



S-Miles Cloud Monitoring Platform **USER MANUAL**

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1. Introduction

1.1 Introduction

The S-Miles Cloud (Hoymiles Monitoring Platform) is a smart PV operation monitoring and management system developed by Hoymiles specifically for installers of distributed PV power plants.

At present, the system has the Installer and the Owner versions, with the corresponding webpage and mobile application available.

This platform provides an easy-to-use procedure for accounts under monitoring. It enables installers to configure the monitored accounts quickly and provides them with power generation data of both plant and device, as well as detailed alarm information about the power plant regarding commissioning and diagnostics.

1.2 System Composition

Install our DTU, Hybrid Inverter and battery before using the monitoring system. DTU is a communication bridge which is used to collect status and operation data from inverter and transmit control commands to it. At the same time, the DTU also connects to the Internet through a router and sends hybrid inverter data to the Hoymiles Monitoring Server to achieve remote control of the whole system.

1.3 Installer & Owner App/Platform

1.3.1 App download

(1) Scan the QR code to download.

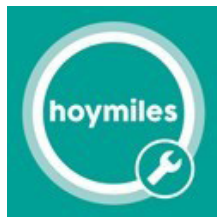


S-Miles installer



S-Miles owner

(2) Search "Hoymiles" on Google Play or App Store.



S-Miles installer



S-Miles owner

1.3.2 Webpage

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

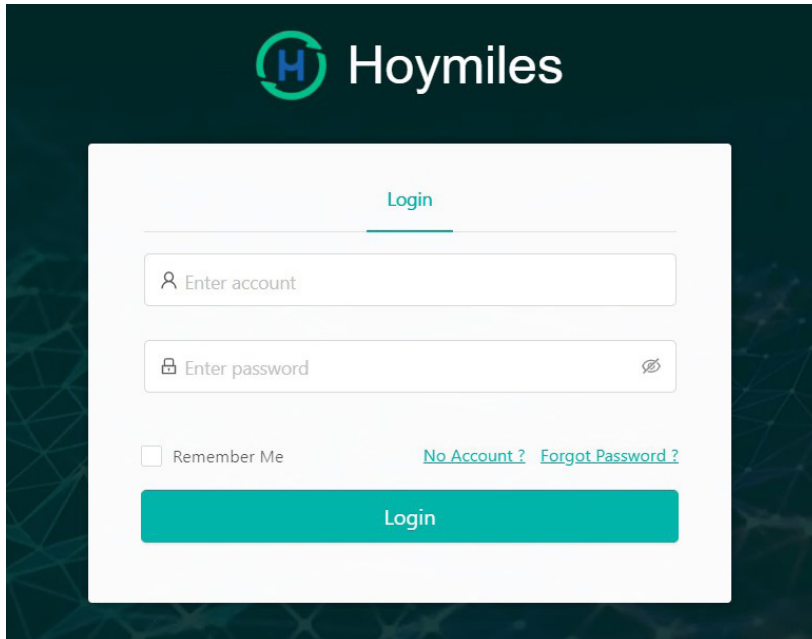
2. About Monitoring Account

2.1 Get a Hoymiles distributor/installer account

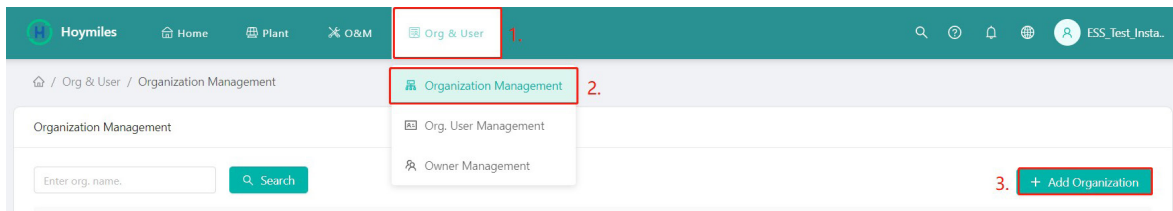
1. If you are a new distributor, send an email to service@hoymiles.com. The Hoymiles Technical Service Center will apply for an account for you.
2. If you are a new installer with Hoymiles and don't have an installer account, approach your distributor to create an account for you.
3. If you are an installer/distributor and have an installer/distributor account, you can directly create sub-accounts and plants under your existing account.

2.2 Create a sub-account under my installer/distributor

1. Go to <https://world.hoymiles.com/> in Google Chrome browser and log in to the S-Miles Cloud (Hoymiles Monitoring Platform) with your account.



2. Select "Organization Management" under "Org & User" and click "Add Organization"



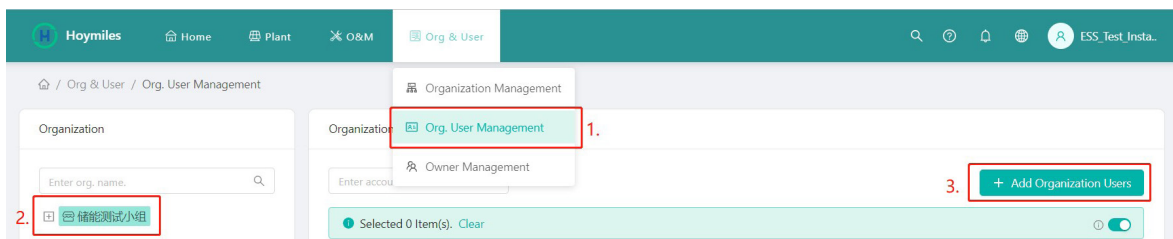
3. Fill in the organization details and click “Confirm” to complete account creation.

The screenshot shows a 'Create Organization' dialog box with the following fields and annotations:

- * Parent Organization:** Select organization. A red annotation says: "Select the organization name where you want to locate sub organization".
- * Name:** Enter
- * Type:** Select
- Country:** China
- Region:** Select
- Contact:** Enter
- Contact Number:** Enter
- Address:** Enter
- Organization Introduction:** Enter

At the bottom right, there are two buttons: "Cancel" and "Confirm". A red arrow points to the "Confirm" button.

4. Select “Org. User Management” under “Org & User”, select and double click the organization name you just created on the left, and then click “Add Organization Users”.



5. Fill in the details of organization user and click “Confirm” to complete account creation.

* Organization: 储能测试小组 (Dealer)

* Login Account:

* Password:
Enter the password

Name:

Contact Number:

Email:
* The email address will be used to reset the password when you forget your password. We recommend that you enter an email address.

Default Role: Dealer

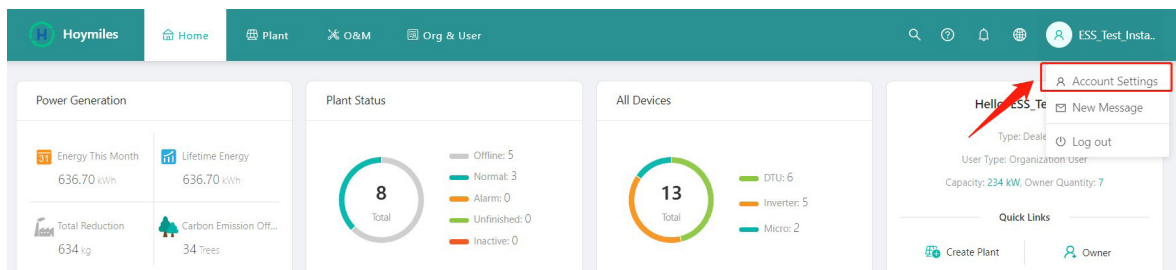
Custom Role: Sales (View only) SunSpec Modbus

Note:

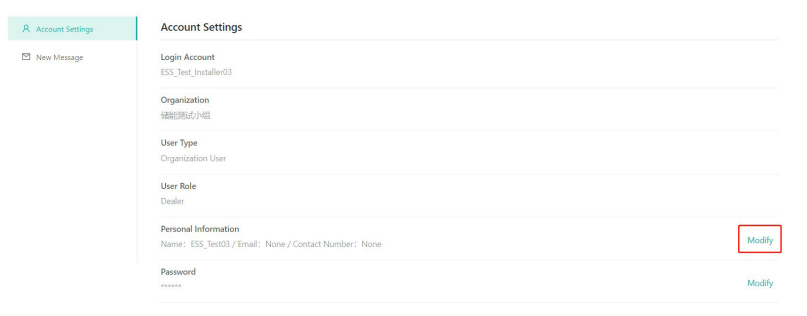
- (1) An organization can have multiple login accounts, so just select the organization name and add organization users again.
- (2) Hoymiles falls under the “Device Supplier” category and has a higher and greater authority than dealers and installers. Dealers can create distributor and installer organizations, while installers can only create installer organizations.
- (3) Regular users have two user-defined roles: sub-installer and normal installer. Sub-installers can only create and edit plants and issue networking command.
- (4) No matter the account you are creating is a dealer or installer organization, there are two custom roles. You can only check the plant information and has no permission to edit the plant when the sales(only) is selected.
- (5) Email can also be used as a login account.

2.3 Change email and password

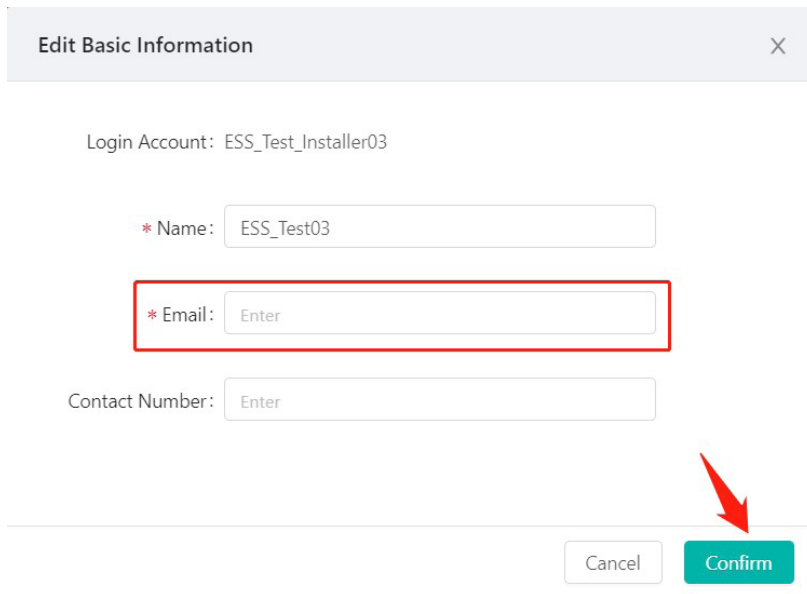
- 1. Enter your account and password and log in the Hoymiles monitoring platform.
- 2. Select the person icon on the right and click the “Account Settings” button.



3. Click "Modify" button on the right of personal information, enter new Email, and then click "Confirm".

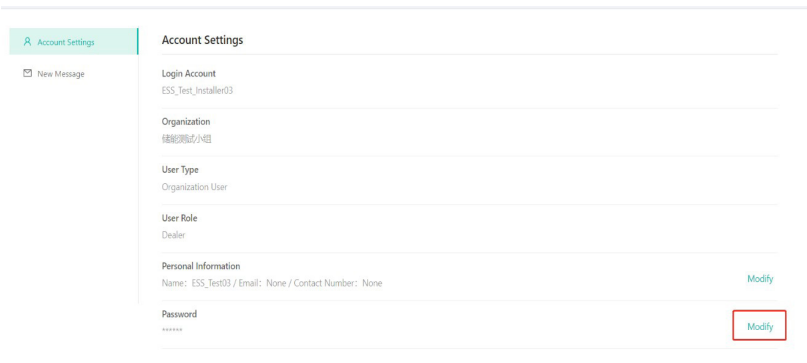


The screenshot shows the 'Account Settings' page. The 'Personal Information' section displays 'Name: ESS_Test03 / Email: None / Contact Number: None' with a 'Modify' button to its right. The 'Password' section shows '*****' with a 'Modify' button to its right.



The screenshot shows the 'Edit Basic Information' modal dialog. The 'Login Account' is 'ESS_Test_Installer03'. The 'Name' field contains 'ESS_Test03'. The 'Email' field is highlighted with a red box and contains 'Enter'. The 'Contact Number' field contains 'Enter'. At the bottom right, there are 'Cancel' and 'Confirm' buttons, with a red arrow pointing to the 'Confirm' button.

4. Click "Modify" button on the right of password, enter original password and new password, and then click "Confirm".



The screenshot shows the 'Account Settings' page. The 'Password' section shows '*****' with a 'Modify' button to its right.

Edit Basic Information

Login Account: ESS_Test_Installer03

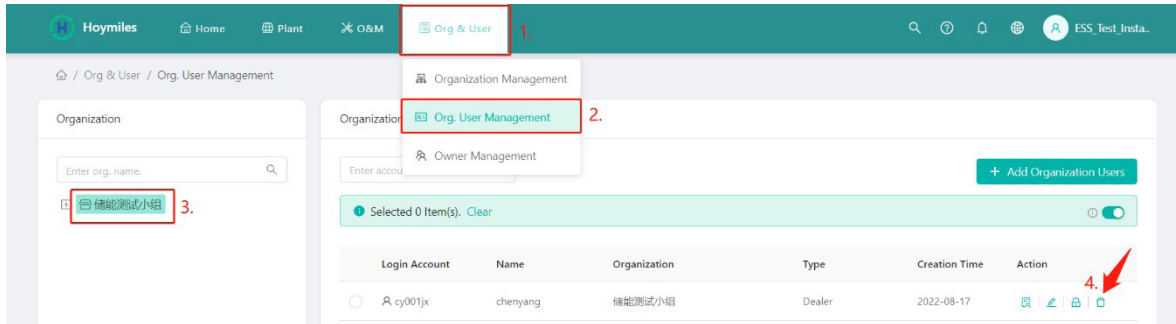
* Original Password:

* New Password:

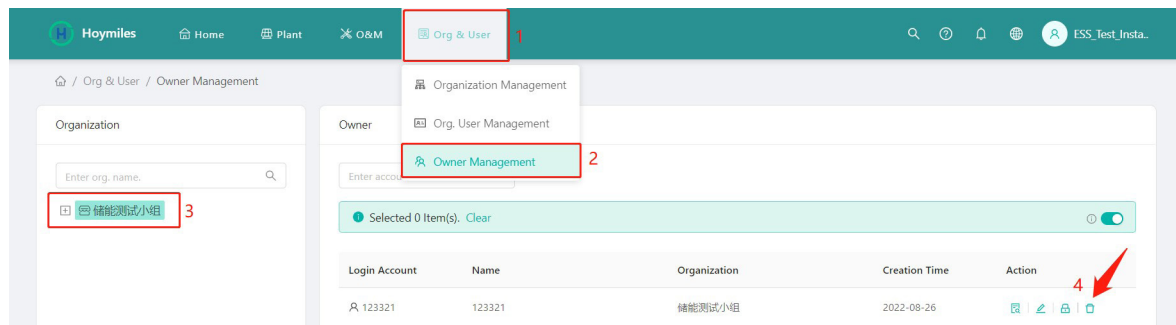
* Confirm Password:

2.4 Delete an account

Select "Org. User Management" on the menu bar under "Org & User", choose the organization, and then click the "Delete" button to complete deletion.



Select "Owner Management" on the menu bar under "Org & User", choose the organization, and then click the "Delete" button to complete deletion.



2.5 Delete an organization

Select "Organization Management" on the menu bar under "Org & User" and click the "Delete" button to complete deletion.



2.6 Transfer an installer/distributor account

Select "Organization Management" on the menu bar under "Org & User" and click "Transfer Organization". Choose the new superior organization that you want to transfer to and click "Confirm".



Current Organization: 大秦_储能电池匹配测试小组

Parent Organization: 储能测试小组

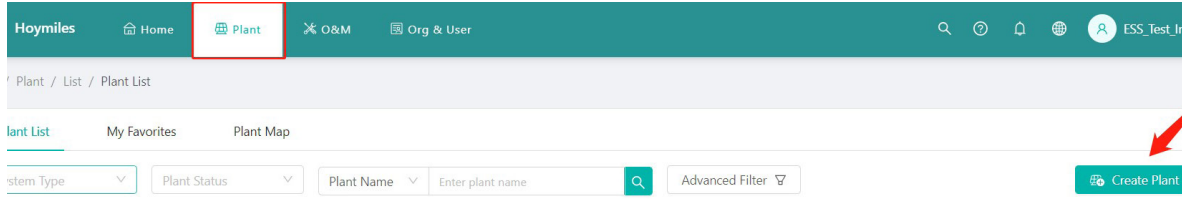
* New Parent Org.:

After the organization is transferred, it will be linked to the new organization. At the same time, the subordinate organization, and all plants and owners will also be transferred. Please proceed carefully.

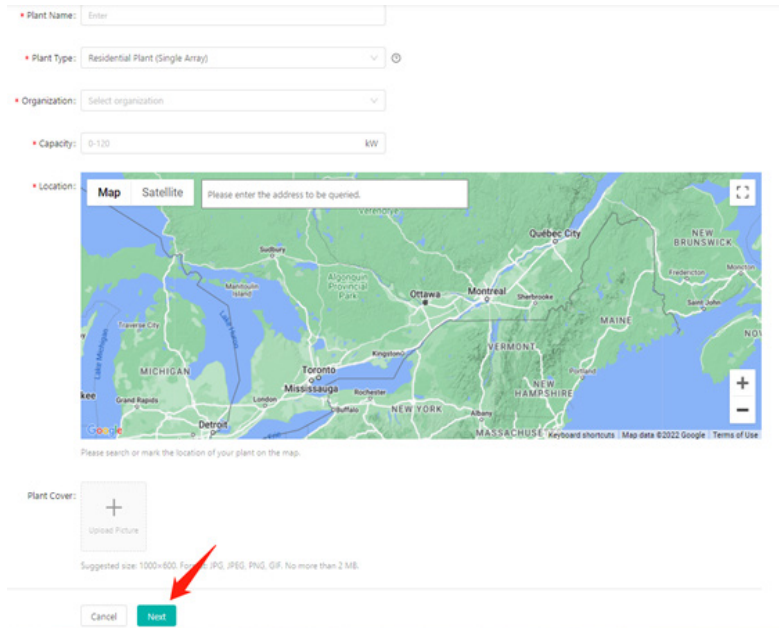
3. About the Plant

3.1 Create plant for end users

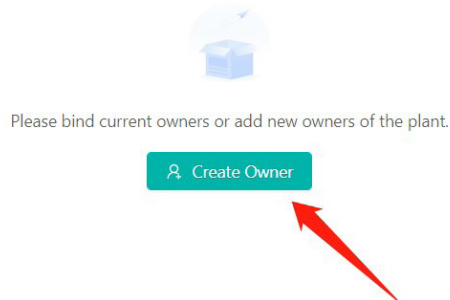
1. Click "Create Plant" on the "Plant" page.



2. Fill in the basic information and click "Next".



3. Click "Create Owner", fill in the owner information, and then click "Confirm".



* Login Account: [Select Another Owner](#)

* Password:

* Full Name:

Contact Number:

Email:

* The email address will be used to reset the password when you forget your password. We recommend that you enter an email address.

4. Click "Next" and "Add Device", and then fill in the DTU serial number. After that, the inverter serial number will be automatically recognized, and then click "Next".

Hoymiles Home Plant O&M Org & User

Plant / Owner

Owner (Test_Office)

Login Account	Name	Contact Number	Email	Creation Time	Action
Office	Office_1			2022-08-30 17:14:25	Edit Reset Password Remove

+ Create Owner

Add Device/Layout (Test_Office)

1 Devices > 2 Layout Design > 3 Upload Installation Map

There is no device in this plant, please add.

Add Device X

* DTU SN:

← Add Device/Layout (Test_Office)

DTU	Inverter	Action
430100000001	214300000001	Edit Delete
	+ Add Inverter	

[+ Add Device](#)

5. Fill in the plant regulation information and finish the plant creation.

Plant Regulation

Plant Name: Test_Office

Currency:

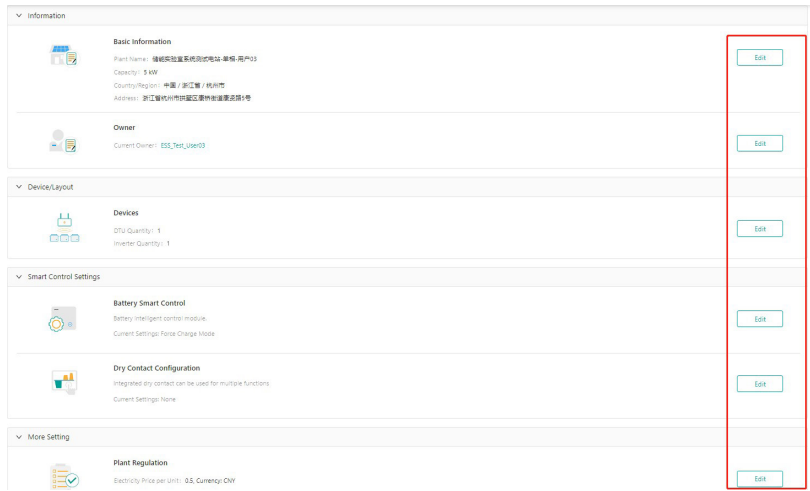
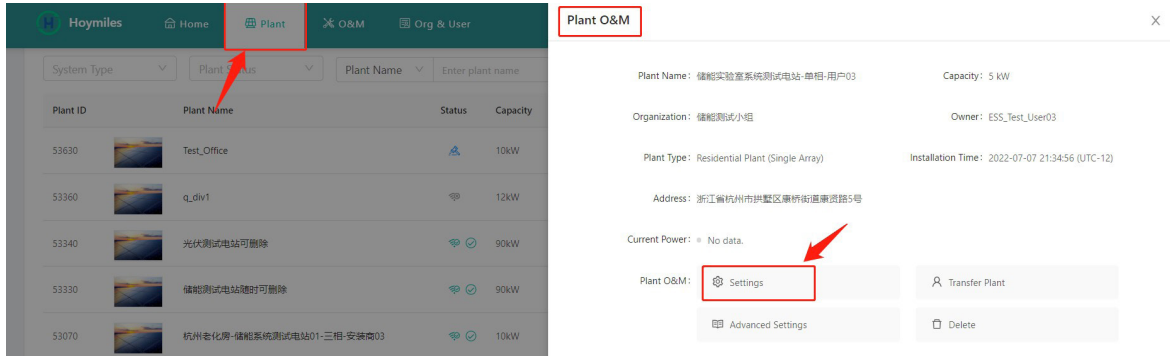
Electricity Price per Unit

Buy:

Sell:

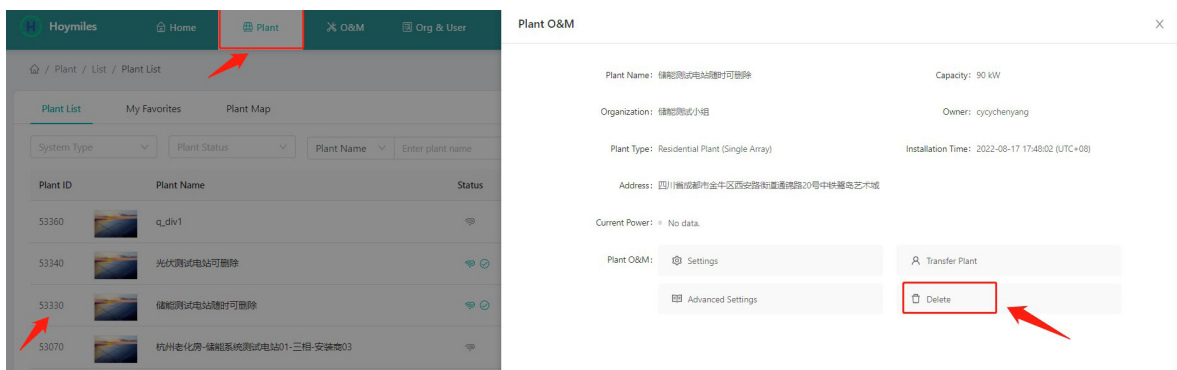
3.2 Edit plant basic information

Go to the “Plant” page and choose the plant you want to amend. Click the “Settings” button on the left side of the Plant O&M, and then edit the information you want to change.



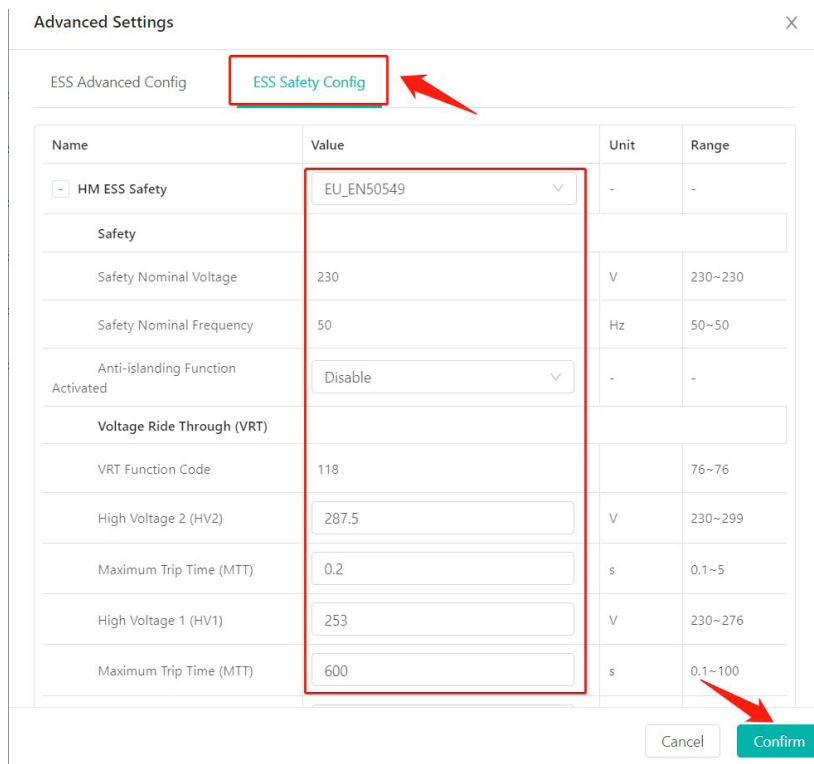
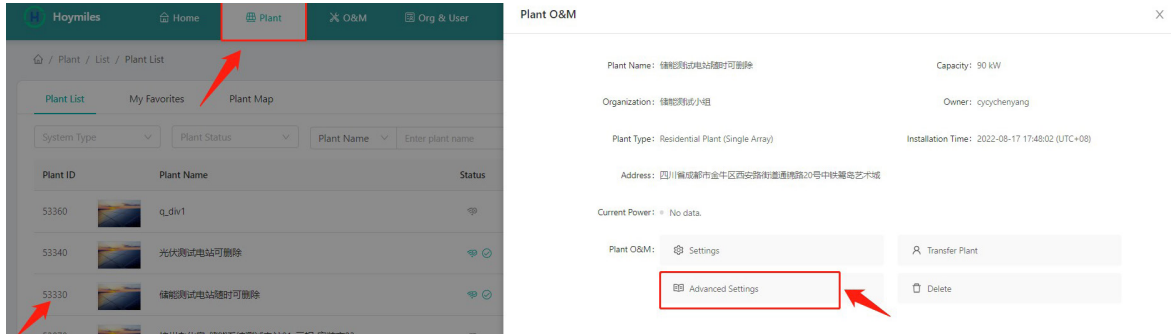
3.3 Delete a plant

Go to the “Plant” page, choose the plant you want to delete, and then click the “Delete” button on the right side of the Plant O&M. To delete a plant, you will need to delete all devices under this plant firstly (refer to Section 2.2).



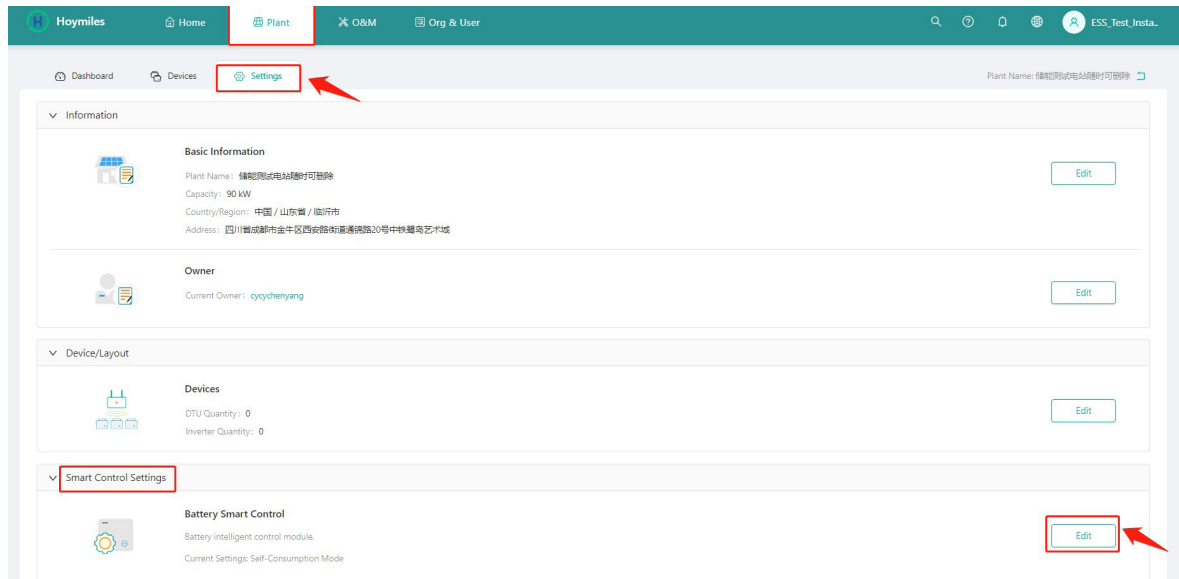
3.4 Update the grid profile of the inverter (deletable)

Click "Plant" firstly, choose the plant that you want to update the grid profile, and then click the "Advanced Settings" button on the left side of the Plant O&M. You can change the parameter within the certain range after clicking the "ESS Safety Config", and then click "Confirm".



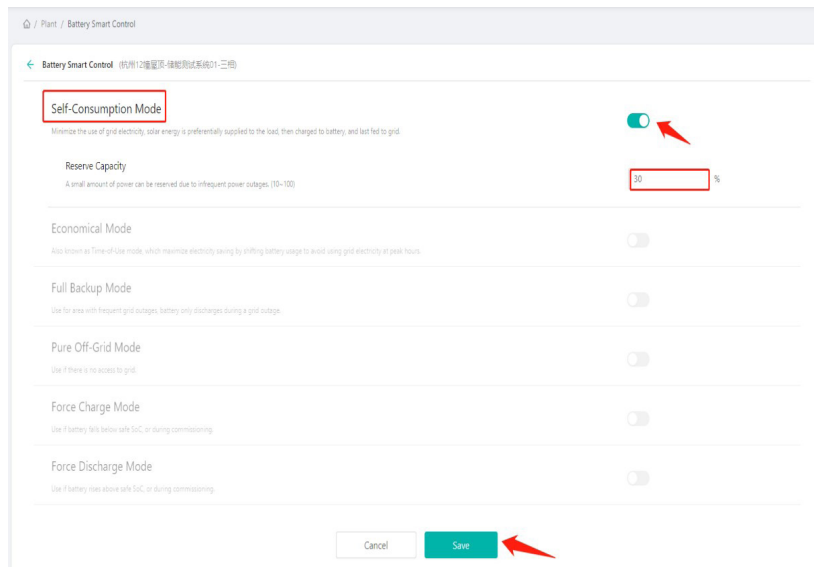
3.5 Change the working mode of system

Choose the plant where you want to change the mode of system and click the “settings”. Click the “Edit” button of Battery Smart Control under Smart Control Settings. Only one control mode can be selected at a time.



3.5.1 Self-Consumption Mode

The Self-Consumption Mode can reduce the use of grid power. Solar energy is preferentially supplied to the load, charged to the battery, and fed to the grid last. You can set Reserve Capacity within the certain range due to infrequent power outages, and then click “Save”.



3.5.2 Economical Mode

In this mode, battery charging and discharging periods need to be defined. Meanwhile, the battery can be forced to charge from the grid during the preset charging time. For instance, the battery could be charged or discharged according to valley or peak electricity prices. You can set reserve capacity within the certain range due to infrequent power outages, select the type of currency you need, and then click “Save”. You can set different time periods to be more flexible to save costs of electricity. Click “Edit” to set the time period for peak, low and partial peak grid prices in different seasons or dates, but you can just add up to four time periods, and then click “Save”. If you want to delete one of the time periods, just click “delete” in the top right corner and then click “Save”.

Self-Consumption Mode

Minimize the use of grid electricity. Solar energy is preferentially supplied to the load, then charged to battery, and last fed to grid.

Economical Mode

Also known as Time-of-Use mode, which maximizes electricity saving by shifting battery usage to avoid using grid electricity at peak hours.

Reserve Capacity
A small amount of power can be reserved due to infrequent power outages (10-100). %

Currency
Select currency:

Time of Use
Set time periods for peak and valley electricity prices, and (net power and unit prices). (Net) Selected

Full Backup Mode

Pure Off-Grid Mode

Force Charge Mode

Force Discharge Mode

Electricity rate 1

Select a time period. To

Time Range 1

Peak Hour Start: End:
 £/kWh Buy: Sell:

Off-Peak Hour Start: End:
 £/kWh Buy: Sell:

Partial-Peak Hour £/kWh Buy: Sell:

Time Range 2

Peak Hour Start: End:
 £/kWh Buy: Sell:

Off-Peak Hour Start: End:
 £/kWh Buy: Sell:

Partial-Peak Hour £/kWh Buy: Sell:

Time of Use

Electricity rate 1

Select a time period. To

Time Range 1

Peak Hour Start: End:
 £/kWh Buy: Sell:

Off-Peak Hour Start: End:
 £/kWh Buy: Sell:

Partial-Peak Hour £/kWh Buy: Sell:

Time Range 2

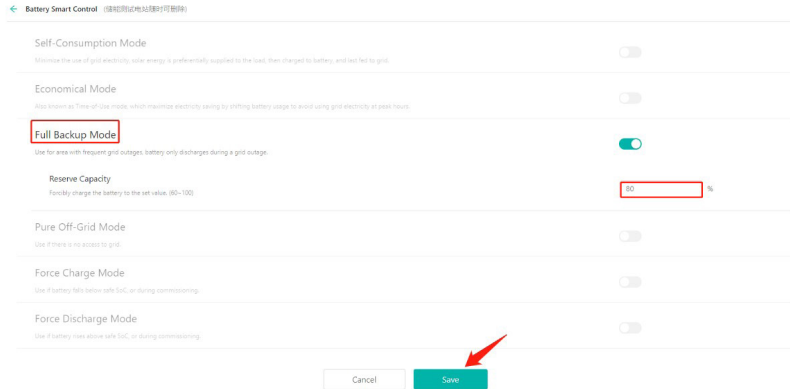
Peak Hour Start: End:
 £/kWh Buy: Sell:

Off-Peak Hour Start: End:
 £/kWh Buy: Sell:

Partial-Peak Hour £/kWh Buy: Sell:

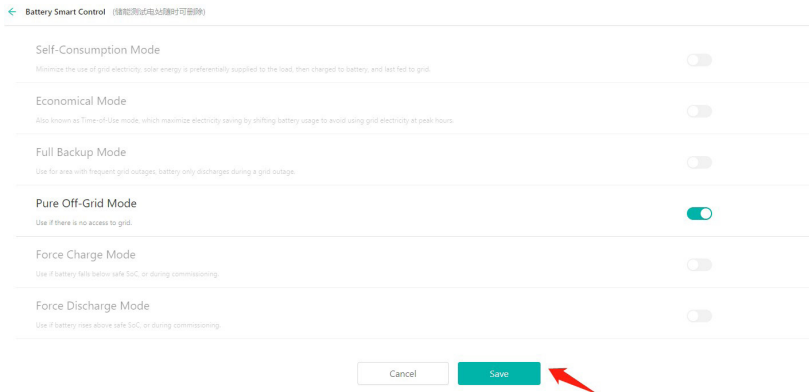
3.5.3 Full Backup Mode

Full Backup Mode can be selected when the grid frequently breaks down. The battery will be forced to charge to a set capacity so that it has enough power to support the electricity consumption in daily life when you are off-grid. You can set the reserve capacity within the certain range, and then click “Save”.



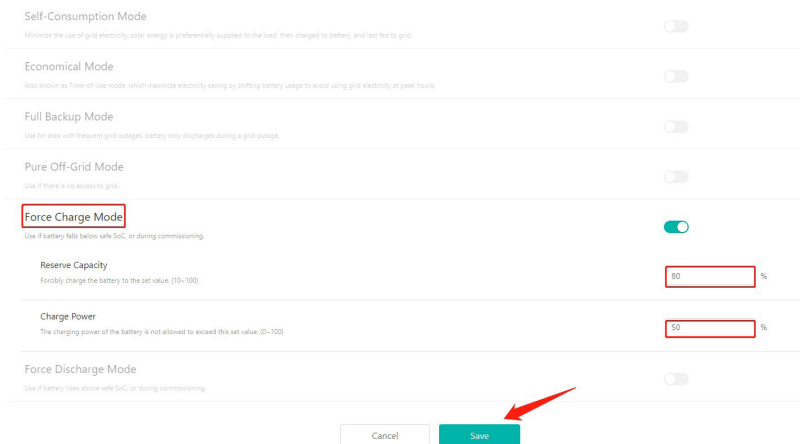
3.5.4 Pure Off-Grid Mode

When this system is not connected to the grid, you can choose the pure off-grid mode and click “Save”.



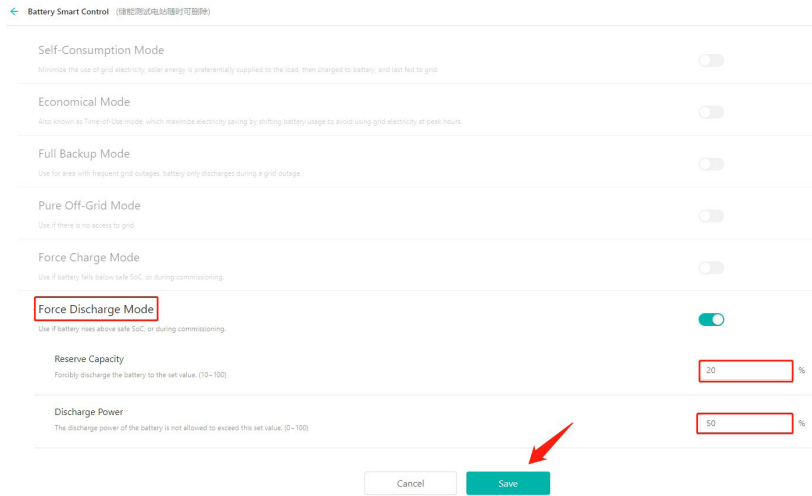
3.5.5 Force Charge Mode

The Force Charge Mode can be used during commissioning of inverter or when the battery capacity falls below the value of safety SoC. You can set the value of reserve capacity within the certain range. If the battery capacity is lower than the setting, the battery will be forcibly charged. And you can set the charge power of the battery. Finally, save the values you have changed.



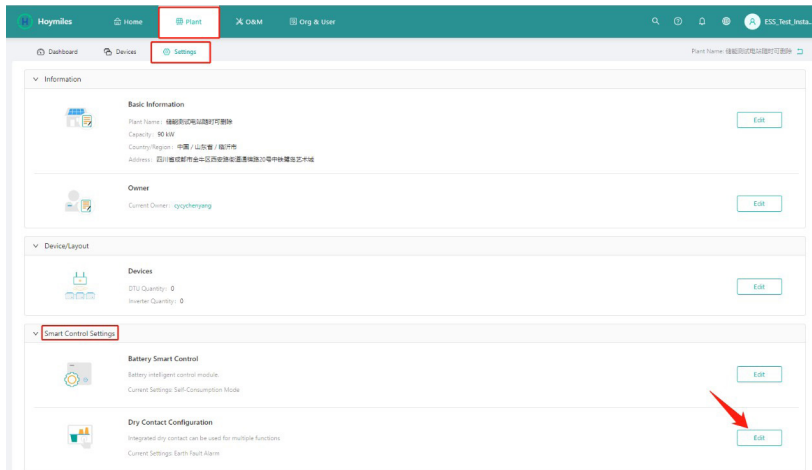
3.5.6 Force Discharge Mode

The Force Discharge Mode can be used during the commissioning of inverter or when the battery capacity rises above the value of safety SoC. You can set the value of reserve capacity within the certain range. If the battery capacity is higher than the setting, the battery will be forcibly discharged. And you can set the discharge power of the battery in need. Finally, save the values you have changed.



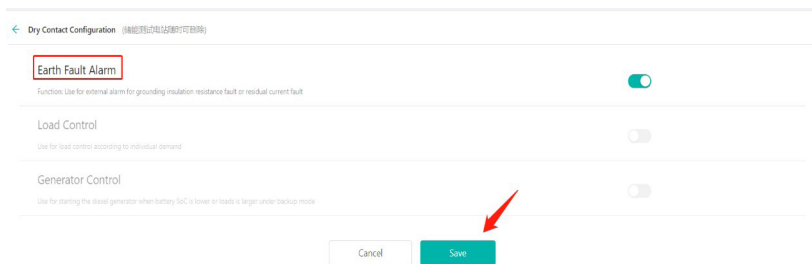
3.6 Dry Contact Configuration

Click the "Edit" button of Dry Contact Configuration under Smart Control Settings. But just one mode can be selected at a time.



3.6.1 Set the working mode of the load

Disable the external alarm caused by grounding insulation resistance fault or residual current fault when the load is connected.



3.6.2 Set the Alarm of Earth Fault

This mode is to control whether the load is working or not. There are four modes available as follows.

Time Mode: Set the time period for the load to work. The load is turned on during this set time and turned off at other times.

Intelligent Mode: Because the energy generated by PV fluctuates a lot, this mode is to make the load avoid being turned on and off frequently. The load will only be turned on when the residual energy generated by the PV exceeds the power set by the load within the set time period. You can set the minimum run time of the load and the nominal Power of Load.

Backup Load Smart Control: The unnecessary Load will be turned off in off-grid situation when the battery capacity is lower than the set SoC value. You can set the value of protection SoC in need.

Load Control ☑️

Use for load control according to individual demand

Switch Mode Time Mode Intelligent Mode Backup Load Smart Control

Time Range: Time Range:

Time Period1: To Time Period1: To

Time Period2: To Time Period2: To

Load Control ☑️

Use for load control according to individual demand

Switch Mode Time Mode Intelligent Mode Backup Load Smart Control

Time Range: Time Range:

Time Period: To Time Period: To

Load Consumption Time: Minute (10-1440) Nominal Power of Load: kW (1-9999)

Load Control ☑️

Use for load control according to individual demand

Switch Mode Time Mode Intelligent Mode Backup Load Smart Control

Protection SoC: % (10-90)

3.6.3 Set the working mode of the Generator

Generator Control is used when there is higher power on the load side or lower battery capacity in off-grid mode. Set the value of protection SoC in need. When the battery capacity is below the set protection SoC, the generator will work.

← Dry Contact Configuration (储能测试电站随时可删除)

Earth Fault Alarm ☐️

Function: Use for external alarm for grounding insulation resistance fault or residual current fault.

Load Control ☐️

Use for load control according to individual demand

Generator Control ☑️

Use for starting the diesel generator when battery SoC is lower or loads is larger under backup mode

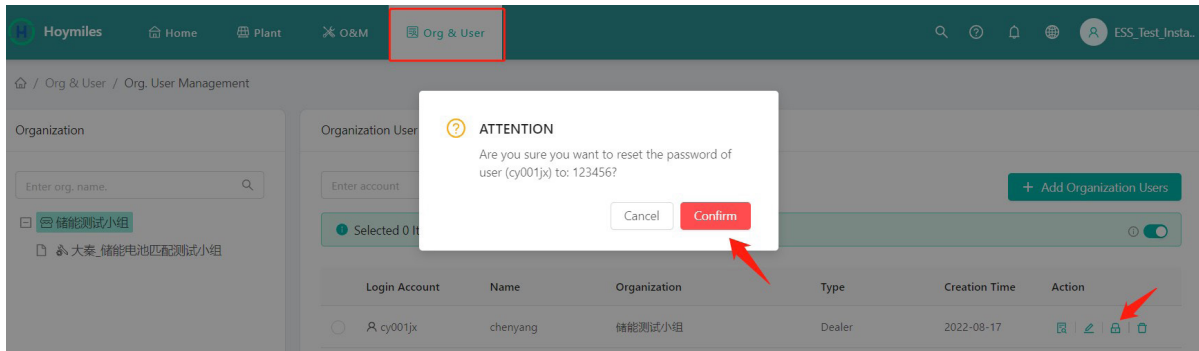
Protection SoC ☑️

Startup the diesel generator when battery SoC lower than preset protection SoC under backup mode

% (10-90)

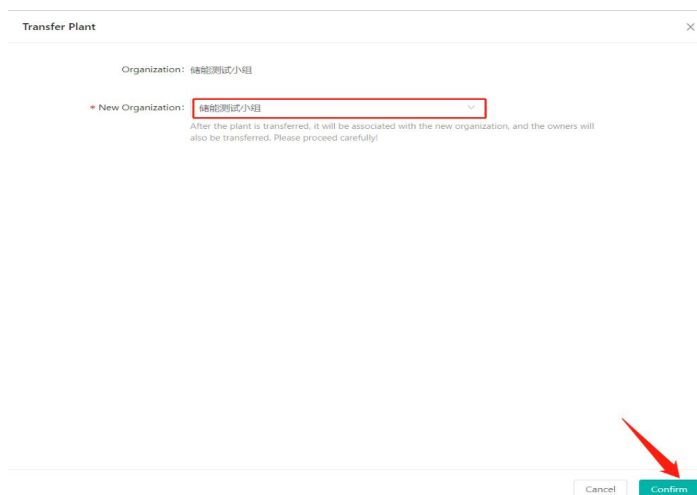
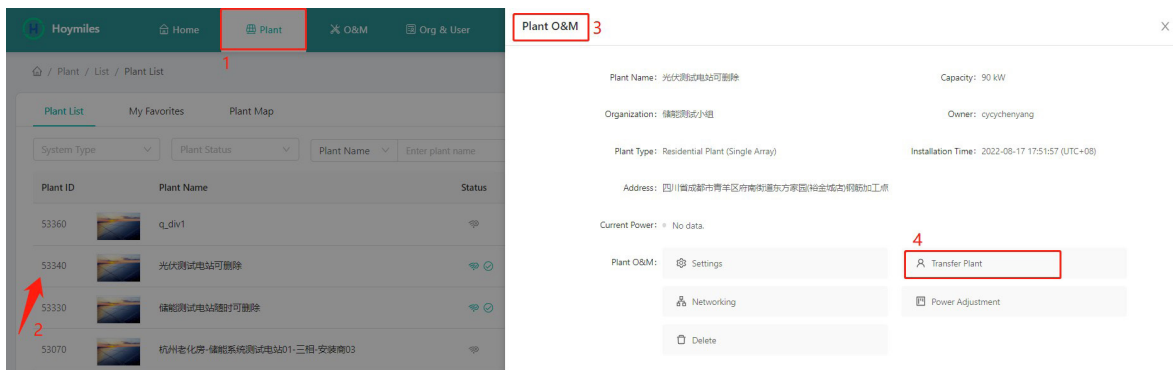
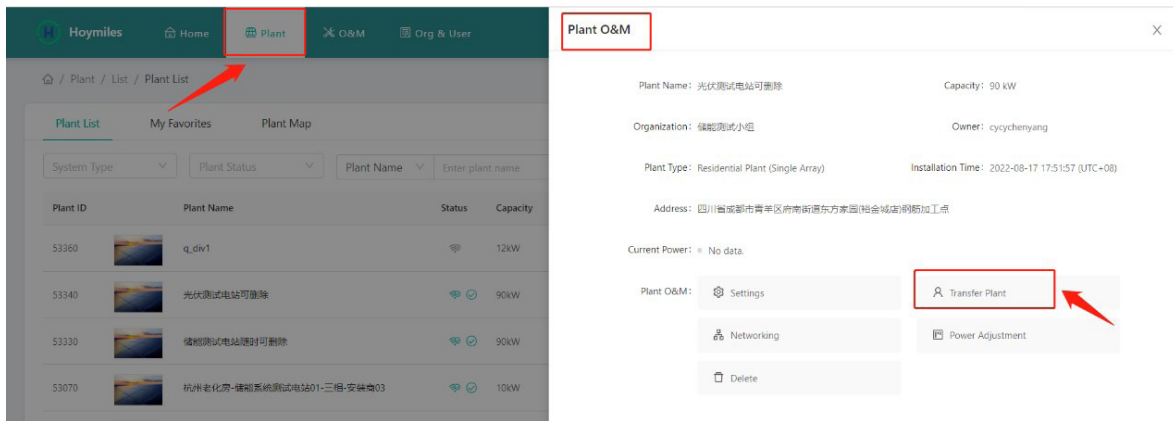
3.7 Reactivate the password of the end user

Select “Org. User Management” or “Owner Management” on the menu bar under “Org & User” and click the “Reset Password” button to reset password to 123456.



3.8 Transfer the PV plant from the original organization to another one

Go to the “Plant” page, select “Plant O&M”, click “Transfer Plant”, choose the new organization that you want to transfer to, and then click “Confirm”.



The PV plant cannot be transferred when one owner account is used by multiple PV plants. If one of the PV plants will be transferred, please firstly remove the owner account from other PV plants.

4. Remote Control Function

4.1 Restart the DTU remotely

Click "O&M > Device List", select "DTU", choose the DTU SN, and then click "Device Maintenance > Restart".



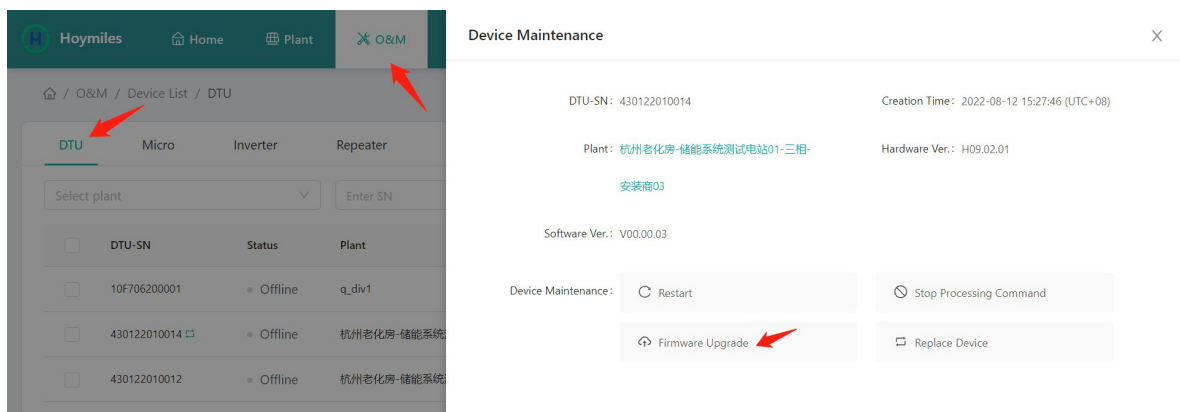
4.2 Stop Processing Command remotely

Click "O&M > Device List", select "DTU", choose the DTU SN, and then click "Device Maintenance > Stop Processing Command".



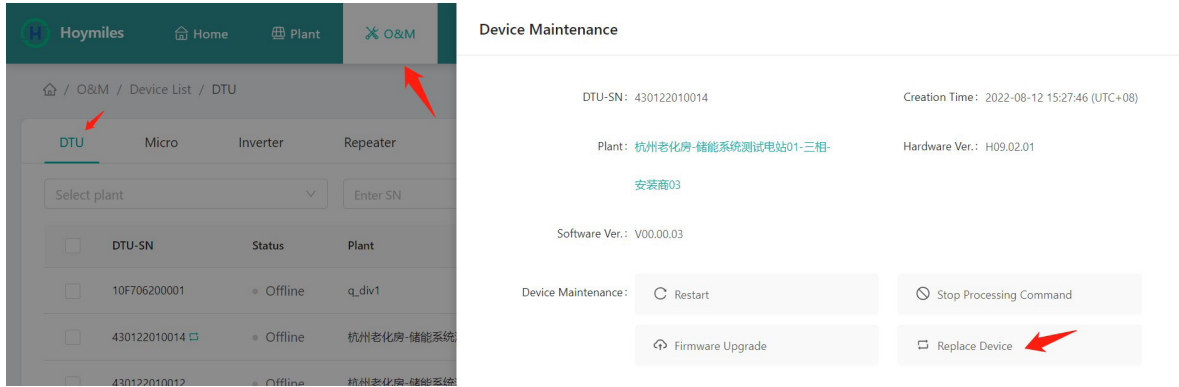
4.3 Upgrade the firmware on the DTU remotely

Click "O&M > Device List", select "DTU", choose the DTU SN, and then click "Device Maintenance > Firmware Upgrade".



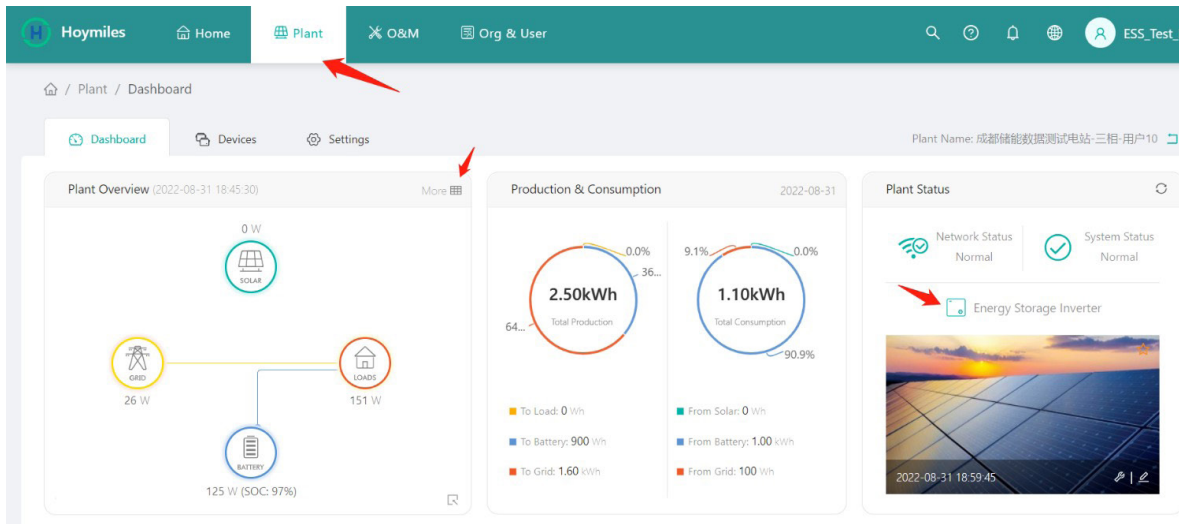
4.4 Replace DTU serial number

Click "O&M > Device List", select "DTU", choose the DTU SN, and then click "Device Maintenance > Replace Device".



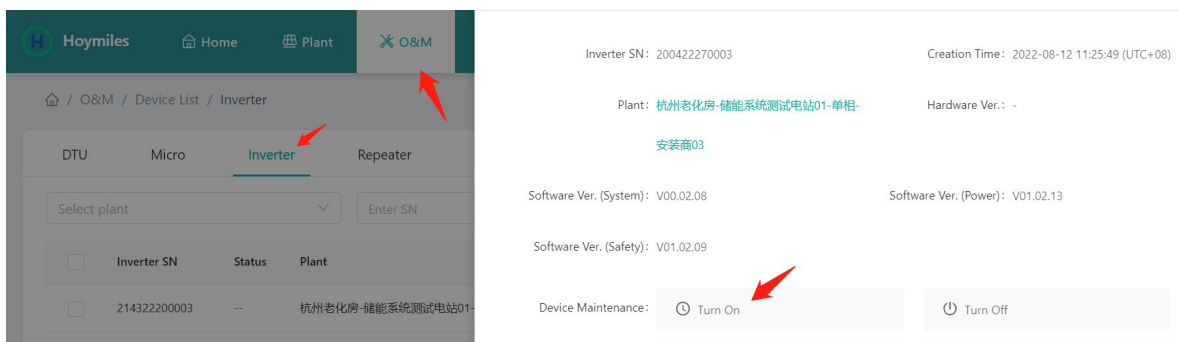
4.5 Check the various data of the device

Go to the PV plant page and click "More" or "Energy Storage Inverter".



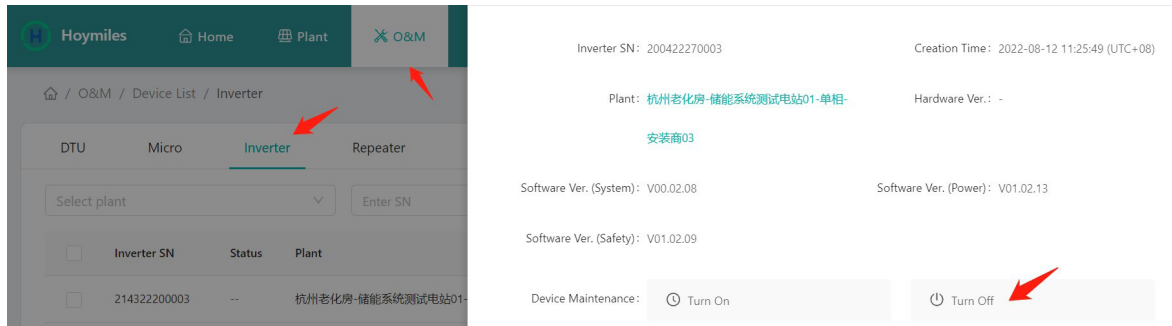
4.6 Turn on the inverter remotely

Click "O&M > Device List", select "Inverter", choose the Inverter SN, and then click "Device Maintenance > Turn On".



4.7 Turn off the inverter remotely

Click "O&M > Device List", select "Inverter", choose the Inverter SN, and then click "Device Maintenance > Turn off".



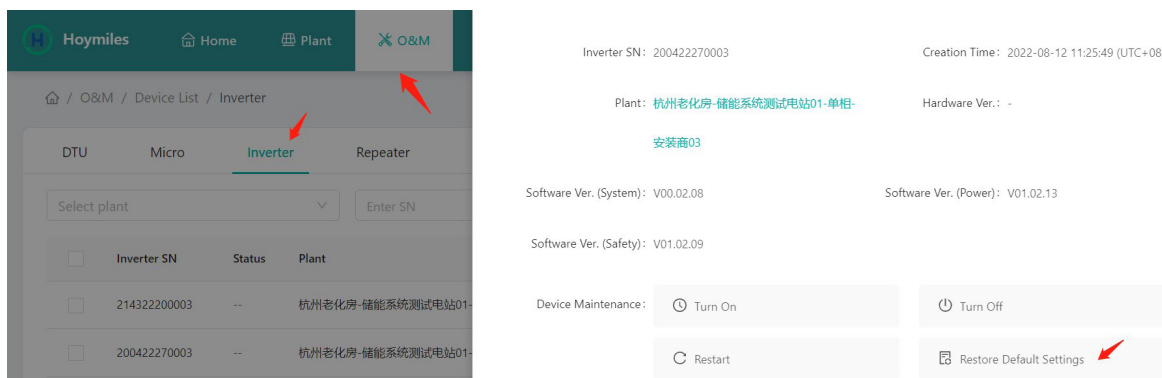
4.8 Restart the inverter remotely

Click "O&M > Device List", select "Inverter", choose the Inverter SN, and then click "Device Maintenance > Restart".



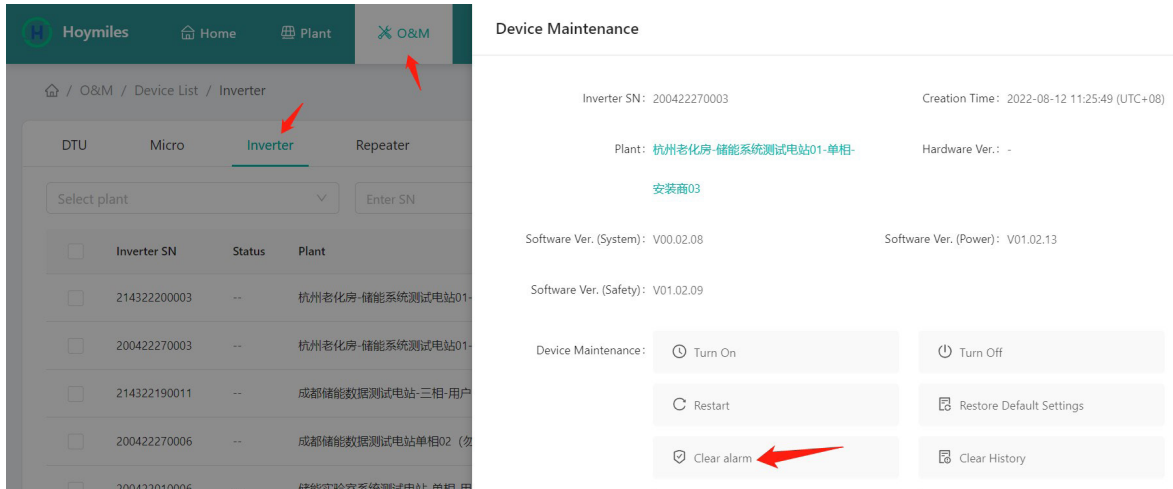
4.9 Restore the inverter default settings

Click "O&M > Device List", select "Inverter", choose the Inverter SN, and then click "Device Maintenance > Restore Default Settings".



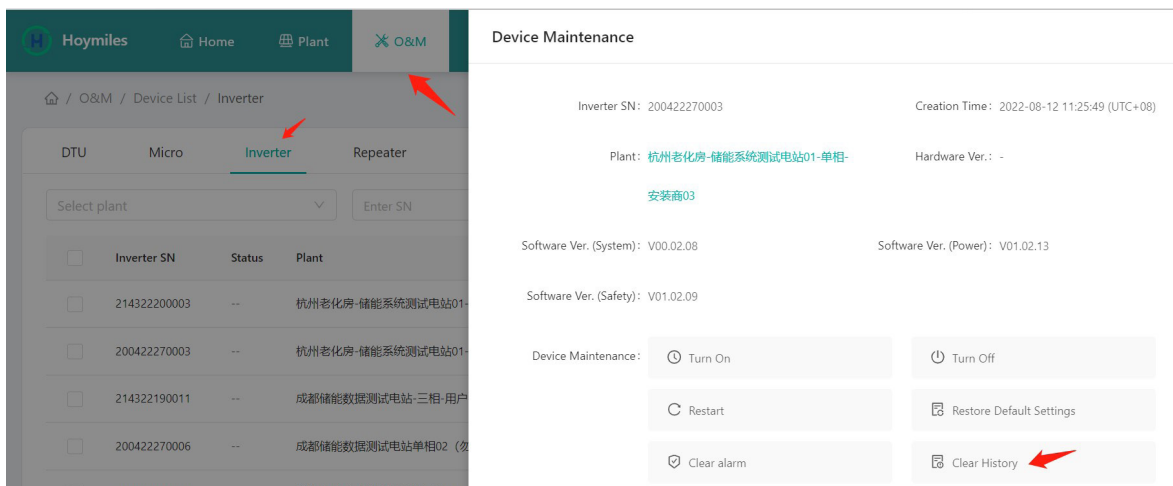
4.10 Clear the alarm of the inverter

Click "O&M > Device List", select "Inverter", choose the Inverter SN, and then click "Device Maintenance > Clear Alarm".



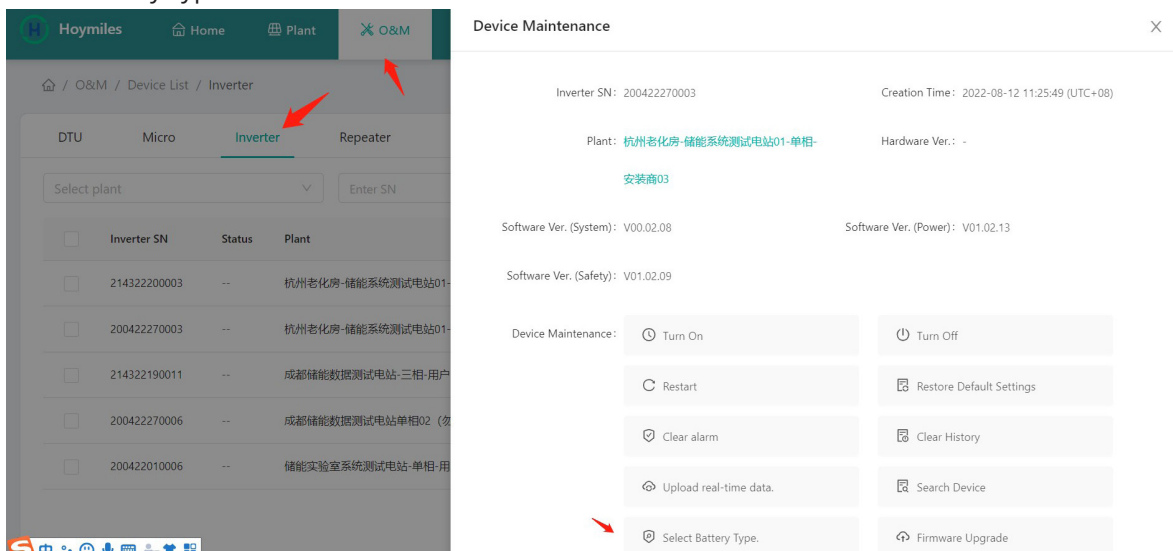
4.11 Clear the history of the inverter

Click "O&M > Device List", select "Inverter", choose the Inverter SN, and then click "Device Maintenance > Clear History".



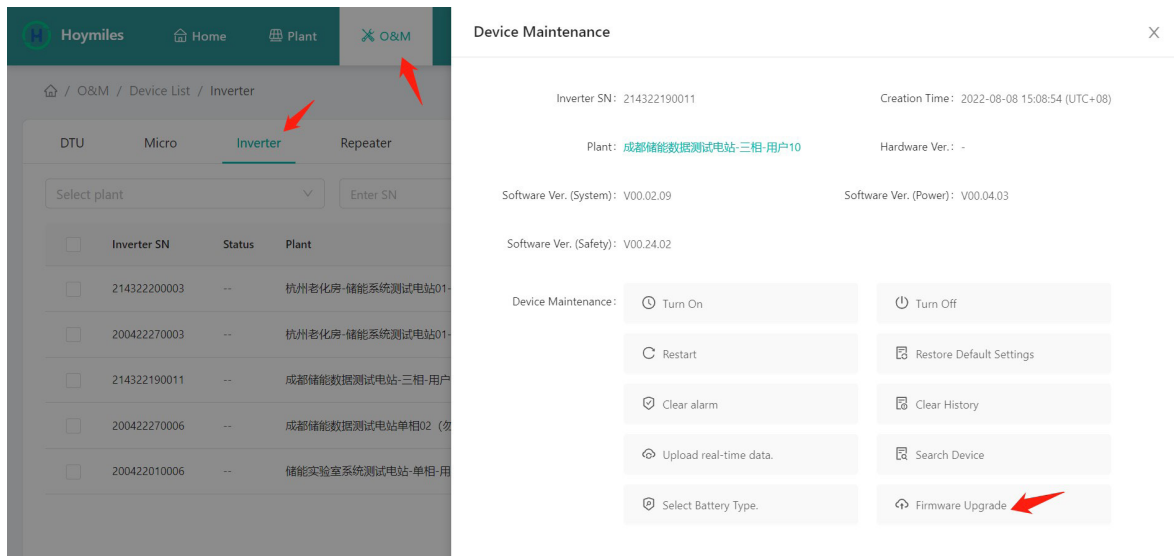
4.12 Select the battery type

Click "O&M > Device List", select "Inverter", choose the Inverter SN, and then click "Device Maintenance > Select Battery Type".



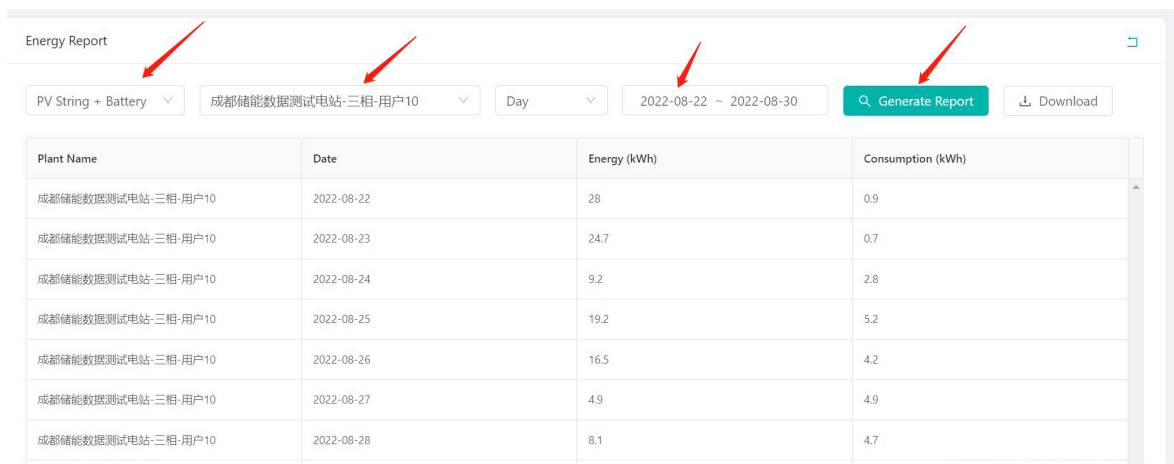
4.13 Upgrade the inverter firmware

Click "O&M > Device List", select "Inverter", choose the inverter SN, and then click "Device Maintenance > Firmware Upgrade".



4.14 Download the energy data (Power plant level)

1. Click "O&M" > "Report Query" and select the PV plant type, PV plant name and specific time range.
2. Click "Generate Report" and "Download".



5. About Report Download

5.1 Download the real-time data

Go to the PV plant page and click “CSV icon”.

