



# USER **GUIDE**

**S-miles Cloud** Monitoring Platform

— By Hoy Miles

Hoy Miles Power Electronics Inc.

No.18 Kangjing Road, Hangzhou 310015, P.R.China

+86-571-28056101

[www.hoy miles.com](http://www.hoy miles.com)

Last update time 2021.1.28  
Contact: [Service@hoy miles.com](mailto:Service@hoy miles.com)

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# 1. About

## 1.1 Introduction

Hoymiles' Monitoring platform is a smart photovoltaic operation monitoring and management system developed by Hoymiles, especially for installers of distributed photovoltaic power plants.

At present, the system mainly includes the Installer and the owner version. The corresponding web and mobile application versions are designed accordingly.

This platform provides an easy-to-use procedure for accounts under monitoring and a visual physical layout guide for the installation of Microinverters, which helps installers configuring monitored accounts rapidly, and provides installers power generation data on both plant- and module-levels, as well as detailed alarm information about the power plant regarding commissioning & diagnostics

## 1.2 System Composition

In order to use the Monitoring system, you must install DTU and Microinverter. On one hand, DTU communicates with the Microinverter in the system through wireless communication, collects the operating data, Microinverter status, and is also responsible for transmitting control commands to the Microinverter, adjusting the operating status of the system. On the other hand, DTU connects to Internet through a router, sends all Microinverter operating data and statuses to Hoymiles Monitoring server. DTU is also responsible for the control commands and data which are sent to the Microinverter into the system to achieve the remote control of the whole system.

## 1.3 Installer & End-user APP/Platform



**S-mile end-user**



**S-mile installer**

## 1. App download

- Scan the QR code to download.

### For Installer,



 Android /  iOS

### For End-user,



 Android /  iOS

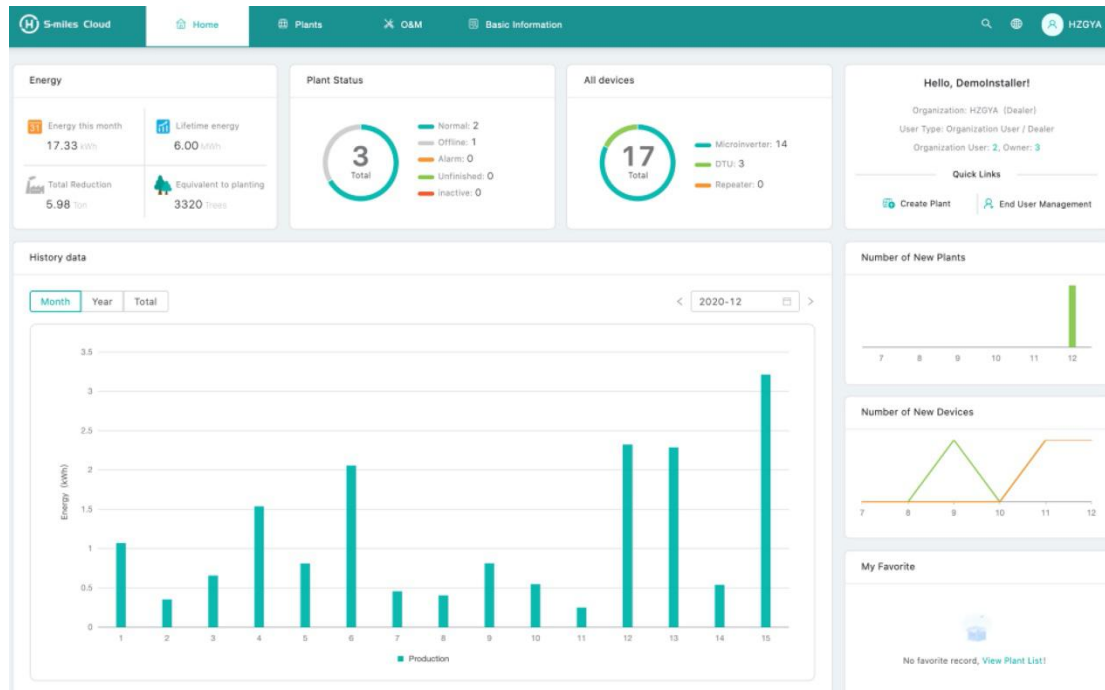
- Search“Hoymiles” on Google Display or APP Store

## 2. Webpage

Web: <https://world.hoymiles.com>


## 2. Overview

### 2.1 Home page




The homepage of the power station displays the number of power stations owned by the logged-in user, the power generation of the current month, the cumulative power generation of the power station, and the total number of alarm devices. The basic function bar at the top can modify the login account.


#### 1. Top basic function bar

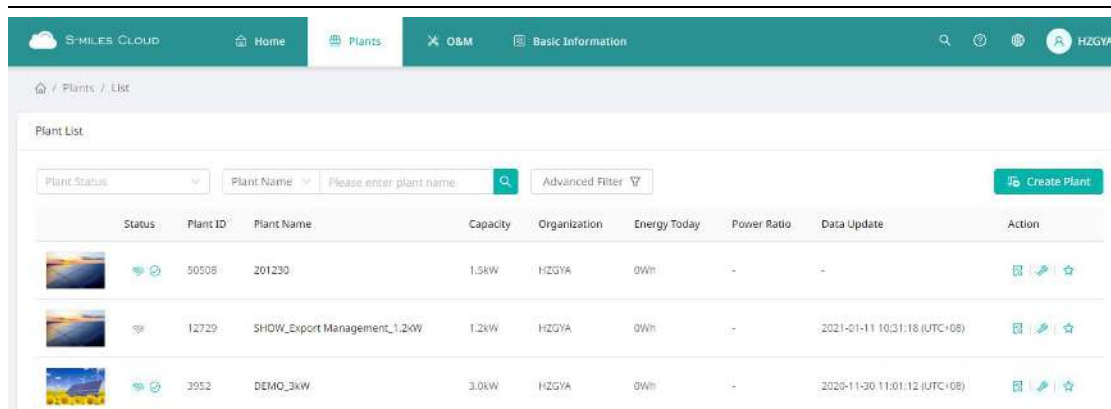
(1) Search: Input the power station name or device serial number, the platform search for the corresponding target. 

(2) Language: Click the language button to switch to the corresponding language. 

(3) Username: Click the username, "My account" and "Logout" will be displayed. Users can click to modify their personal information or log out of the system according to the needs. 

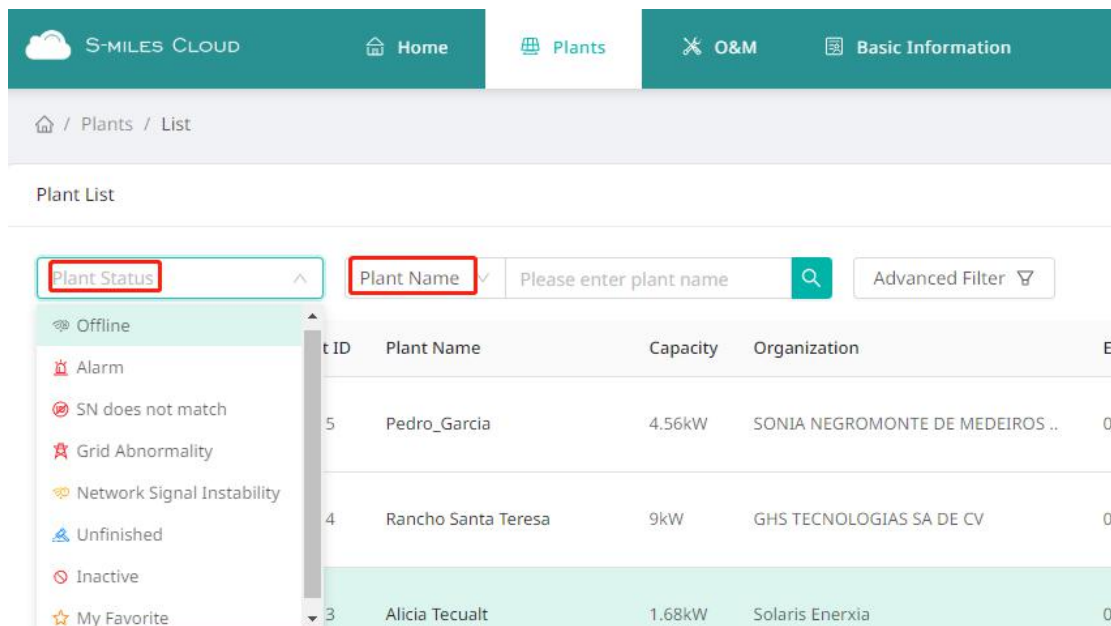
### 2.2 Plants

Power station plants: Display all the power stations of the login user, also you can view or operate the power station, click "Star 

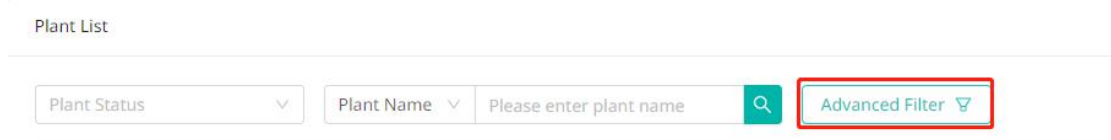


## 2.2.1 Filter

You can find the power stations according to the plant status, plant name or plant id, etc.

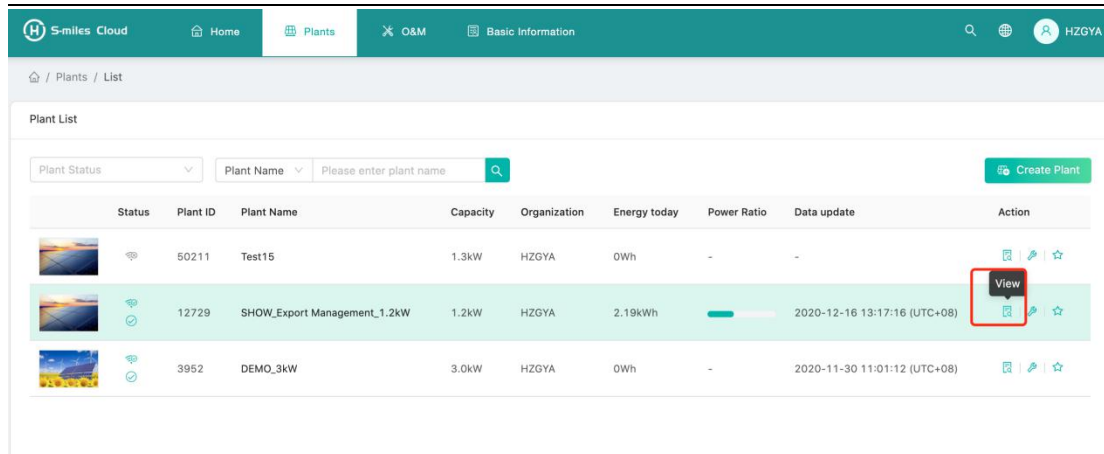


An advanced filter will be added to find plants later.



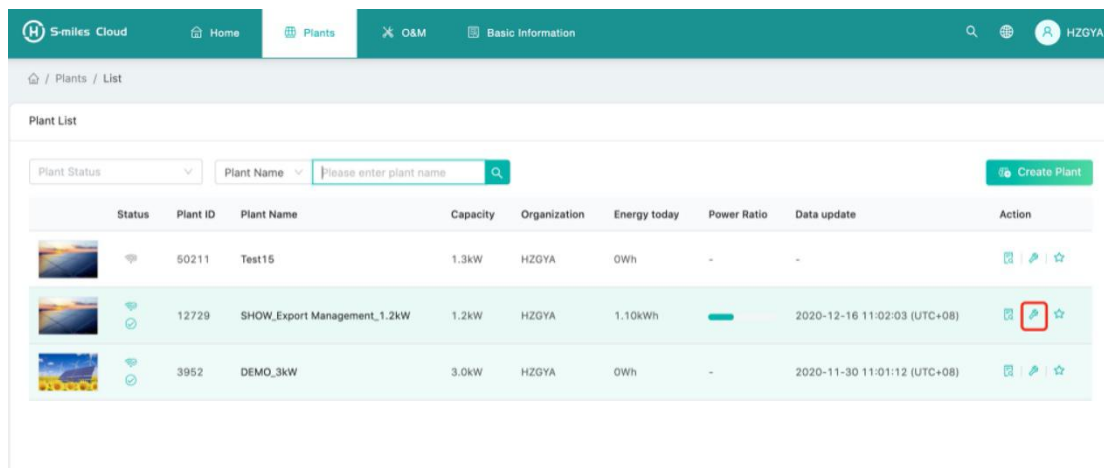
## 2.2.2 View

Click the "View" button to enter the power station details page (there are general power station and zero export power station details page).

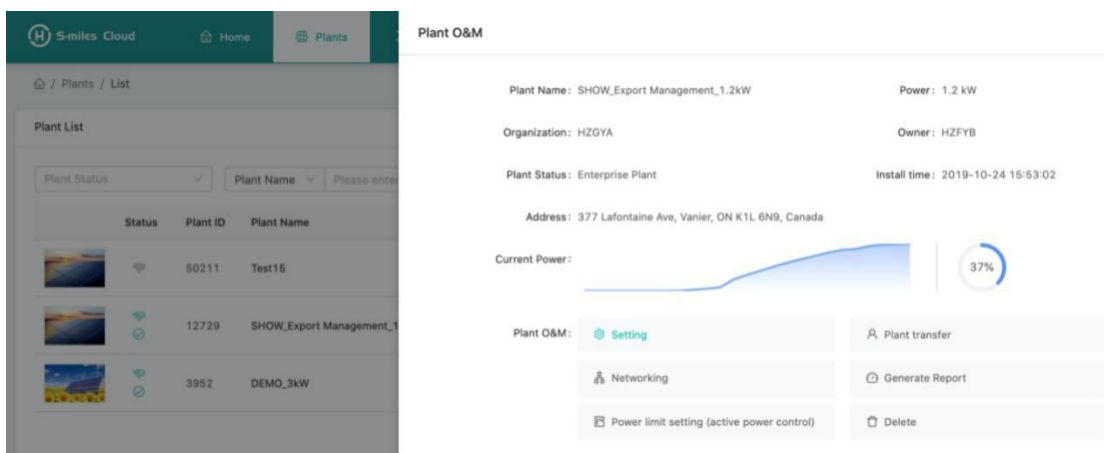


### 2.2.3 Edit

Click the "Edit" button to edit the power station.



You would see below page,



- Transfer power station (Plant transfer): Click the "Transfer Power Station" button to pop up the organization selection box, and choose to transfer the

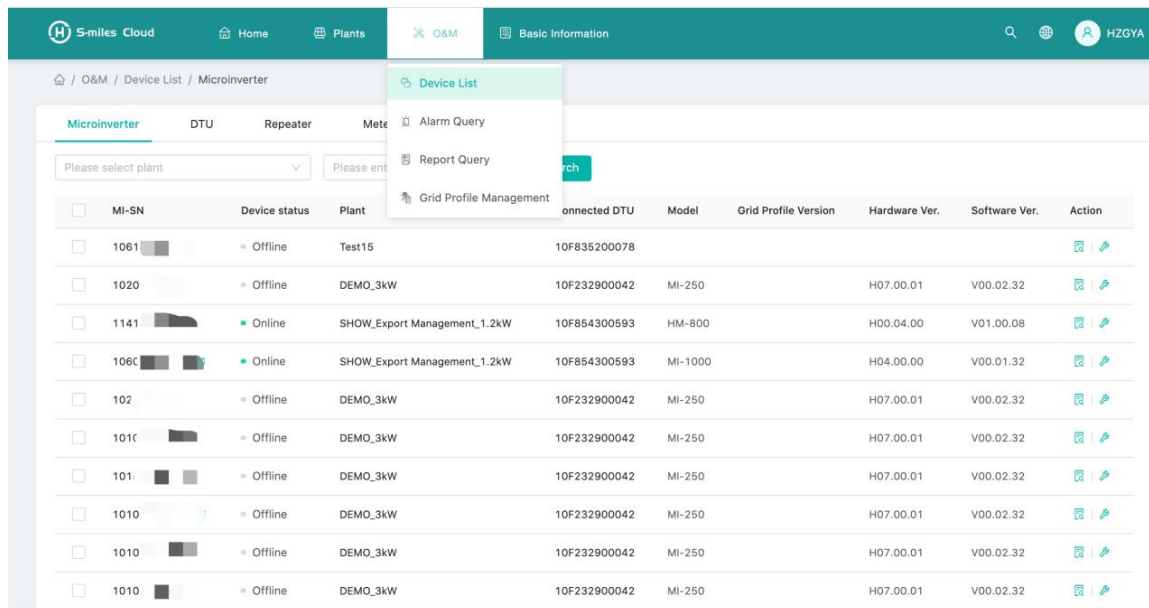
power station to a certain organization

- Networking: Click the "Networking", DTU would give the network connecting command to microinverter.
- Generate report: Generate report of the power station data.
- Delete: Click the "Delete" button to delete the power station (cannot be deleted if there are devices under the power station)
- Power limit setting: For DTU-Pro users only. According to your needs to set the value limit with generation power.

## 2.3 O&M (Operation and Maintenance)

### 2.3.1 Device List

In this page, you will be able to manage the microinverters, DTU, repeater and meter devices which bound to the stations under your login account.



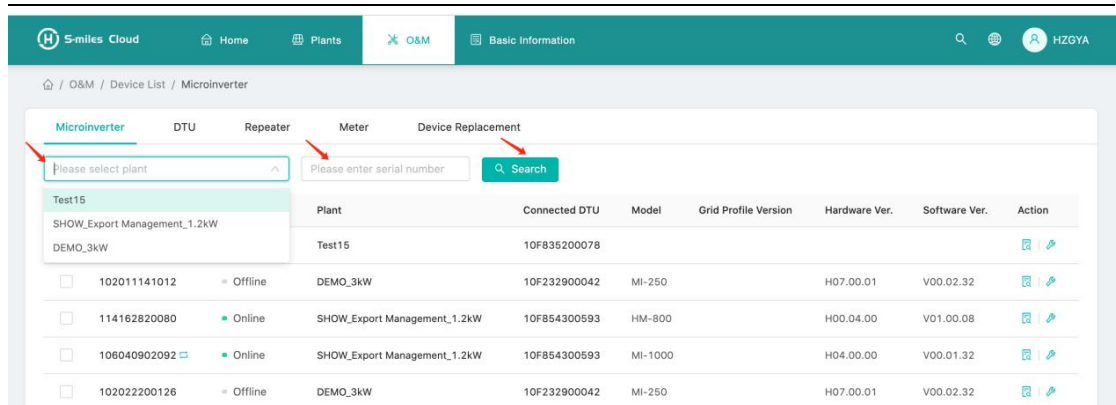
The screenshot shows the 'O&M / Device List / Microinverter' page. A dropdown menu is open over the 'Device List' tab, showing options: 'Device List', 'Alarm Query', 'Report Query', and 'Grid Profile Management'. Below the menu is a search bar with 'Please select plant' and 'Please enter'. The main table lists microinverter devices with columns for MI-SN, Device status, Plant, Connected DTU, Model, Grid Profile Version, Hardware Ver., Software Ver., and Action.

| MI-SN | Device status | Plant                        | Connected DTU | Model   | Grid Profile Version | Hardware Ver. | Software Ver. | Action        |
|-------|---------------|------------------------------|---------------|---------|----------------------|---------------|---------------|---------------|
| 1061  | Offline       | Test15                       | 10F835200078  |         |                      |               |               | [Icon] [Icon] |
| 1020  | Offline       | DEMO_3kW                     | 10F232900042  | MI-250  |                      | H07.00.01     | V00.02.32     | [Icon] [Icon] |
| 1141  | Online        | SHOW_Export Management_1.2kW | 10F854300593  | HM-800  |                      | H00.04.00     | V01.00.08     | [Icon] [Icon] |
| 1060  | Online        | SHOW_Export Management_1.2kW | 10F854300593  | MI-1000 |                      | H04.00.00     | V00.01.32     | [Icon] [Icon] |
| 102   | Offline       | DEMO_3kW                     | 10F232900042  | MI-250  |                      | H07.00.01     | V00.02.32     | [Icon] [Icon] |
| 1010  | Offline       | DEMO_3kW                     | 10F232900042  | MI-250  |                      | H07.00.01     | V00.02.32     | [Icon] [Icon] |
| 1010  | Offline       | DEMO_3kW                     | 10F232900042  | MI-250  |                      | H07.00.01     | V00.02.32     | [Icon] [Icon] |
| 1010  | Offline       | DEMO_3kW                     | 10F232900042  | MI-250  |                      | H07.00.01     | V00.02.32     | [Icon] [Icon] |
| 1010  | Offline       | DEMO_3kW                     | 10F232900042  | MI-250  |                      | H07.00.01     | V00.02.32     | [Icon] [Icon] |

#### ➤ Microinverter management

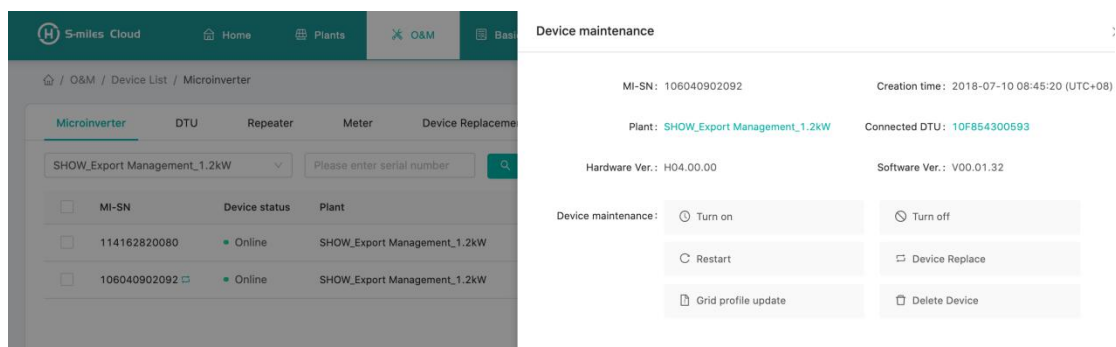
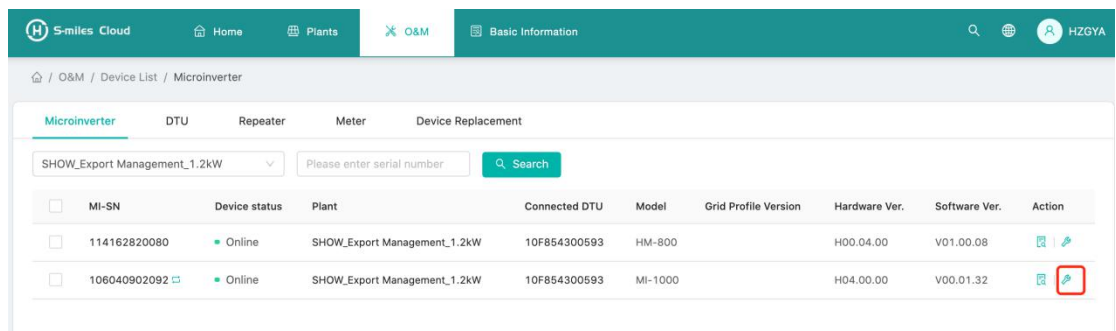
1. Query: Select the power station or input microinverter serial number, click the "Search" button to quickly filter out the qualified microinverter.





2. View: click the "view" button to enter the microinverter details page, which displays the basic information, real-time parameters, equipment status and other information.

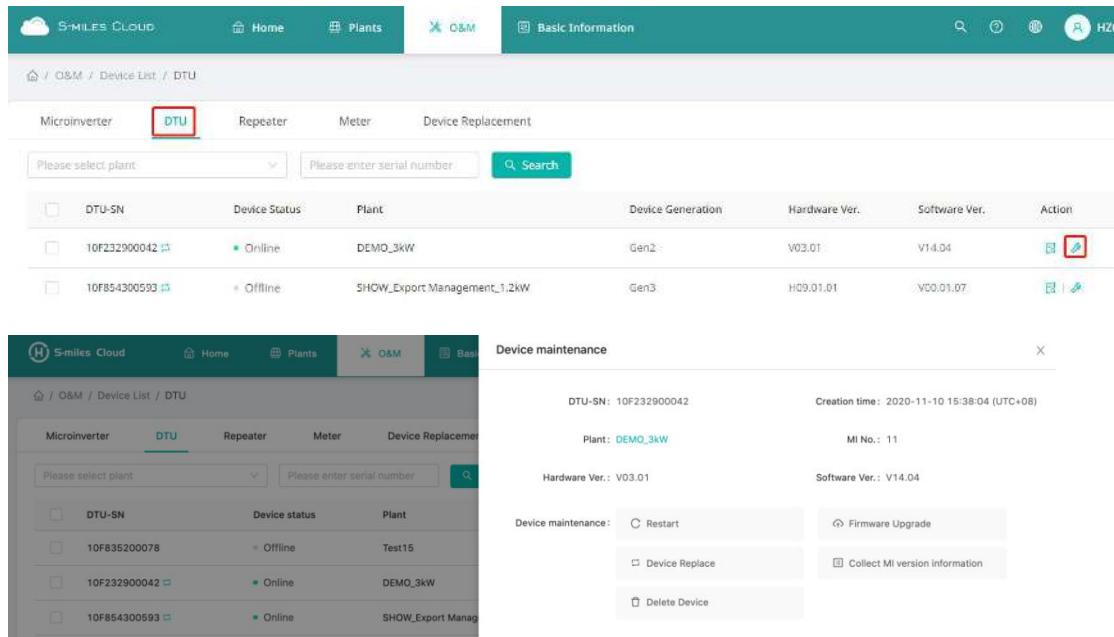
3. Equipment maintenance: Displays the basic information of the microinverter. And remote-control function like turn off, turn on or restart the microinverter, replace or delete device, grid profile update etc., as shown below.



➤ **For DTU management**

Select DTU and click the "Maintenance" button, you will be able to restart, replace, upgrade firmware, collect the software information's, delete DTU (DTU

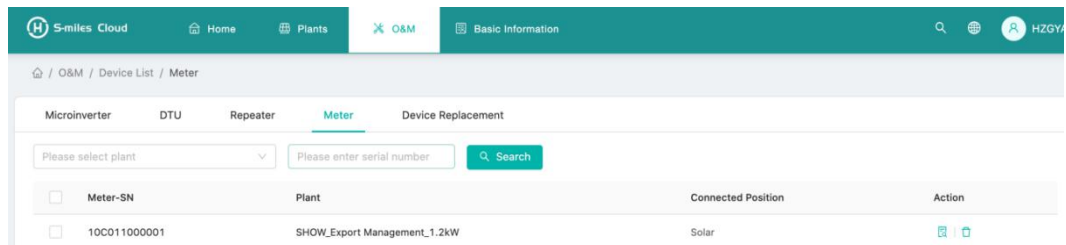
cannot be deleted if there is MI binding, you need to delete the MI first), as shown below.



The screenshot shows the S-miles Cloud interface with the 'DTU' tab selected. A table lists DTU devices with columns for DTU-SN, Device Status, Plant, Device Generation, Hardware Ver., Software Ver., and Action. A 'Device maintenance' modal is open for DTU-SN 10F232900042, displaying details such as Creation time (2020-11-10 15:38:04 (UTC+08)), Plant (DEMO\_3kW), MI No. (11), Hardware Ver. (V03.01), and Software Ver. (V14.04). Maintenance actions include Restart, Firmware Upgrade, Device Replace, Collect MI version information, and Delete Device.

### ➤ Meter management

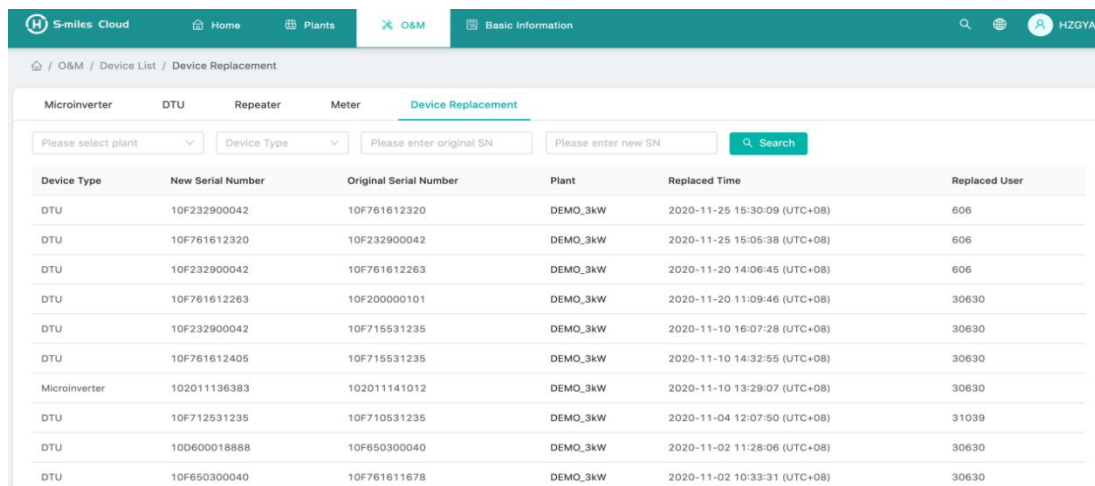
At this page you would be able to query and delete the meter device.



The screenshot shows the S-miles Cloud interface with the 'Meter' tab selected. A table lists Meter devices with columns for Meter-SN, Plant, and Connected Position. The table contains one entry: Meter-SN 10C011000001, Plant SHOW\_Export Management\_1.2kW, and Connected Position Solar. Action icons for edit and delete are visible for this entry.

### ➤ Device Replacement

At this page you would be able to see the device replacement record.

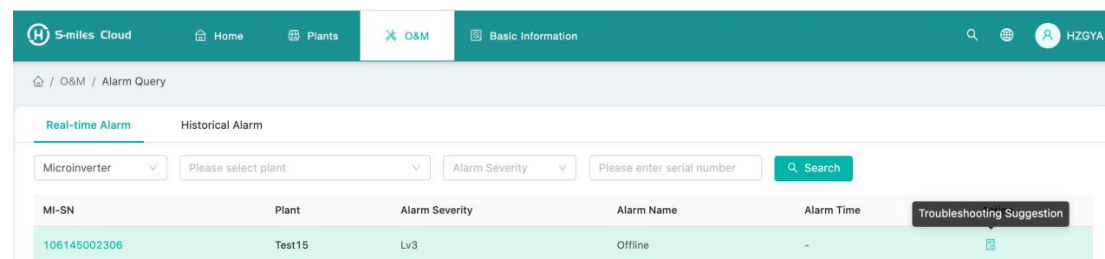


The screenshot shows the S-miles Cloud interface with the 'Device Replacement' tab selected. A table lists replacement records with columns for Device Type, New Serial Number, Original Serial Number, Plant, Replaced Time, and Replaced User.

| Device Type   | New Serial Number | Original Serial Number | Plant    | Replaced Time                | Replaced User |
|---------------|-------------------|------------------------|----------|------------------------------|---------------|
| DTU           | 10F232900042      | 10F761612320           | DEMO_3kW | 2020-11-25 15:30:09 (UTC+08) | 606           |
| DTU           | 10F761612320      | 10F232900042           | DEMO_3kW | 2020-11-25 15:05:38 (UTC+08) | 606           |
| DTU           | 10F232900042      | 10F761612263           | DEMO_3kW | 2020-11-20 14:06:45 (UTC+08) | 606           |
| DTU           | 10F761612263      | 10F200000101           | DEMO_3kW | 2020-11-20 11:09:46 (UTC+08) | 30630         |
| DTU           | 10F232900042      | 10F715531235           | DEMO_3kW | 2020-11-10 16:07:28 (UTC+08) | 30630         |
| DTU           | 10F761612405      | 10F715531235           | DEMO_3kW | 2020-11-10 14:32:55 (UTC+08) | 30630         |
| Microinverter | 102011136383      | 102011141012           | DEMO_3kW | 2020-11-10 13:29:07 (UTC+08) | 30630         |
| DTU           | 10F712531235      | 10F710531235           | DEMO_3kW | 2020-11-04 12:07:50 (UTC+08) | 31039         |
| DTU           | 10D600018888      | 10F650300040           | DEMO_3kW | 2020-11-02 11:28:06 (UTC+08) | 30630         |
| DTU           | 10F650300040      | 10F761611678           | DEMO_3kW | 2020-11-02 10:33:31 (UTC+08) | 30630         |

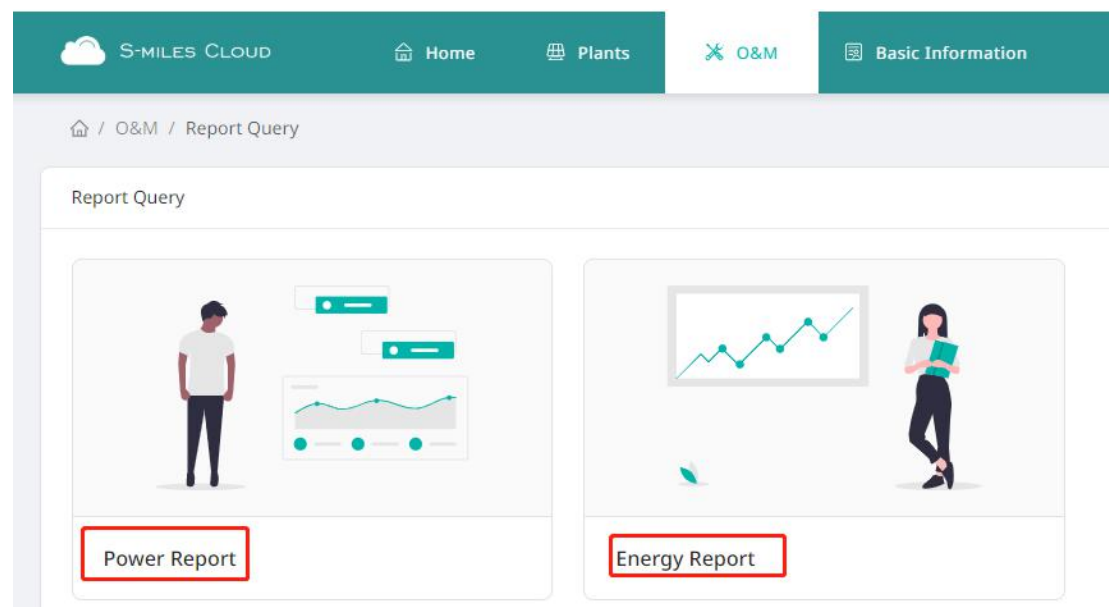
## 2.3.2 Alarm query

- **Real-time alarm:** The alarm query page can view all the alarms under the login account. Click "Real-time alarm" to view all the current alarms, including the alarm device, the power station, the alarm level, the name of the alarm. Click "troubleshooting suggested", the system will show the suggested ways to deal with the alarm.
- **Historical alarms:** Click "Historical Alarms" to view the information of historical alarms.



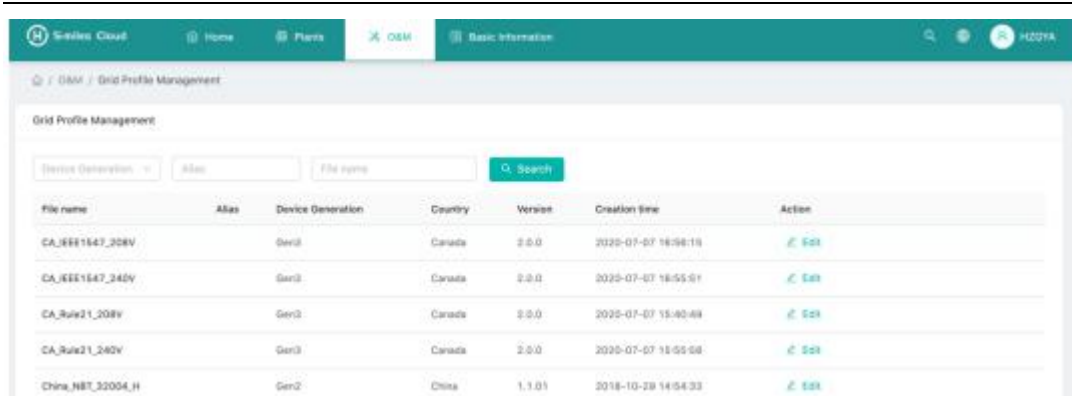
## 2.3.4 Report Query

At this page you would be able to download the power and energy report of the whole system.



## 2.3.5 Grid profile management

At this page you would be able to edit the grid profile.



| File name         | Alias | Device Generation | Country | Version | Creation time       | Action |
|-------------------|-------|-------------------|---------|---------|---------------------|--------|
| CA_KEE1647_208V   |       | Gen2              | Canada  | 2.0.0   | 2020-07-07 16:56:19 | ✎ ✖    |
| CA_KEE1647_240V   |       | Gen2              | Canada  | 2.0.0   | 2020-07-07 16:55:51 | ✎ ✖    |
| CA_Rule21_208V    |       | Gen2              | Canada  | 2.0.0   | 2020-07-07 15:40:49 | ✎ ✖    |
| CA_Rule21_240V    |       | Gen2              | Canada  | 2.0.0   | 2020-07-07 15:55:58 | ✎ ✖    |
| China_HBT_32004_H |       | Gen2              | China   | 1.1.01  | 2018-10-29 14:54:33 | ✎ ✖    |

## 2.4 Basic information

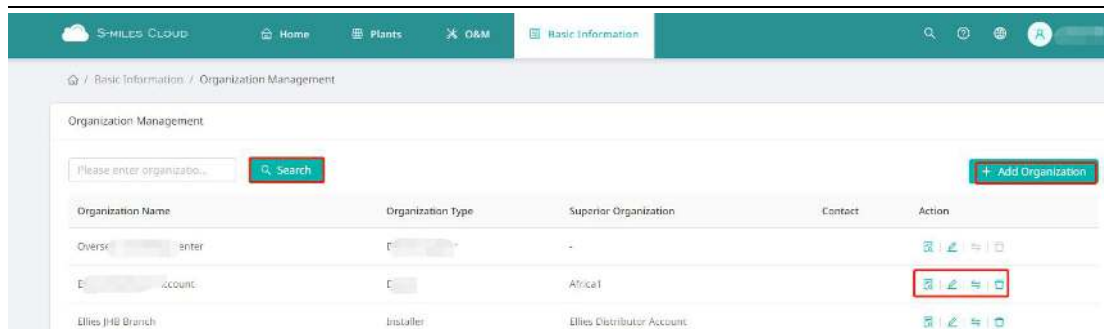
### 2.4.1 Organization management

The organization list displays all the organizations under the login account. According to the type of organization, you can filter out eligible organizations, add new organizations, edit existing organizations, view and delete the organization users.

There are **four types** of organizations: device supplier, dealer, installer, and regular. Regular organization type have two user defined role, sub installer and normal installer. Sub installer only can create, edit plant and issue networking command.

User-defined Role:  Sub-Installer  Normal Installer

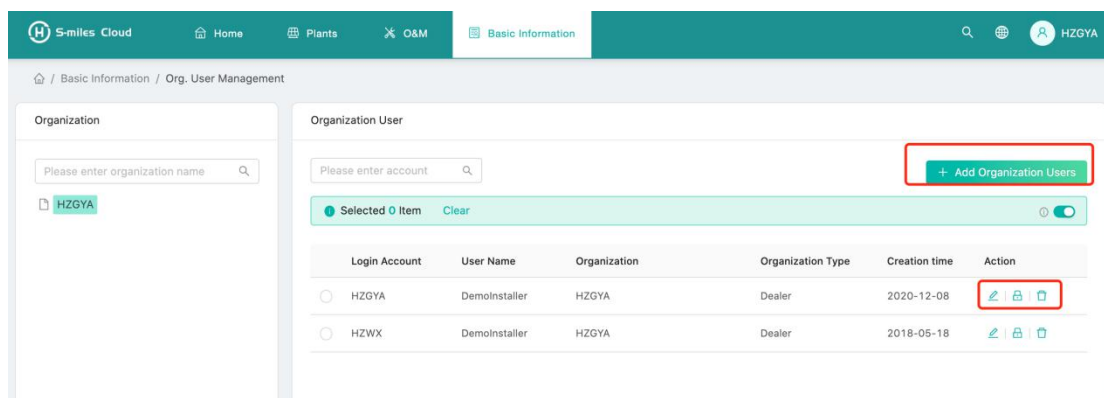
- **Definition:** Organization means a group name, like distributor, installer company.
- **Edit:** Click the "Edit" button to edit organization information.
- **Add organization:** Click the "Add Organization" button to add sub organization.
- **View :** Click the "View" button to jump to the organization information page, where you can view organization name, superior organization , Org.User Quantity, Plant Quantity and etc.
- **Delete:** Click the "Delete" button, and confirm whether to the deletion (if the organization has a power station, it cannot be deleted)
- **Search:** Click the "Search" button according to the selected institution type to quickly filter out the institutions that meet the conditions.
- **Organization transfer :** Click the "Organization transfer" button to jump to the transfer page, Choose the new superior organization name.



## 2.4.2 Org. User Management

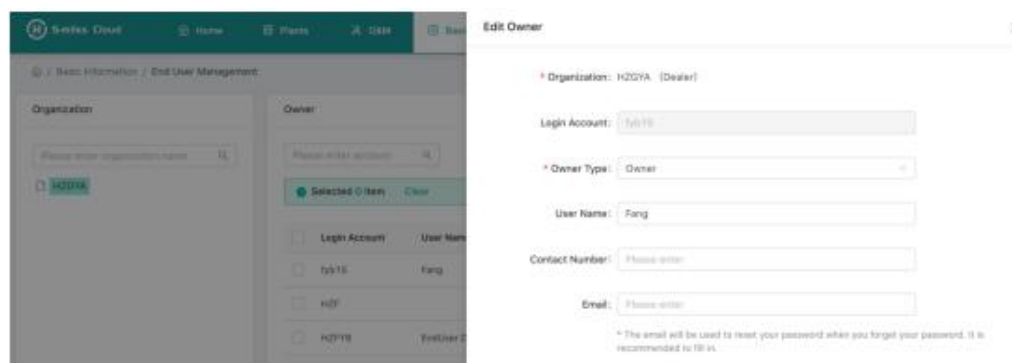
**Definition:** login account for installers or cooperative partner.

This page displays the current users and subordinate users. And you can add, edit, view users' authority, reset passwords, delete, and set as Org. administrators for users.

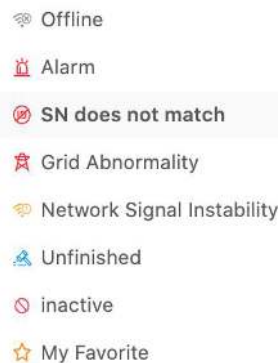


## 2.4.3 End User Management

At this page will be able to edit the end user's information and reset the password.



### 3. Alarm Definition



- **Offline:** DTU is not connecting to internet. It would need to make sure DTU is install and network configure is done.
- **Alarm :** The whole station status alarm. If there are more than half of the microinverter in the power station have grid-related alarms, and the entire power station reports abnormal grid alarms. To know what the alarm is, you can refer to the station home page, click to the alarm icon you will find the solution.
- **SN does not match:** Microinverter Serial Number is not correct, or SN exist in the other station. Please check if everything is correct.
- **Grid Abnormality:** Grid over voltage/grid lower voltage/grid voltage fluctuation etc.
- **Network signal instability:** DTU detected the home network is not stable.
- **Unfinished:** Incomplete power station.
- **Inactive:** the station has not uploaded any data for more than half a year. Once the DTU is connected to internet again, the station will be back to normal.
- **My favorite:** the stations you mark as favorite.

## Appendix - Quick Installation Guide (Web)

### -For Installer

#### STEP 1 - Login

**Note:**

##### 1. Apply an account

For distributors - please contact Hoymiles team ([service@hoymiles.com](mailto:service@hoymiles.com)) for the account creation.

For installers - please contact your direct distributor for the account creation.

For end-users - please contact your installer for the account creation.

##### 2. System requirements

(1) Browser: Google Chrome is recommended.

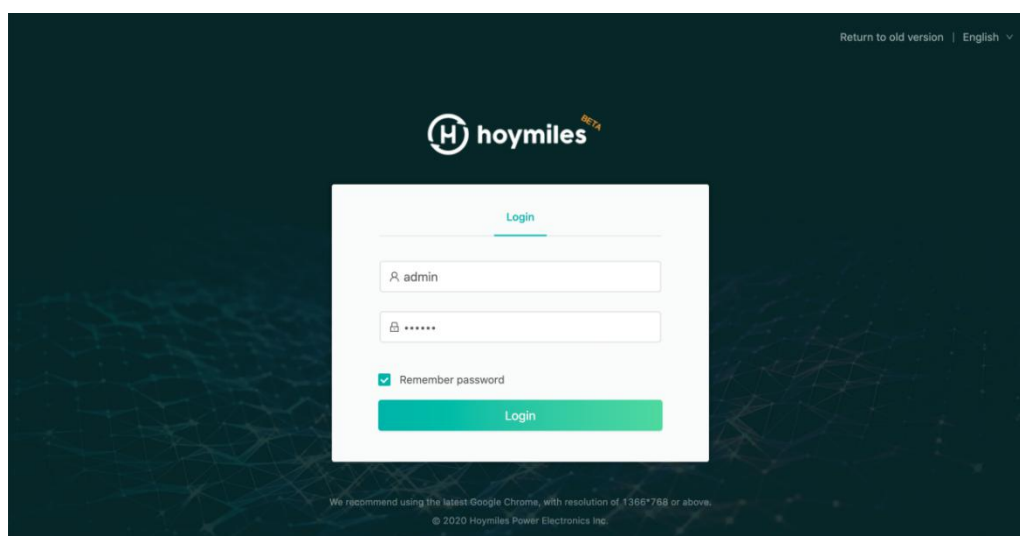
(2) Screen resolution: 1920\*1080 recommended, 1366\*768 supported.

##### 3. System Login address: <https://world.hoymiles.com>

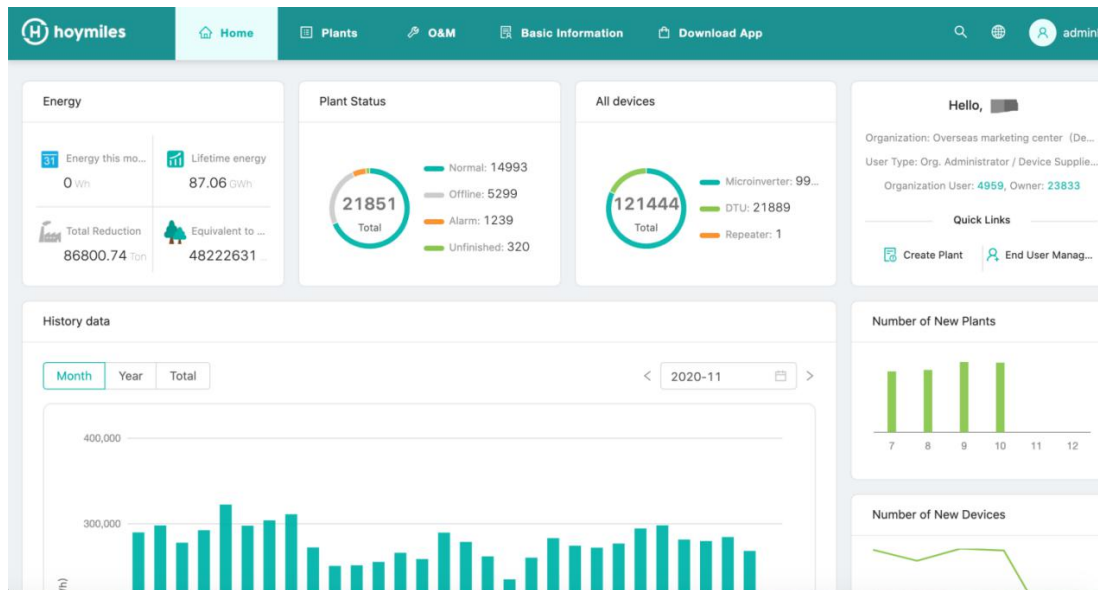
##### 4. Login steps

(1) Open the browser, enter the system address in the address bar.

(2) Enter the correct username and password in the input box, as shown below.

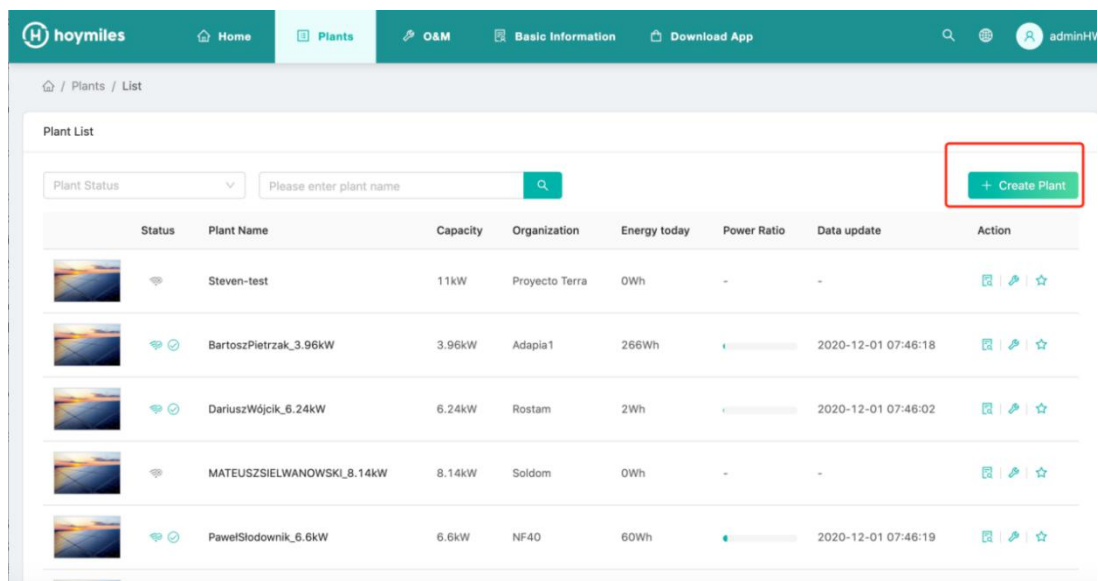


(3) Click login, the system will automatically jump to the system homepage.



## STEP 2 - Create a plant

Click 'Plants' - 'Create plant' as shown below,



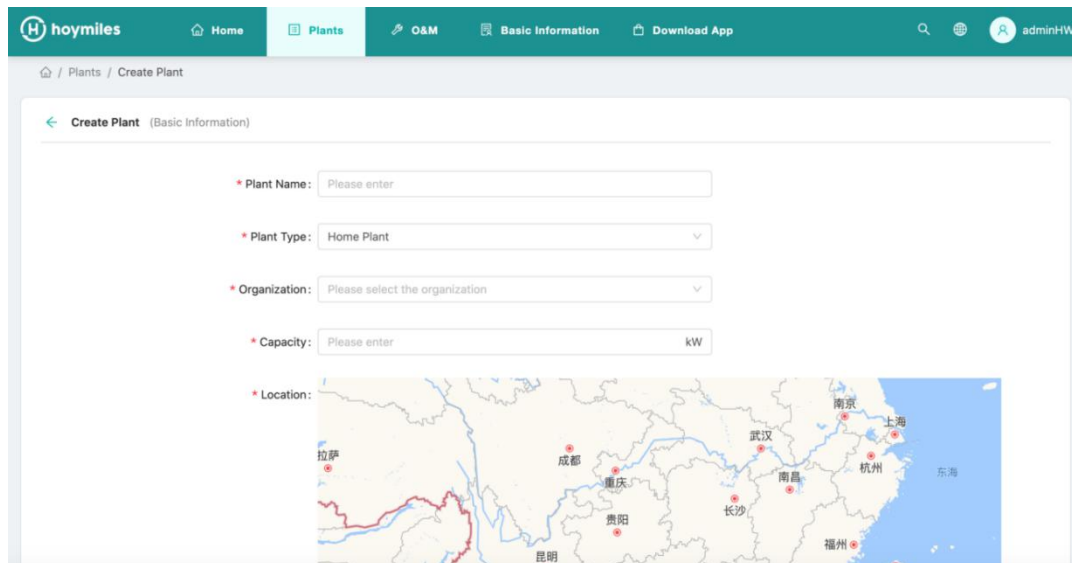
Please fill up below information then click 'Next'.

### Note:

- **Plant name:** the name of the station.
- **Plant Type:** home plant/enterprise plant/large professional plant, please select the plant type according to the scenario.
- **Organization:** Select your installer or distributor.

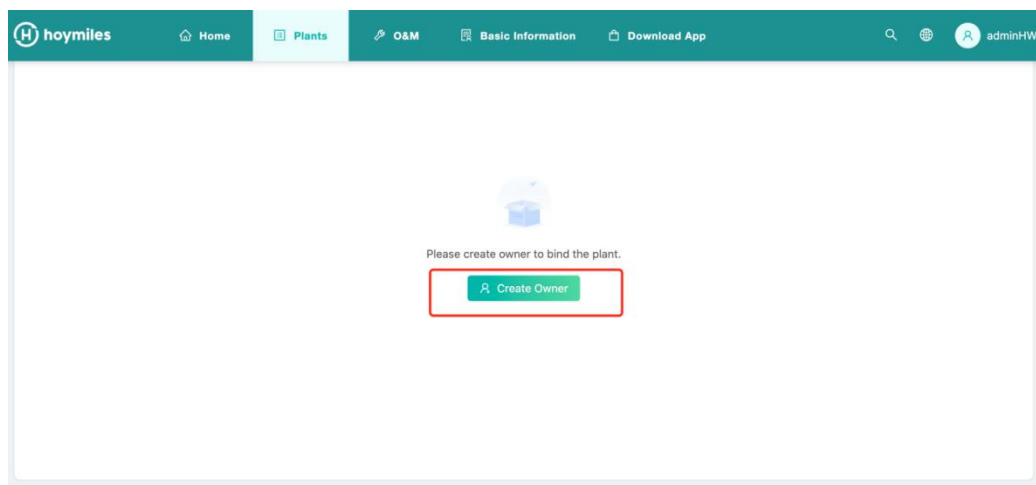


- **Capacity:** Capacity of the whole system.
- **Location:** Drag the map icon to select your approximate area, then fill in your address manually.

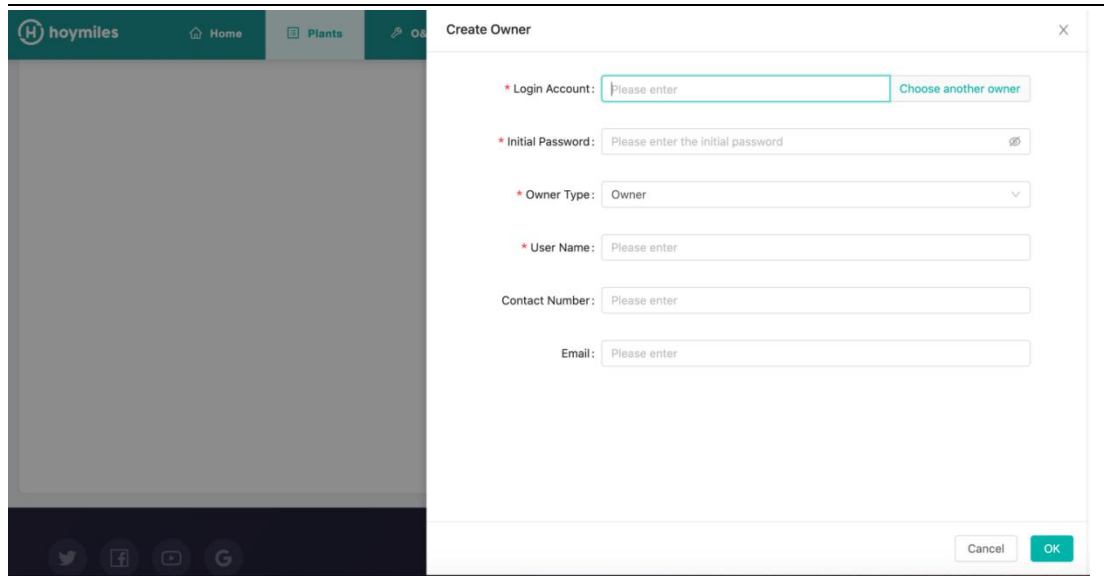


### STEP 3 - Create an owner account

1. Click 'Create Owner'.



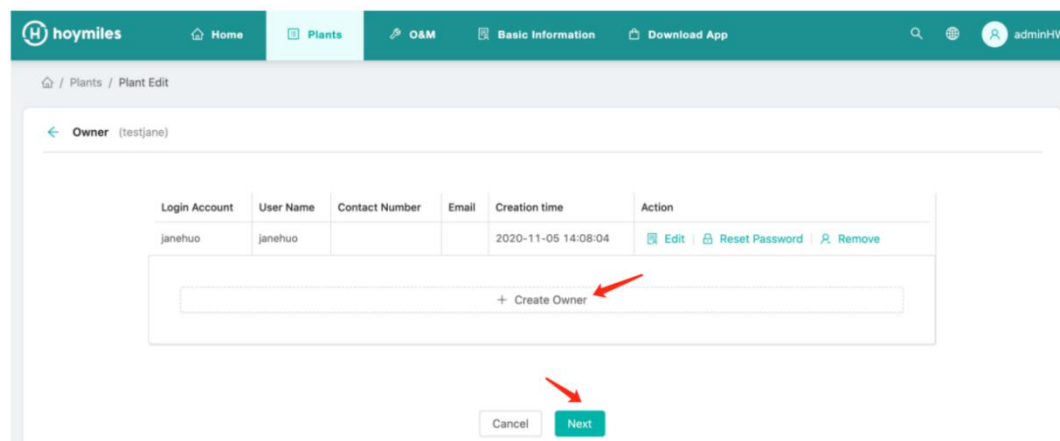
2. Fill up owner's information as below
  - Click "Choose another owner" to select the exist owner.  
Or enter the information to create a new owner account and enter the corresponding information.
  - Click 'OK' to finish the Login account creation.



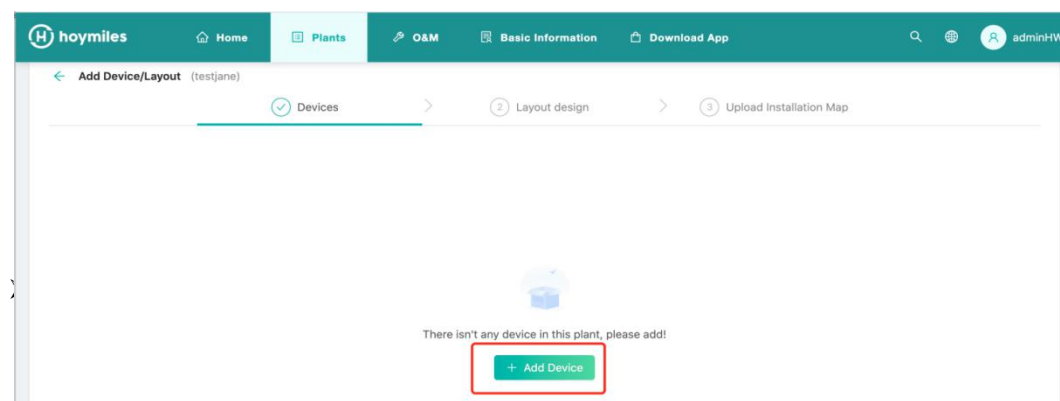
## STEP 4 - Add device & Layout

### 1. Add device

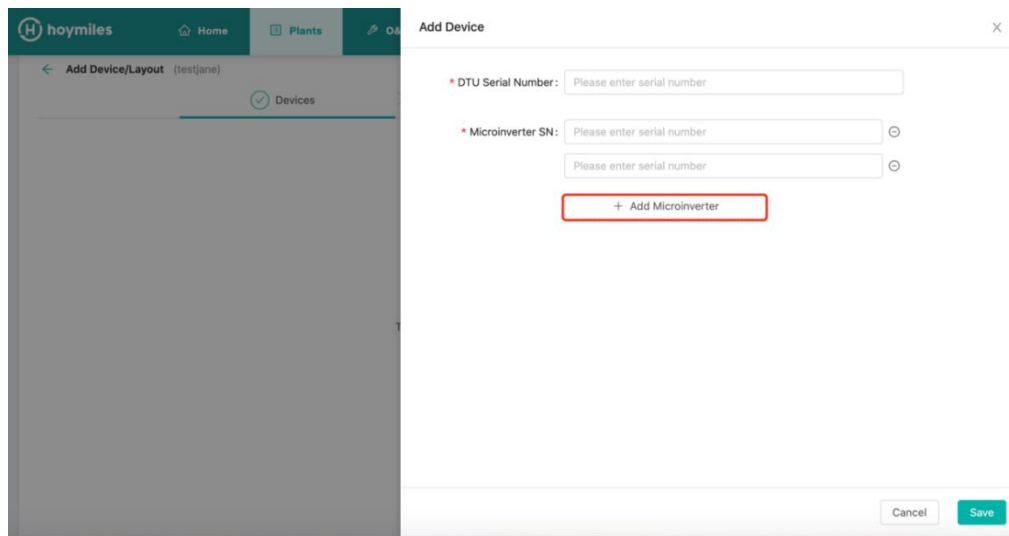
In this page, you can click 'Create owner' to create more owner accounts which can also login to this plant, or just click 'Next' to go to next page.



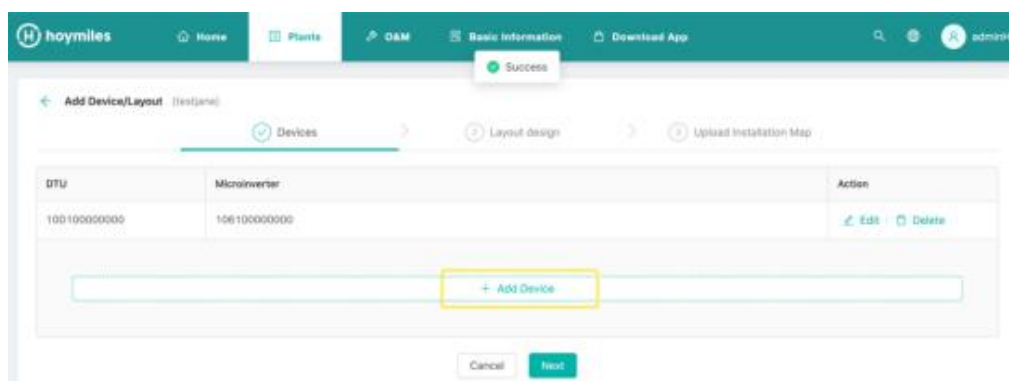
➤ Click 'Add device',



- To add more Microinverters, please click 'Add Microinverter' and input the serial number.

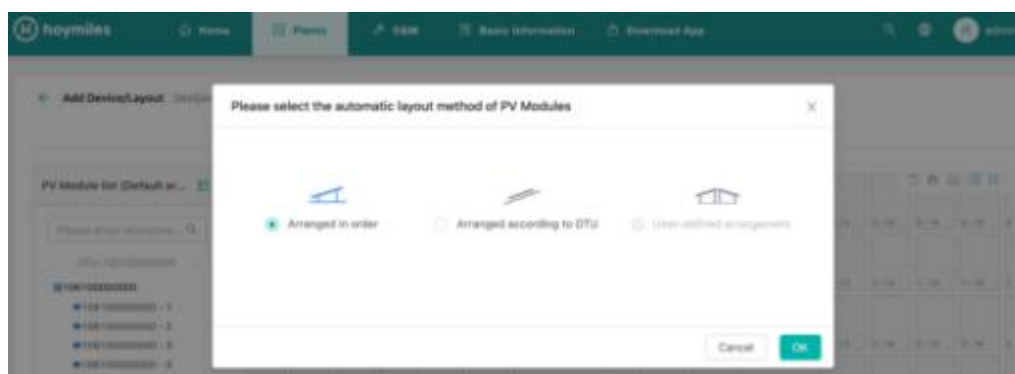


- To add more DTU, please click 'Add Device', after filling up all the information please click '**Next**'.

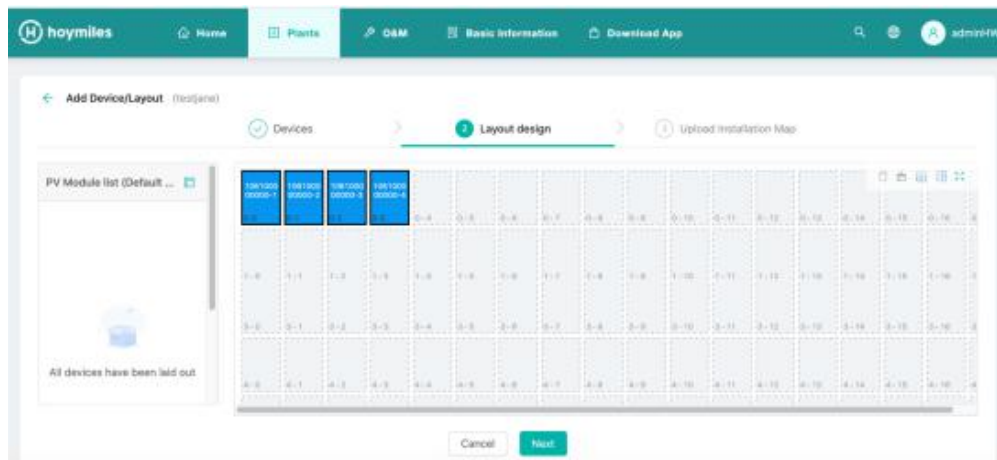


## 2. Layout design

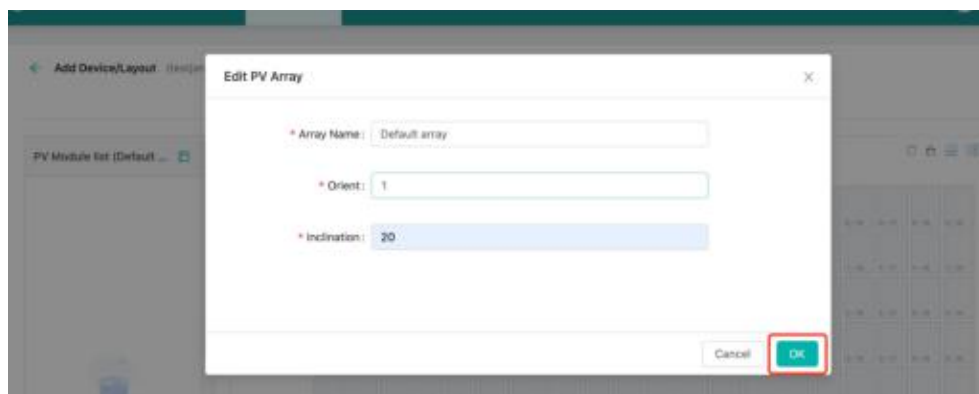
Select the Module layout or drag the panels to the map as you want, then click 'OK'.



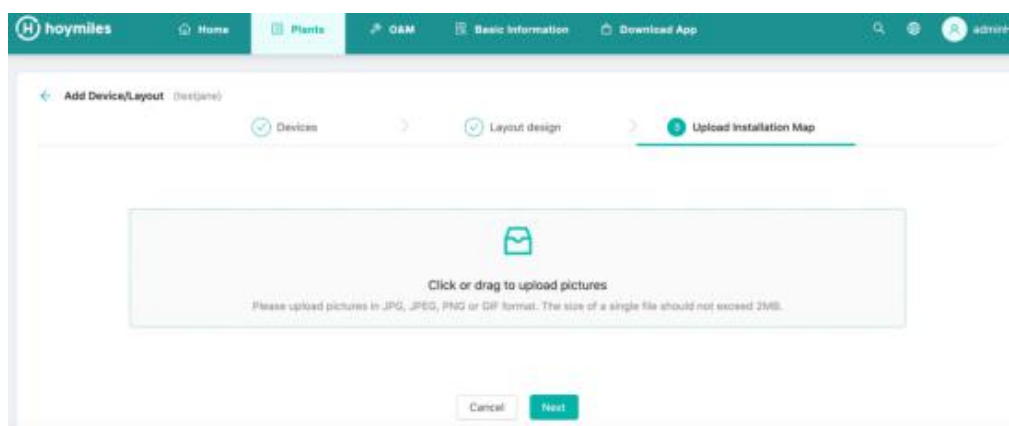
After click 'OK', you will see below page, if there is nothing you want to change then please click 'Next'.



### 3. Fill up the PV array information then click 'OK'.



### 4. Upload the picture of the station or click 'Next'.



## 5. Fill in the subsidy information, click 'Save'.

Then wait for few second for the networking command issued, the whole setting will be completed.

🏠 / Plants / Information


← **Setting** (id不匹配2)

Plant Name: id不匹配2

Currency Unit:

Unit Electricity Price:

Network select:  Networking Automatically



**Success**

Congratulations, the operation is successful, the networking command has been issued, please wait!