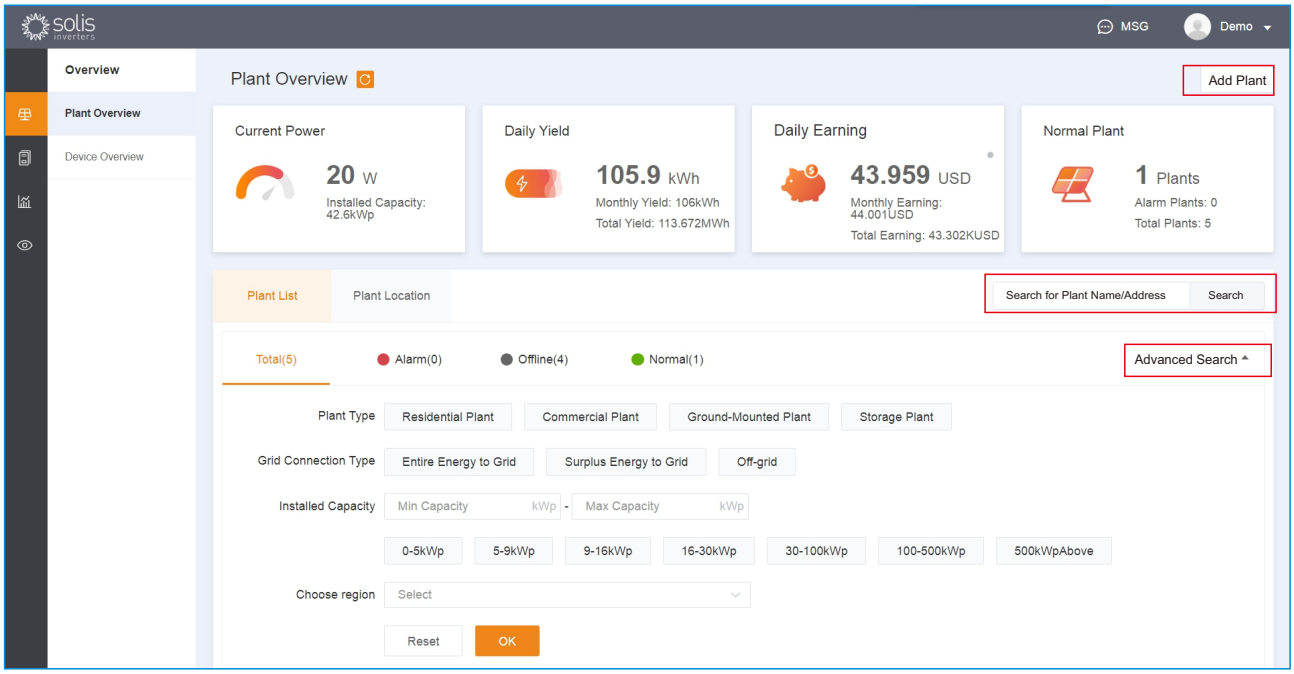


4 . Platform Operations

4.1 Plant Management

Users can operate and manage the plant in [Plant Overview] of [Overview] interface.

4.1.1Plant Overview



[Plant Data Display] Users can view the basic information of total plant and the detailed information description is as follow:

Basic information	Information description
Current power	Click and check the current power, installed capacity and full load hours.
Yield	Click and check Daily Yield, Monthly Yield and Total Yield.
Earning	Click and check Daily Earning, Monthly Yield and Total Yield.
Full load hours	Daily full load hours indicate daily power generation capacity.

[Add Plant] Users can add plant needed to be created, please refer to 3.4 Add Plant for specific procedure.

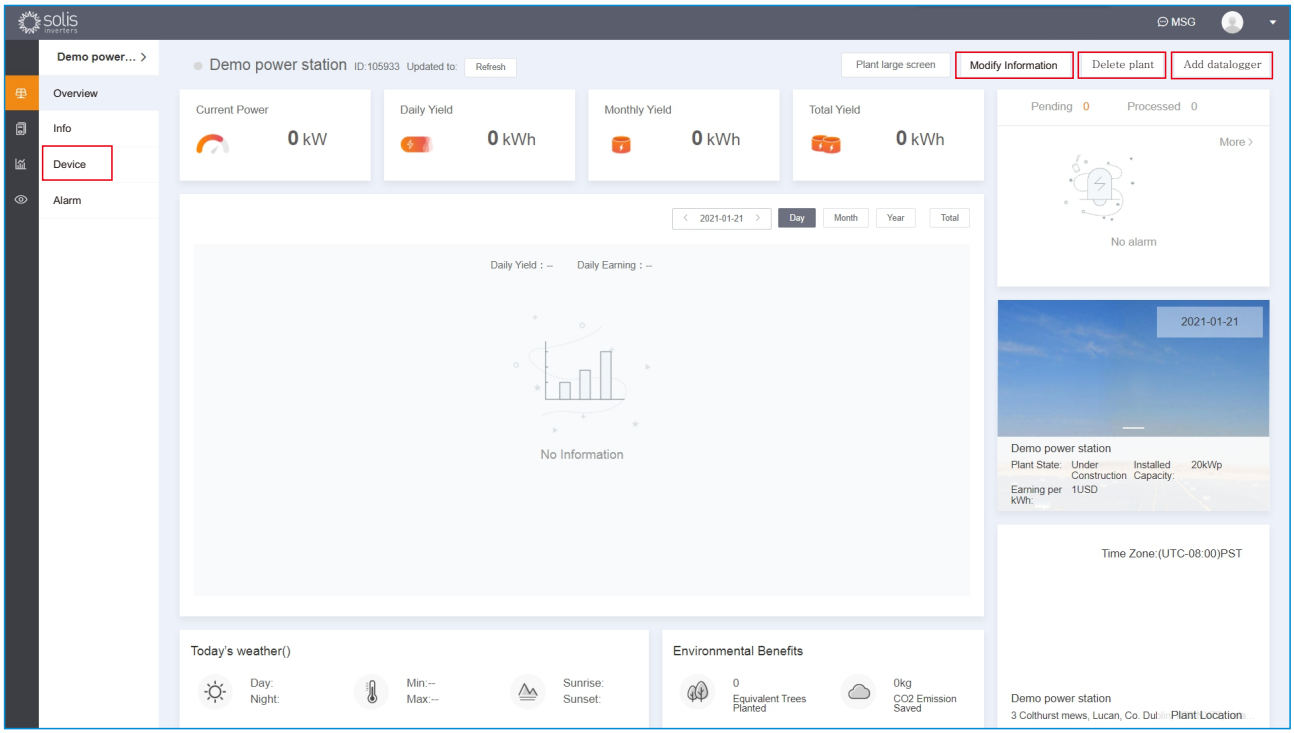
[Search Plant] User can search the specified plant according to the plant name or installation address and the click [Search] to finish.

[Plant Screening] Users can use the function to classify and search plant, the main categories include plant type, funding method, grid connection type, installed capacity and selected regions.

4 . Platform Operations

4.1.2 Plant Info

Click the specified plant to check the detailed information for operation and management separately.



[Plant Overview] Users can view the basic information of the specified plant and detailed information is as follow:

Basic information	Information description
Current power	Click and check the current power, installed capacity and full load hours.
Daily Yield	Click and check Daily Yield and Monthly Yield.
Monthly Yield	Click and check Monthly Yield and Annual Yield.
Total Yield	Click and check Annual Yield and Total Yield.
Weather	Check local Weather, Temperature, Sunrise and Sunset Time.
Environmental benefits	Check Equivalent Trees Planted and CO2 Emission Saved.
Alarm	Check Historical Alarm Message.
Plant States	Check Plant States, Installed Capacity and Earning per kWh.
Location	Check detailed location and scroll mouse on map for zooming in and out.

[Modify Plant Info] Users can modify and update the original information filled in during the plant creation process, there are two operation methods:

Method 1: Click [Modify Information] in the upper right corner of [Overview] interface to modify;

Method 2: Click [Modify Information] in the upper right corner of [Info] interface to modify.

4 . Platform Operations

[Delete Plant] Users can delete the plant through clicking [Delete Plant] in the upper right corner of [Overview] interface and the warning message will pop up, please click [Delete] to complete after confirmed carefully.

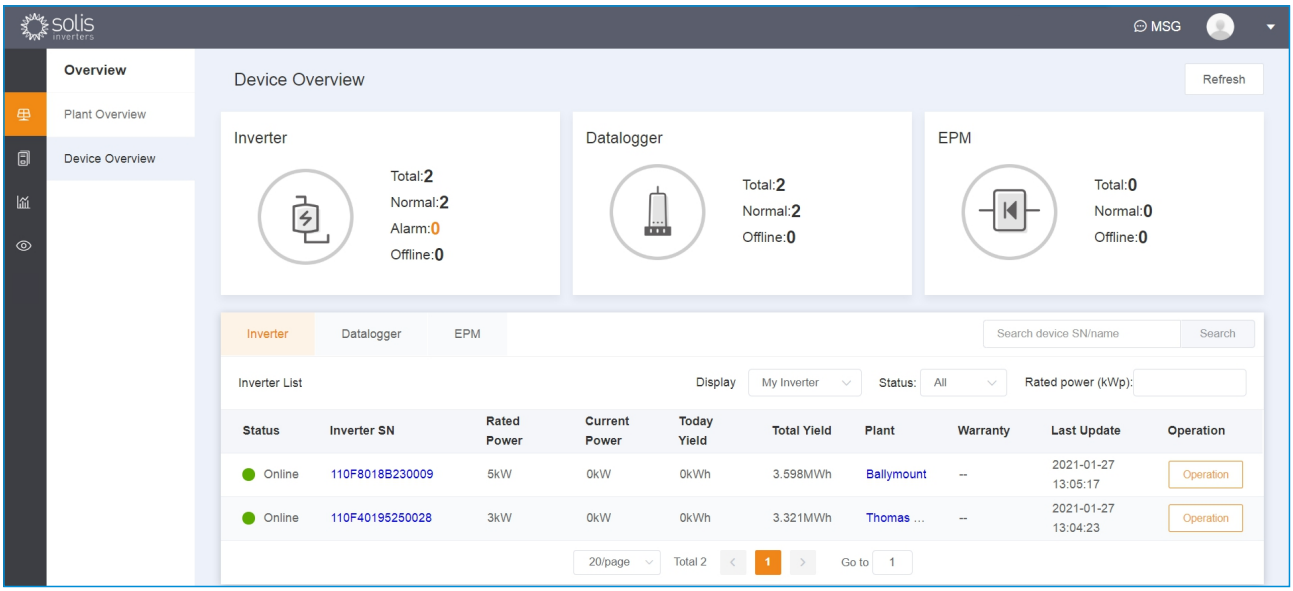
[Device Management] Users can add and edit devices connected to the plant.

①Add Device: Users can use the same method of adding datalogger to add plant devices, please refer to 3.5 Add Datalogger for specific procedure.

②Edit Device: Click [Device] in plant interface to view the inverters, loggers and EPM of the plant, users can edit and manage these devices in the current interface.

4.2 Device Management

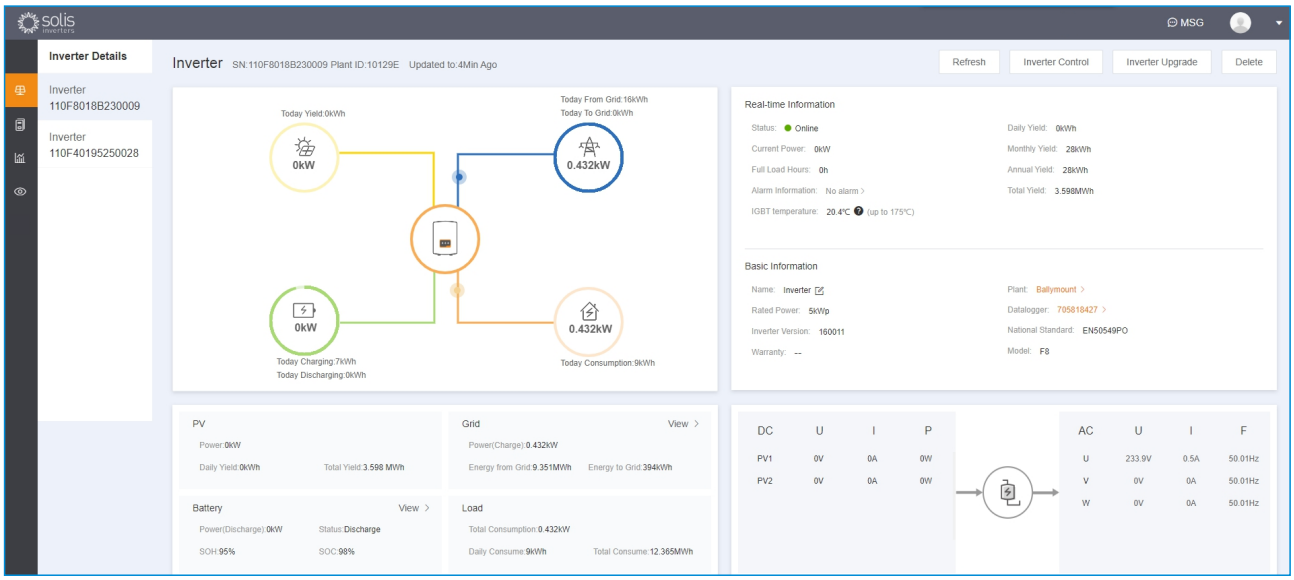
In the [Device Overview] of [Overview] interface, users can monitor the number and states of these inverters, loggers and EPM devices of the account. Click a single device in the list to check specific information and corresponding data for operation and management.



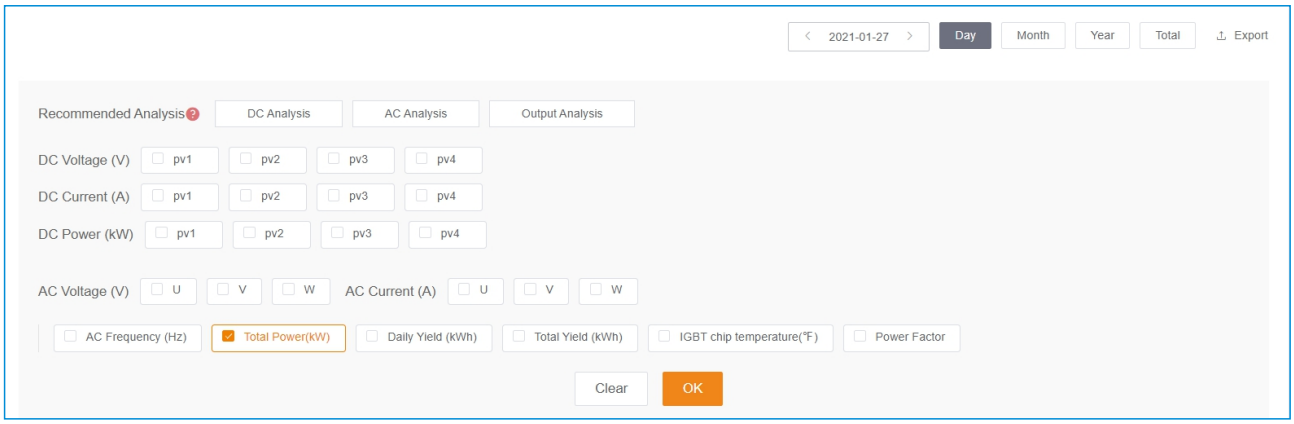
4 . Platform Operations

4.2.1 Inverter

[View inverter information] In the inverter interface, users can view the basic information like name, model and version information of inverters, also the current power and generation yield can be viewed.



[Monitor Current and Historical Info of Inverter] The SolisCloud platform will monitor the inverter data and display the corresponding graph analyses by single or multiple selection of different parameters. This includes DC analysis, AC analysis, power analysis and other corresponding parameter analyses, and users can also customize parameter types for specific analyses.

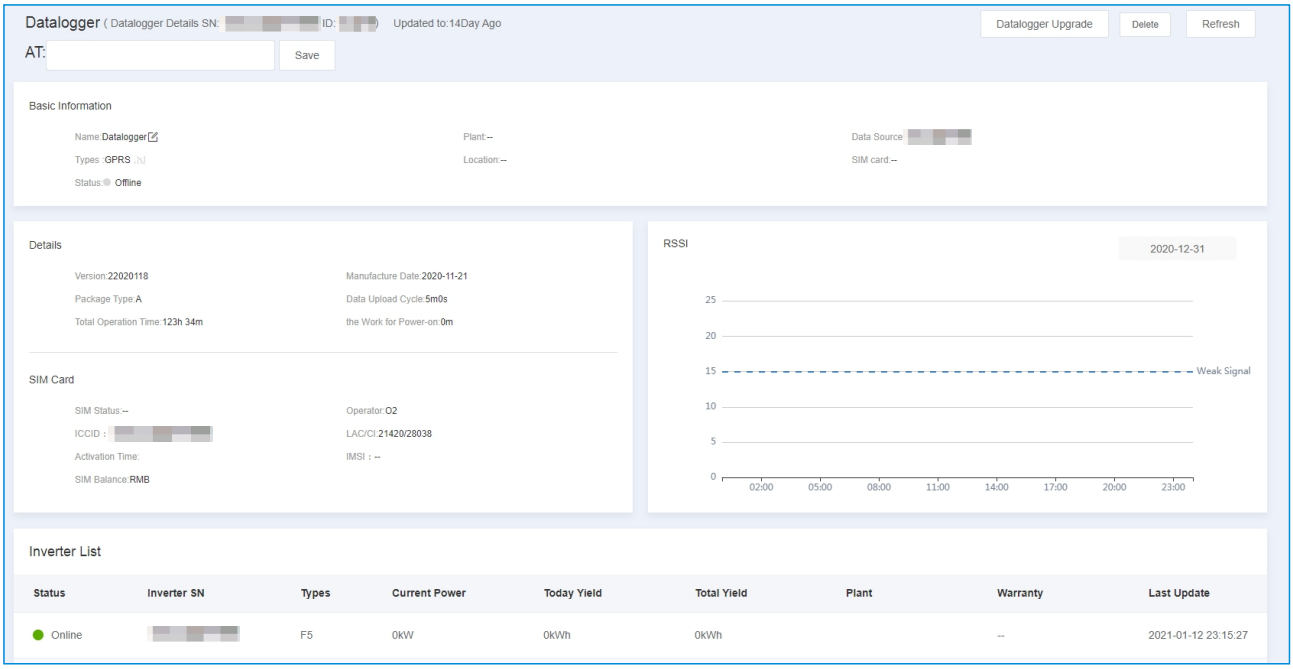


[Inverter Control] (Please consult Ginlong for activating inverter control function) Users can control one inverter remotely and change the current states or parameters of the controlled inverter.
[Inverter Upgrade] Firmware version shall be upgraded by internal personnel only.
[Warranty Query] Users can check the Warranty Period, Warranty Status and Warranty End Time according to the SN of specified inverter.

4 . Platform Operations

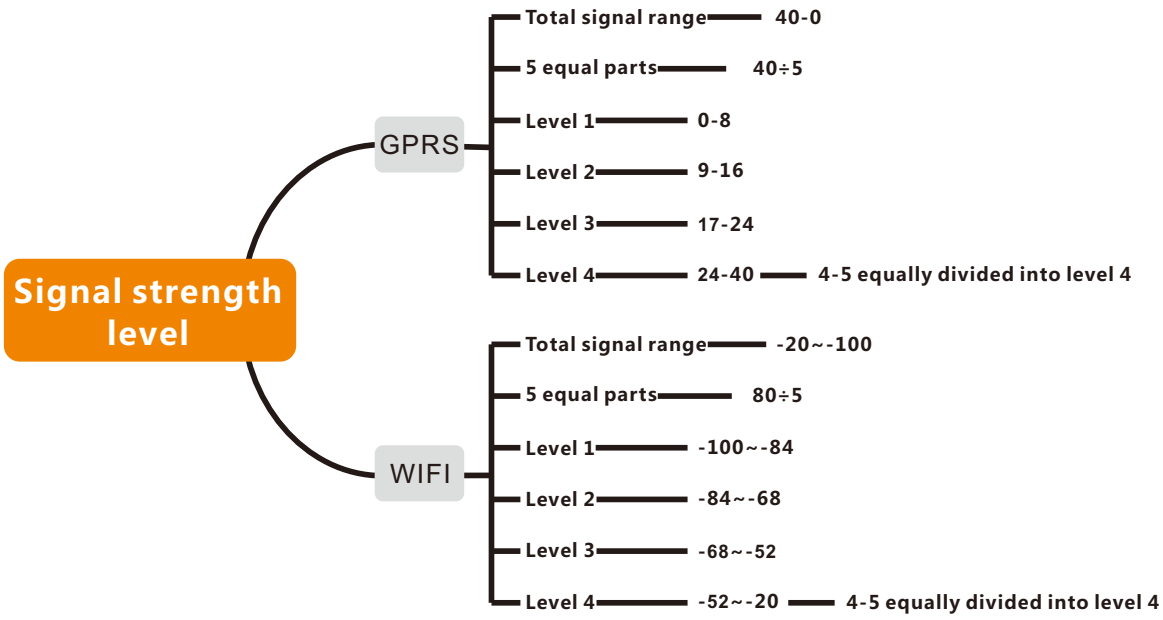
4.2.2 Datalogger

[View Datalogger Information] In the datalogger interface, users can view the detailed information like name, signal strength, version and manufactured time of inverter.



[Parameter Information]

[RSSI] The signal strength of current datalogger information;



[Total Operation Time] The total operation time of the bound datalogger;

[Data Upload Cycle] Time interval of data obtained by logger and the default interval is 5 mins;

[Power-on Time] The daily operation duration of the datalogger.

4 . Platform Operations

[Related Operation]

[Search Datalogger] Search according to the name or SN of datalogger;

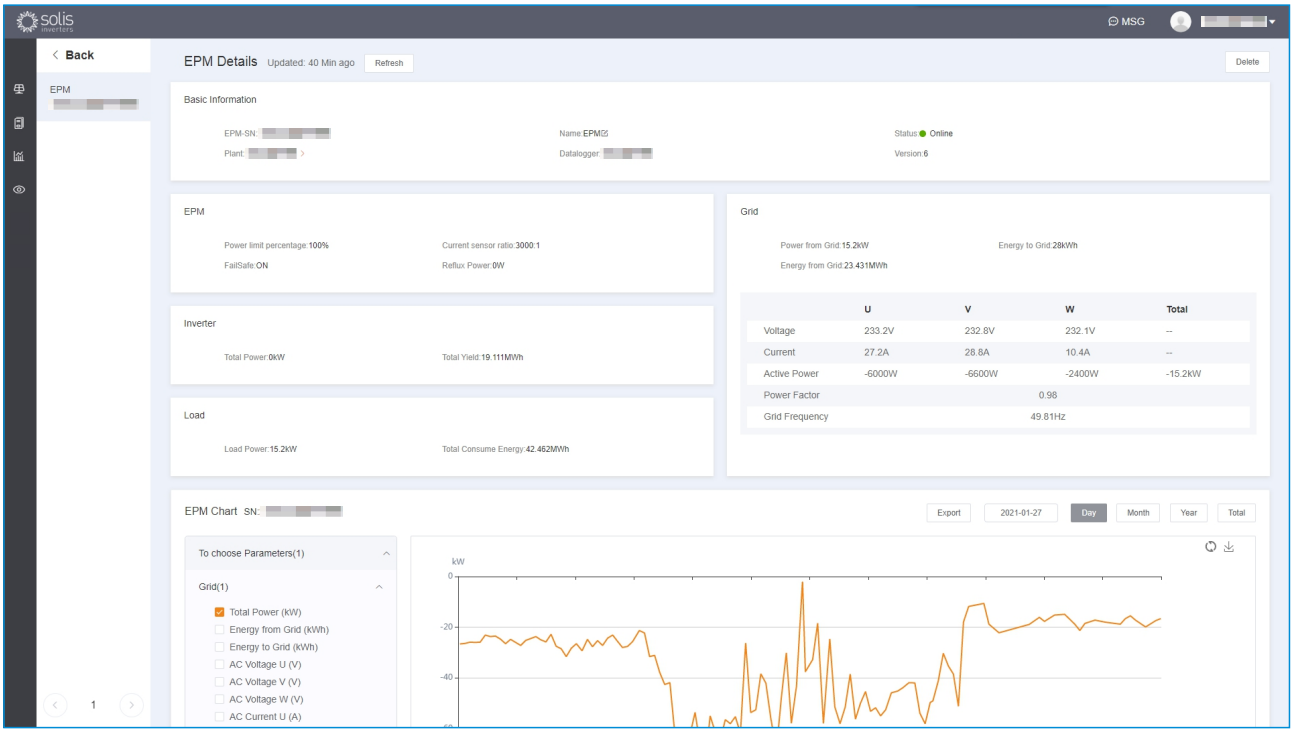
[Filter Datalogger] Filter and view the datalogger list corresponding to the conditions according to the type, status and relationship with plant of logger;

[Unbind Datalogger] Unbind the connection between datalogger and plant;

[Change Datalogger] Complete through entering the SN of changed datalogger.

4.2.3 EPM

[EPM] User can check inverter, load, grid information and all real-time input & output data.



[Parameter]

[Power Limit Percentage] Use for limiting the inverter's output power, a percentage based on rated power;

[Current Sensor Ratio] Ratio between primary current and secondary current;

[FailSafe Status] When the output power limit function and failsafe function are activated, the inverter will automatically set the output power to zero to avoid sending power to the grid if the inverter loses communication with the METER/EPM/CT;

[Reflux Power] When output power limit function is applied, set maximum power to the grid;

[Power Factor] Use for showing the power factor of the inverter, it is equal to the ratio of active power to apparent power.

[Related Operation]

[Search for EPM] Search for EPM according to name or SN;

[Filter EPM] Filter selection of EPM for certain applied conditions according to the current status of device;

[Delete EPM] Delete EPM from the power station.

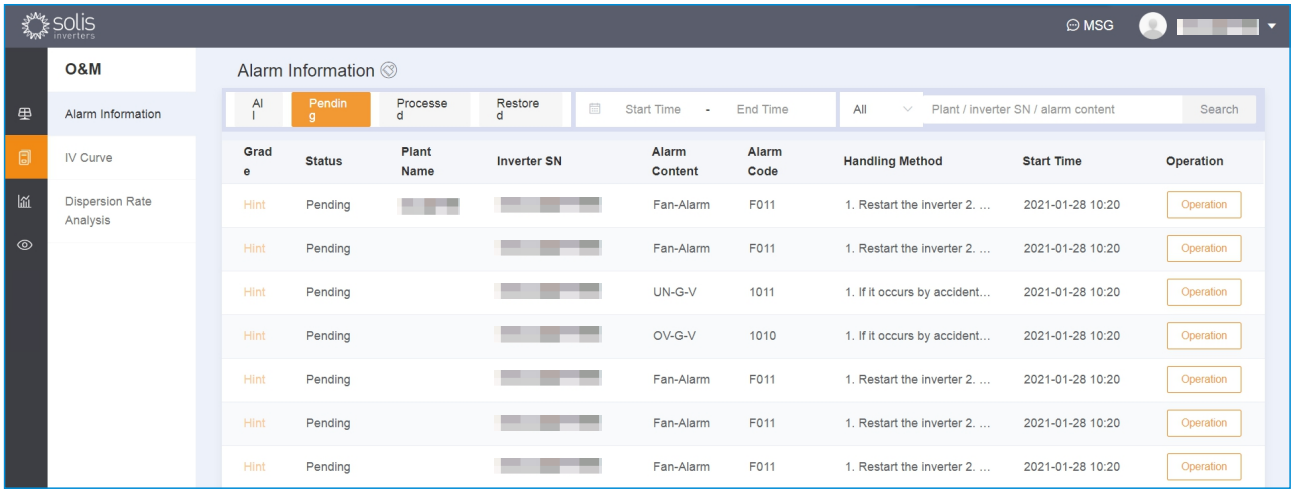
4 . Platform Operations

4.3 Operation & Maintenance

Users can conduct maintenance management in [O&M] which includes three main parts: alarm information, IV curve inspection and dispersion rate analysis.

4.3.1 Alarm Information

Users can monitor the inverter alarms, as well as the classification of all alarm information including pending, processed and restored. User can also filter the alarms based on time. The system will make an evaluation of alarms and provide suggestion to repair.



[Search alarms] On the top right corner of the page, you can search by plant name, inverter SN or alarms in search page.

[Ignore alarms] Regarding the pending alarms that are not affecting inverter's normal operation, user can define whether to ignore. Click on single alarm entry to pop up the alarm information page, then click on "ignore" to ignore it.

[Delete alarms] User can delete alarms by clicking on single alarm entry then deleting on the alarm information page, or by sliding the single alarm entry to the left then deleting it.

[Alarm notification] User can set alarm notification by clicking on "alarm notification" on the top right corner then selecting "Allow Notification" to enable this feature.

①Push notification: User can define the emergency level of push notification and push rule intervals according to own demands.

②Email message: User can designate email to receive notification message and choose whether to enable this feature.

4 . Platform Operations

4.3.3 PC Discrete Rate Analysis

Dispersion rate is an index to describe string current fluctuation and also to evaluate string's continuity of power generation, which is indicating the health status of the plant. The less the dispersion rate is, the more stable the plant is running and the better the power generation is. Otherwise, defective bypasses might exist which may affect the power generation.

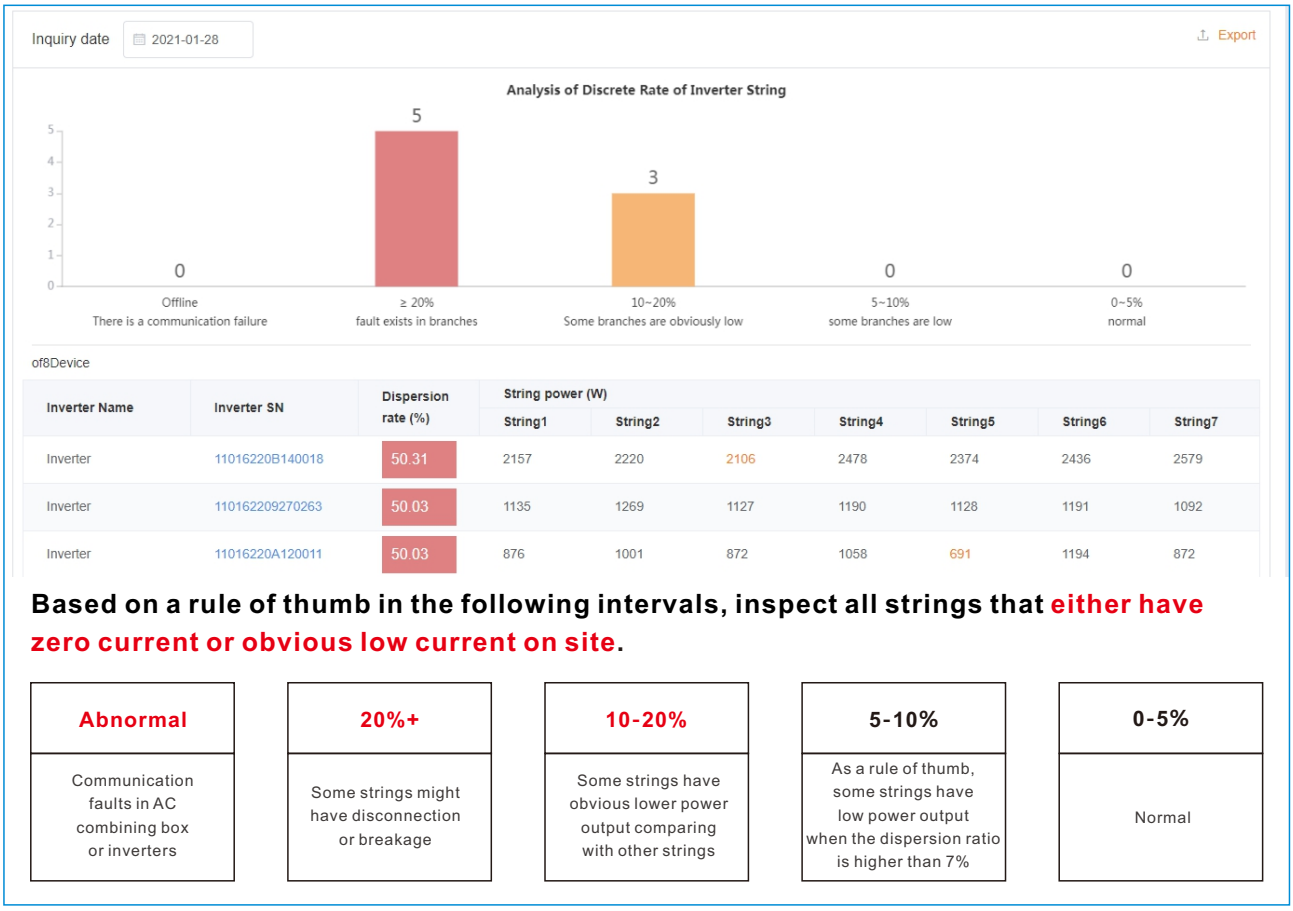
[Operation Prerequisite]

1) Dispersion rate analysis time is 10am to 14pm every day. Please check the dispersion rate analysis result after 10am for that day;
2) Number of input strings to the inverter is equal to or larger than 6;
3) Real-time power of inverter is larger than 10% of rated power.

[Hint] If there are some strings not connecting to PV panels, or their connected power is far different from others', it is not recommended to add these strings to the dispersion rate analysis (click on these strings to set)

[Function Operation]

1) Function location: click [O&M] -Dispersion Rate Analysis, check single device for its dispersion rate curve and data;



Based on a rule of thumb in the following intervals, inspect all strings that either have zero current or obvious low current on site.

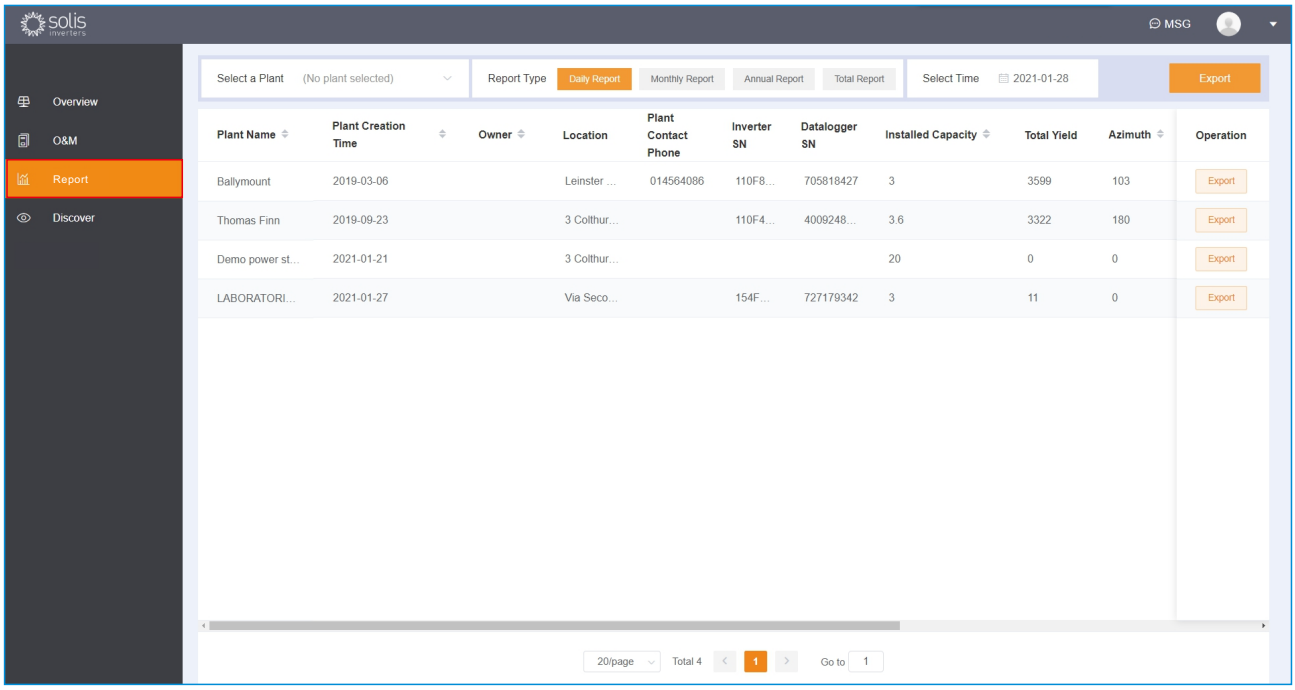
Abnormal	20%+	10-20%	5-10%	0-5%
Communication faults in AC combining box or inverters	Some strings might have disconnection or breakage	Some strings have obvious lower power output comparing with other strings	As a rule of thumb, some strings have low power output when the dispersion ratio is higher than 7%	Normal

2) Check string dispersion rate data for each plant device and if necessary export the dispersion rate data;
3) Set necessary strings to not participate into dispersion rate calculation.

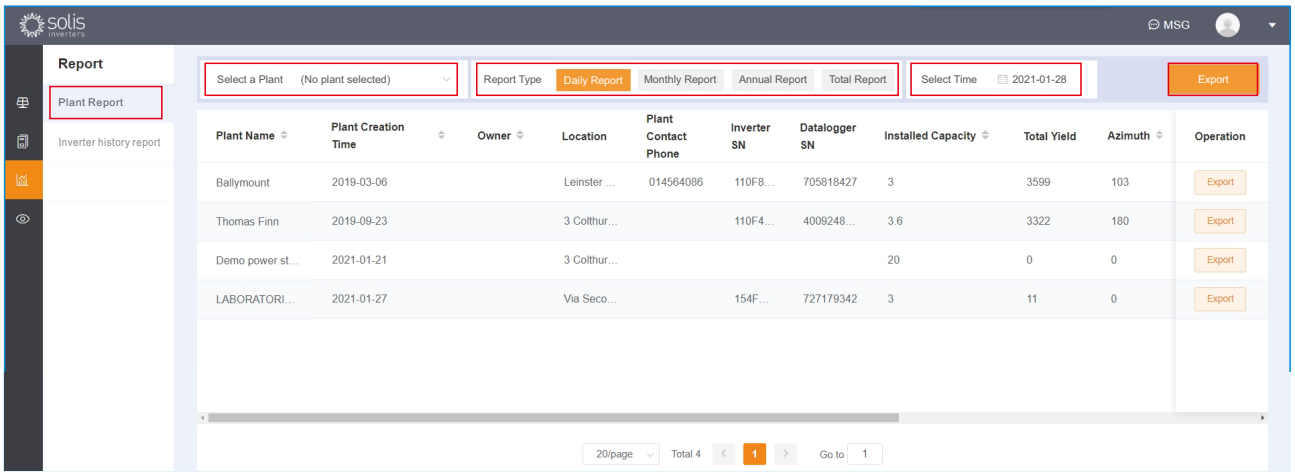
4 . Platform Operations

4.4 Report Management

User can manage the reports in [Report] page, including three parts: plant report export, power report export and inverter history report export.



4.4.1 Plant Report Export



[Select Plant] User can choose to export report by plant name, click on [Select a plant] , check on square before the target plant, then click [OK] . User can also search for plant by the area or plant name.

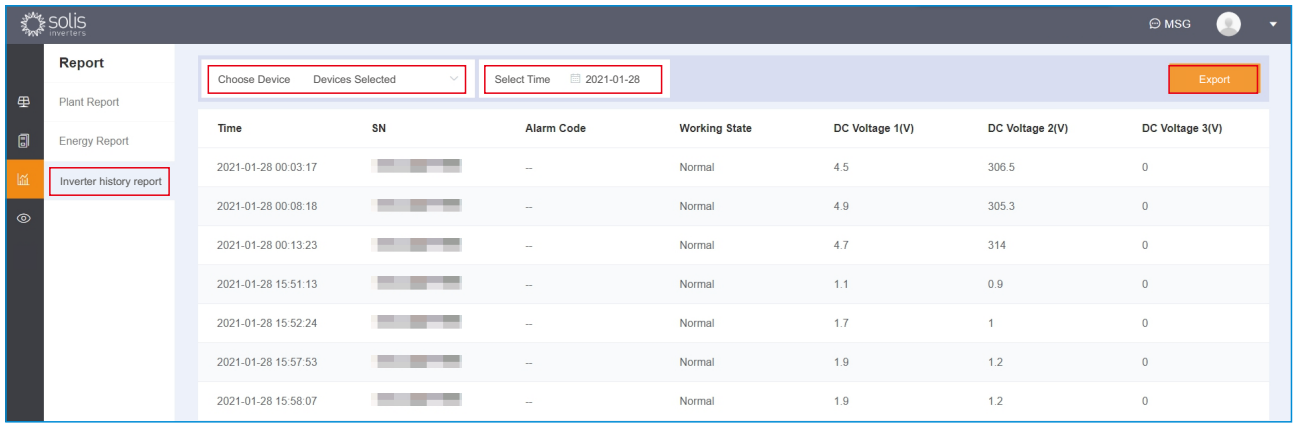
[Select Report Type] User can choose type of exported report: daily report, monthly report, annual report and total report.

[Select Time] User can select time period of report. Selected report period is corresponding to the report type. When total report is selected, there is no need to select time period.

[Report Export] After all previous selections have been finished, click on [Export] on the top and right corner to pop up the download options, and the user can define name and download path, then click [Download] to finish; user can also click on [Export] on the right end of the entry and download the plant data.

4 . Platform Operations

4.4.2 Inverter history report export



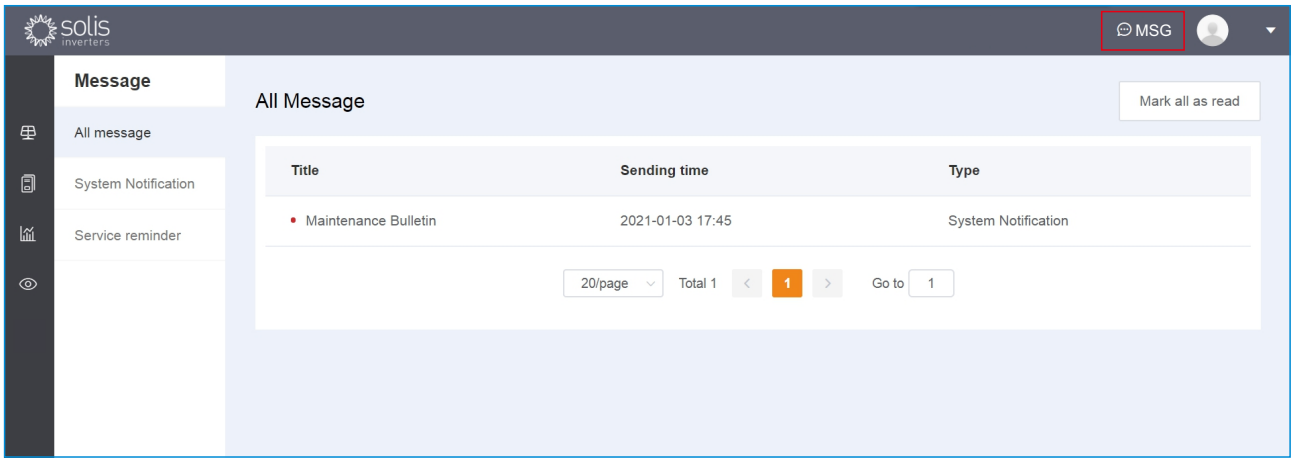
[Select Devices] User can select the report to export by device SN, click on [Select device] , check on square before the target plant, then click on [OK] ; and user can also search by device SN.
[Select Time] User can designate the certain date for plant report export.
[Report Export] After all previous selections have been finished, click on [Export] on the top and right corner to pop up the download options, and the user can define name and download path, then click [Download] to finish.

4.5 Message Management

User can click on [Message Management] on the top right corner, then select [View more] to enter the message center, and then manage the received messages.

4.5.1 Message Center Interface

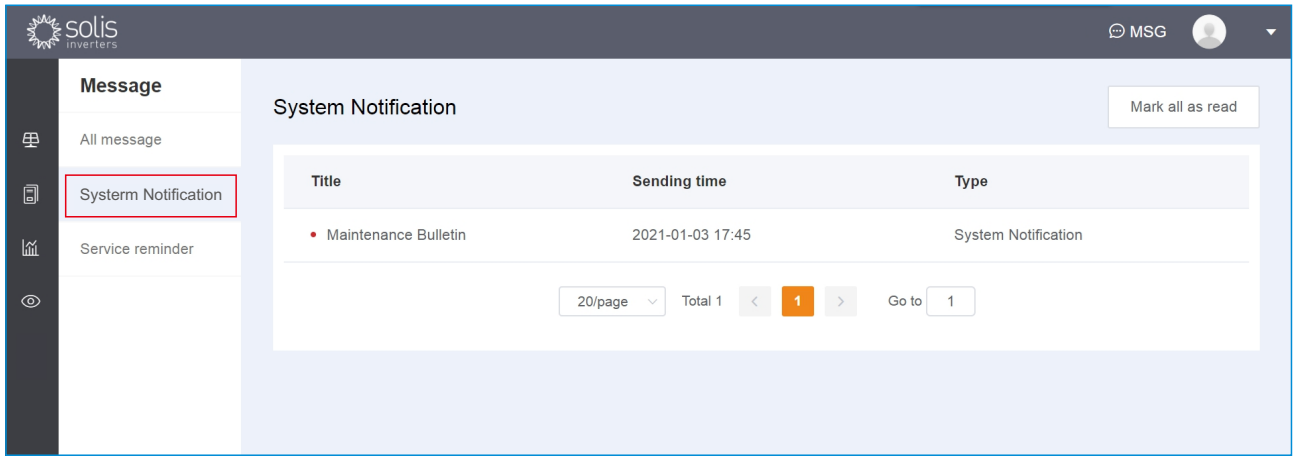
Message center includes three main parts: All message, System notification and Service reminder. In All message, user can check all messages received under the account including system notifications and service reminds.



4 . Platform Operations

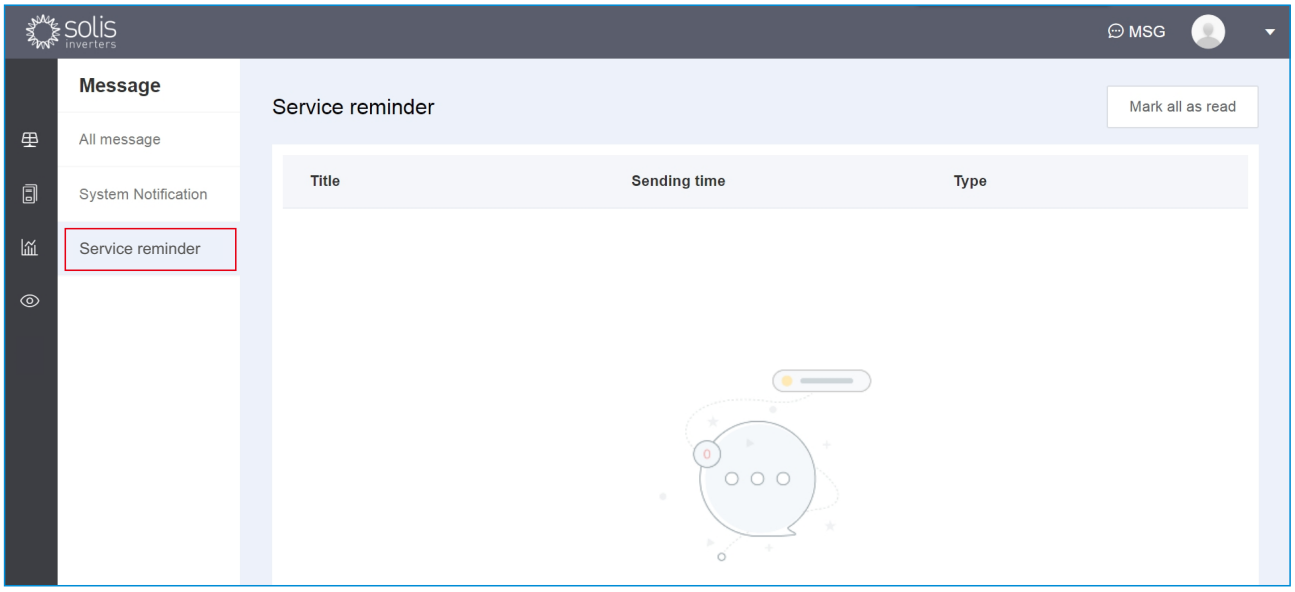
4.5.2 System Notification

User can check maintenance reminds before every time system upgrade in System notification.



4.5.3 Service Reminder

Service reminder is used to remind users of real-time notifications on related business and functions.



4 . Platform Operations

4.6 Basis

This section is for management of user account and settings including user info, basic settings and version info.

4.6.1 User info

User can check account information such as user type, organization. They can set information such as profile picture, email address, password.

4.6.2 Basic Settings

[Temperature] User can select temperature unit either in Celsius or in Fahrenheit.
[Language] User can select language for web or APP including Chinese, English, Spanish, Poland, Germany, French, Korean, Dutch, Portuguese and Italian.
[Alarm Message Setting] User can choose to whether enable AI String Type Alarm or not. When this feature being enabled, all faults on string level will be monitored and users will be notified via alarm information.

4.6.3 Version info

[General] User can clean up the cache and check privacy agreement in this section of APP. Cache clean will only delete temporary information and won't delete plant information and other important information.
[About] User can check current version of SolisCloud. When new version of APP is available, user can upgrade the software.

4 . Platform Operations

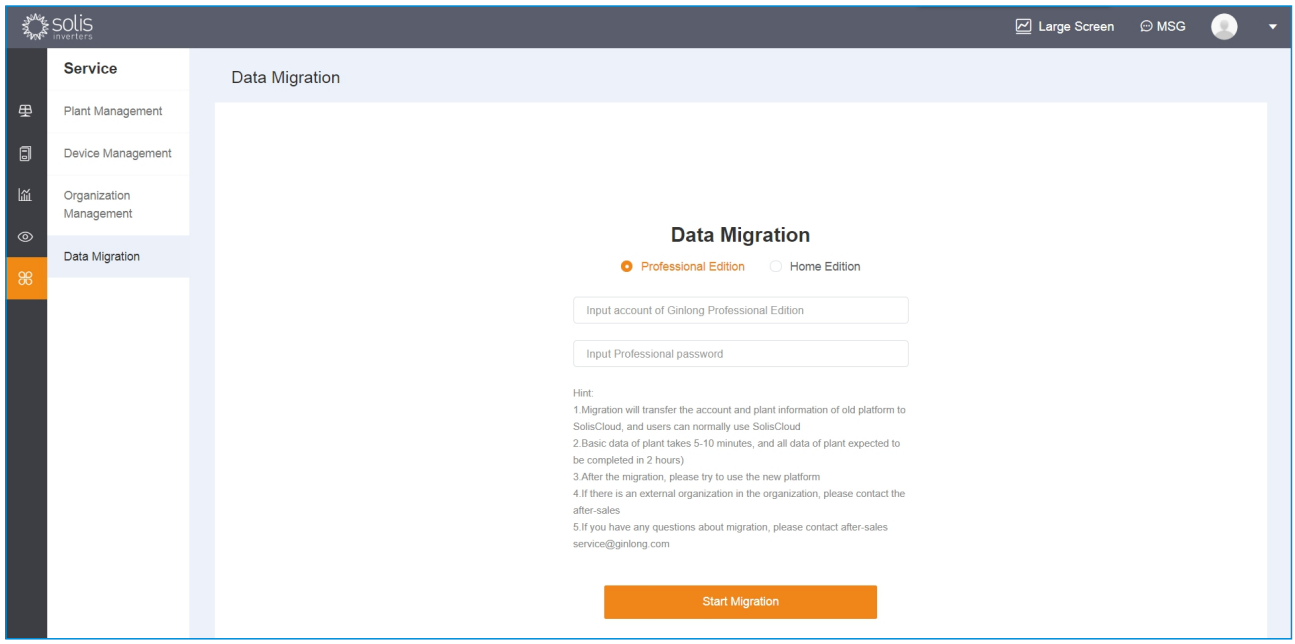
4.7 Tools

4.7.1 Data Migration

[Operation prerequisite]

① Only support one-time successful migration, cannot make repeating migration;

② Only for Solis Home users that have been using SolisCloud for a certain period but have never done the migration, upgrade the user's data in the account.

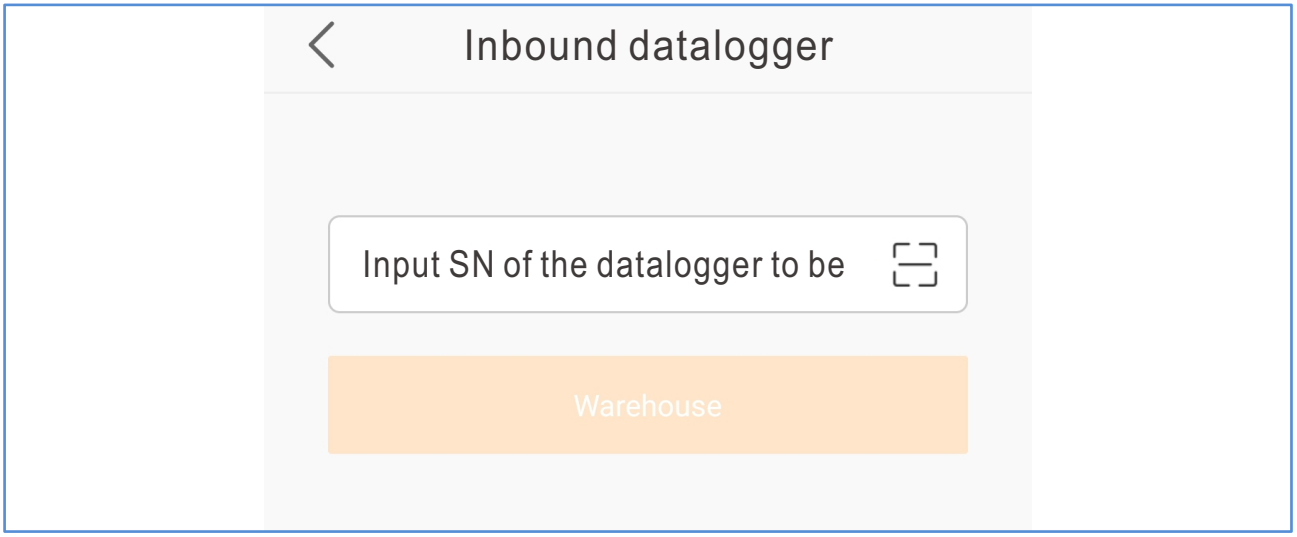


Method 1： Log in SolisCloud--> Data Migration--> Type in Solis Home account/password--> Click on "Migration"-->SolisCloud creates the same account--> Log in--> Refresh

Method 2： Log in SolisCloud --> Tool --> Data Migration --> Type in Solis Home Account & Password --> Click on "Migration"（Wait for 10 minutes）--> Refresh

4.7.2 APP Warehouse tool

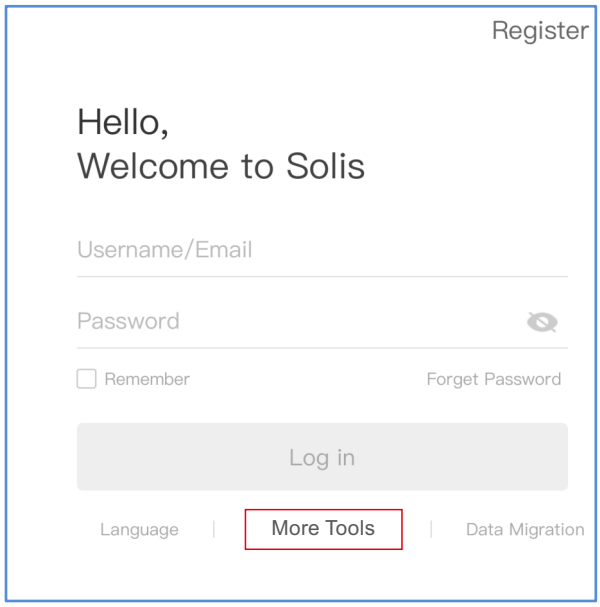
Choose to import data logger into current account. The imported data logger is unbinding to the plant, then the user can choose data logger to bind with plant.



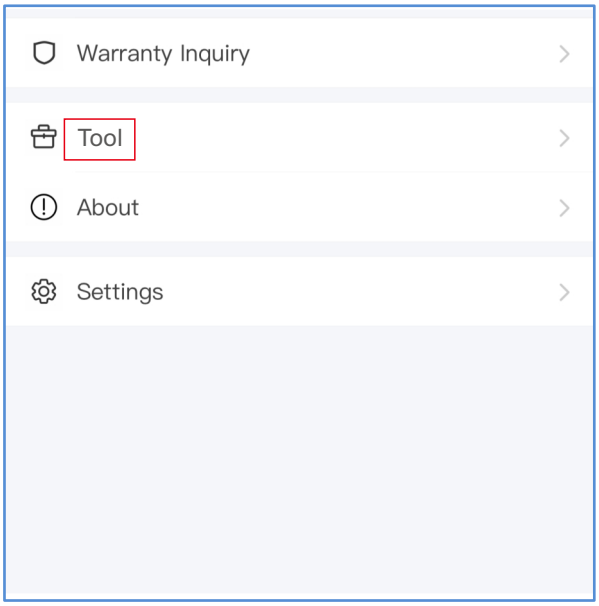
4 . Platform Operations

4.7.3 APP WIFI Configuration

Step 1: download soliscloud app in the APP Store.
Step 2: Click on [WiFi Configuration] . If you already logged into APP, find WiFi Configuration in [Tools].

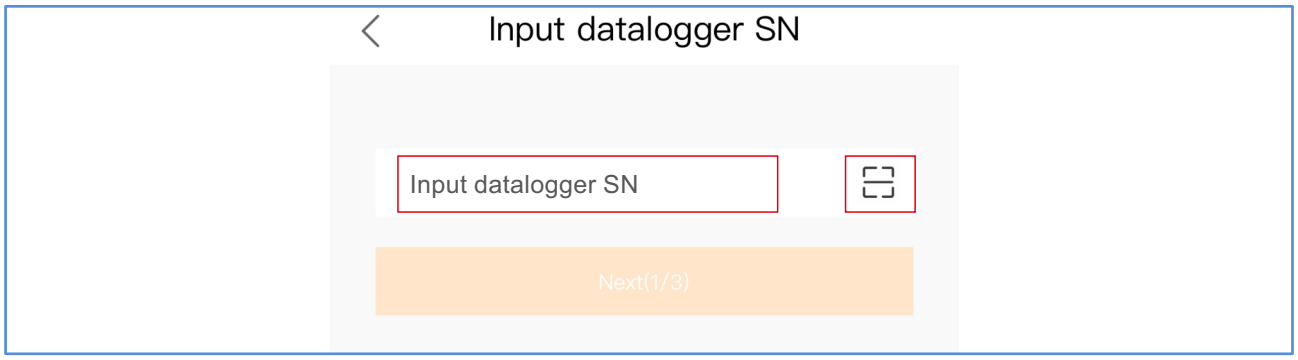


Unlogged account, click on “More Tools” and select “WiFi Configuration”



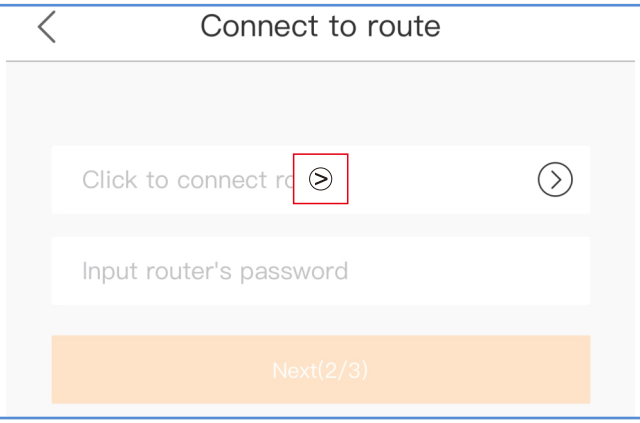
If you have logged in, please click "Tools" to enter WiFi configuration

Step 3: Either type in data logger SN or scan the QR code on the data logger.



4 . Platform Operations

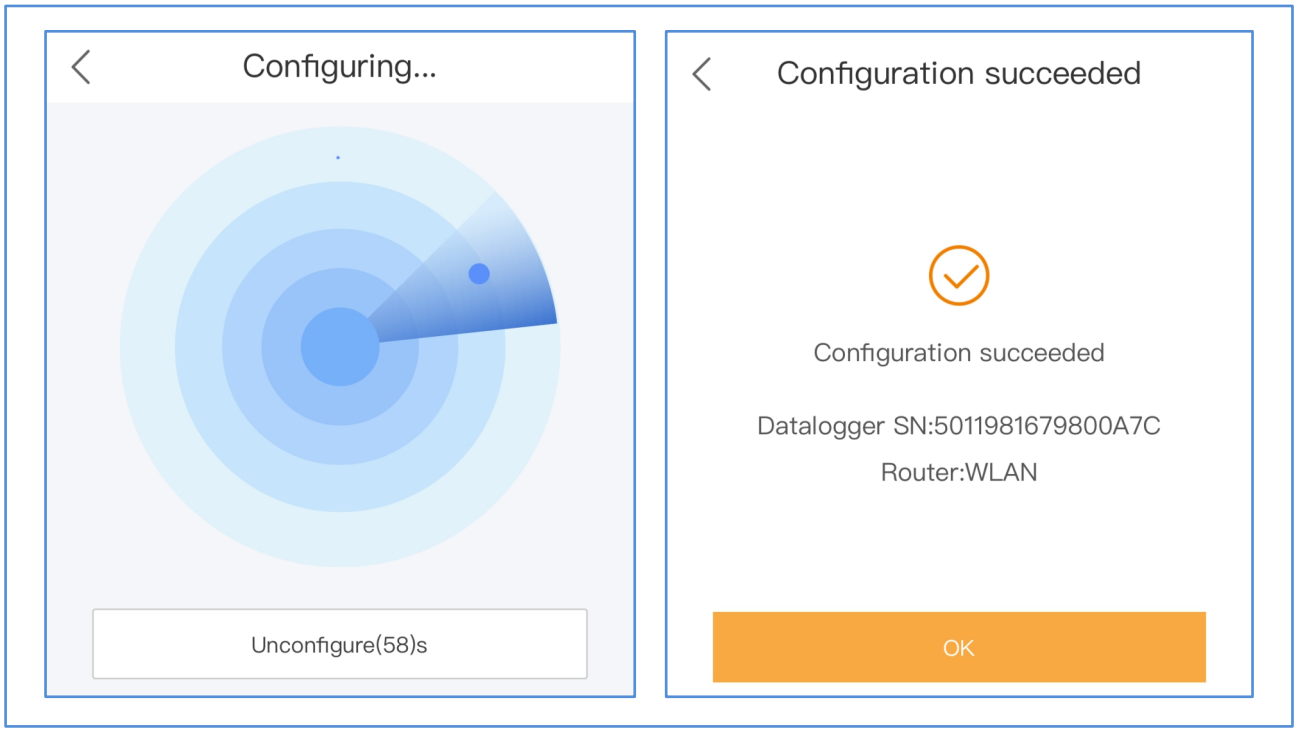
Step 4: Click on [⊳], make sure the phone is connected to the router's WiFi, and type in WiFi password, then click on "Next 2/3".



Step 5: Press on "Reset" button for more than 5 seconds until the indicating light is rapidly flashing. Then click on [It's flashing (3/3)]to finish the setting.

4 . Platform Operations

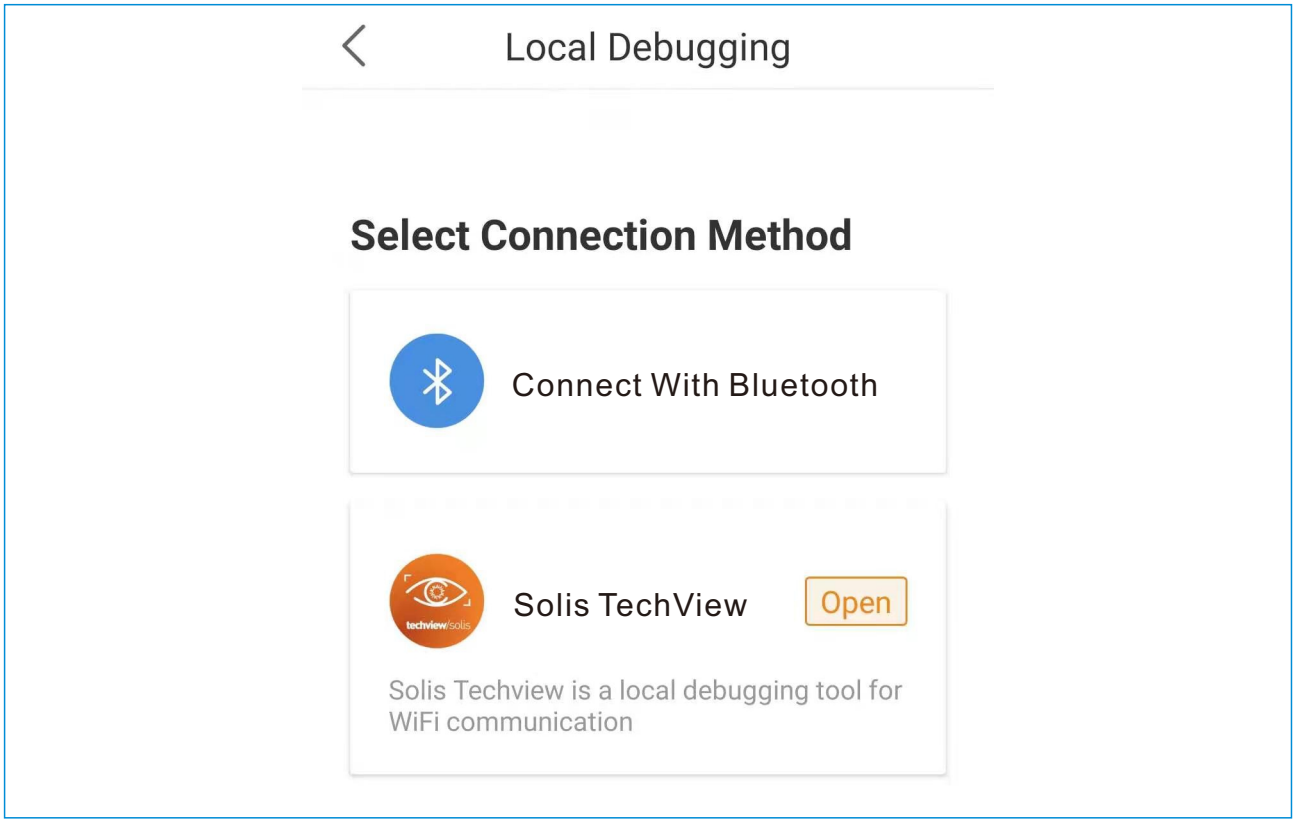
Step 6: Wait for 10 seconds until the setting is finished. After the setting is successfully configured, click on “OK” to return Home. If the setting is not successfully configured, please set again or contact sales support.



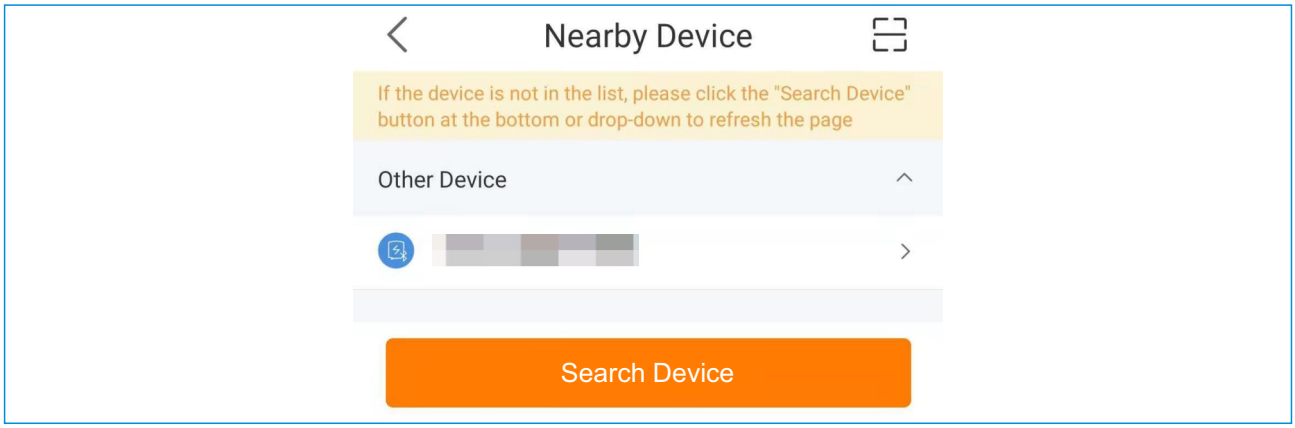
4 . Platform Operations

4.7.4 APP Local Debugging

Local Debugging include Bluetooth connection and WiFi connection, which can be used for commissioning in special situations.



[Bluetooth connection] Click on [Connect With Bluetooth] confirm that phone Bluetooth is enabled, then click on [Search Device], then target devices will show up in [Nearby Device] list, then click on the target device to type in control password, click on OK to enter the commissioning page.



4 . Platform Operations

Commissioning page include energy flow status, parameters, parameter settings etc.

[WiFi Configure] The way of current WiFi configuration jumping into Solis TechView APP is: jumping into installation page if the phone doesn't have Solis TechView APP or directly open the APP if the phone has Solis TechView APP. In case the inverter is properly connected, search for inverter's WiFi, then type in control password to go into commissioning page.

4.8 Others

[Discover] PV knowledge and latest Solis news.
[Help] FAQ and warranty inquiry.
① FAQ: Common problems and solutions in application process
② Warranty inquiry: inquiry about device's warranty time, warranty status and warranty end time based on device SN.

5 . Contact Us

address: No.57 Jintong Road, Seafront(Binhai) Industrial Park, Xiangshan, Ningbo, Zhejiang
Service telephone: 400-101-6600
Sales telephone: +86 (0)574 6580 3887
fax: +86 (0)574 6578 1606
e-mail: info@ginlong.com website: www.ginlong.com