

S-Miles Cloud Monitoring Platform USER MANUAL

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1. Introduction

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

At present, the system has Installer version and End-user version, 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. This manual is intended to guide users in operating and managing S-Miles Cloud.

1.1 System Composition

Install the DTU, inverter, smart meter and battery before using the monitoring system. DTU is a communication gateway 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 inverter data to the Hoymiles Monitoring Server to achieve remote control of the whole system.

1.2 Installer & End-user App/Platform

1.2.1 App Download

S-Miles Installer is a mobile application developed by Hoymiles especially for installers of distributed plants. It is committed to better performing installation and maintenance.

S-Miles End-user is a mobile application developed by Hoymiles especially for owners of distributed plants. It can absorb the operating data of plants from S-Miles Cloud.

a. Scan the QR code to download.



S-Miles Installer



S-Miles End-user

b. Search “Hoymiles” in the Google Play or App Store.



S-Miles Installer



S-Miles End-user

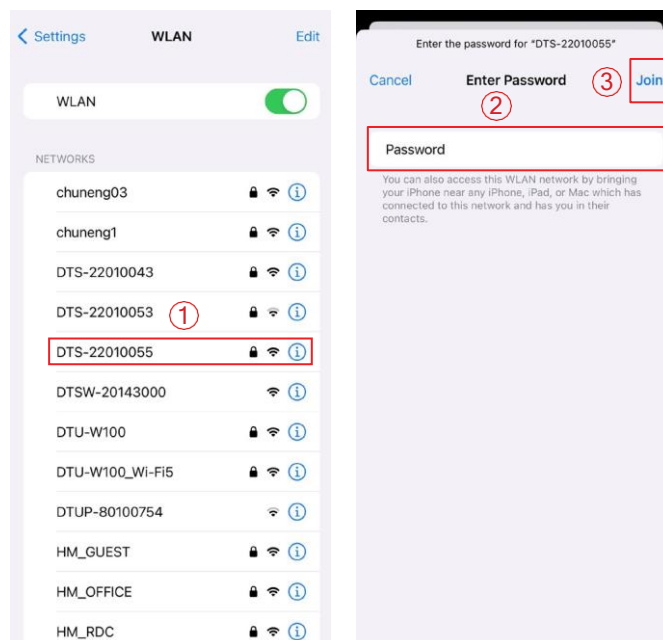
1.2.2 Platform

Open the browser, and then enter <https://global.hoymiles.com> in the address bar to enter the login interface. Please use the latest version of Google Chrome at a resolution of 1366×768 or above.

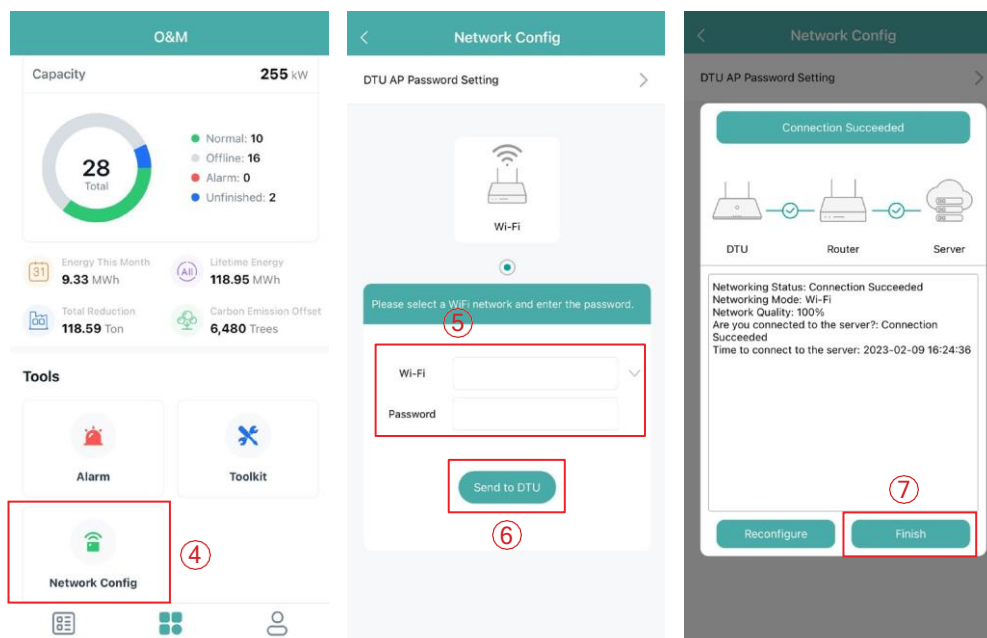
2. App Settings and Data Query

2.1 Configure the Network of DTU

a. Choose the wireless network of DTU with serial number like “DTS-22010055” and enter the default password “**ESS12345**” to connect DTU.

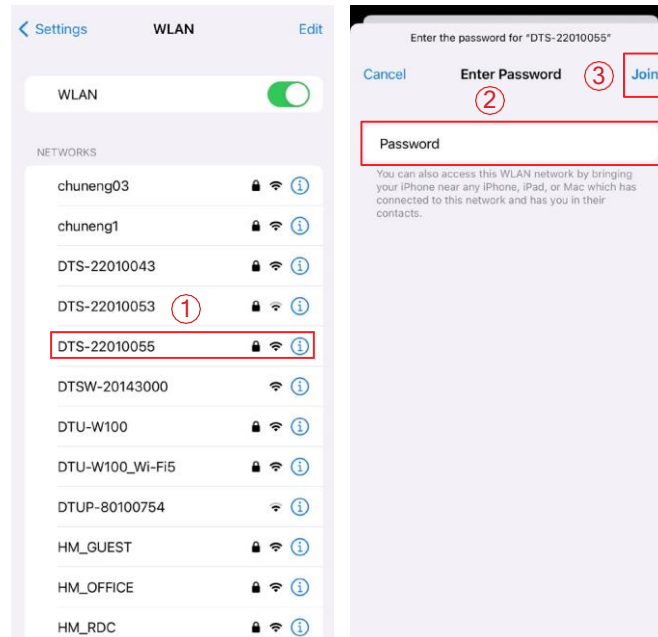


b. Open the S-Miles Installer App and choose the “O&M → Network Config”. Enter the account and password of nearby stable wireless network, click the button of “Send to DTU”, and wait until the “Connection Succeeded” appears to click “Finish”.

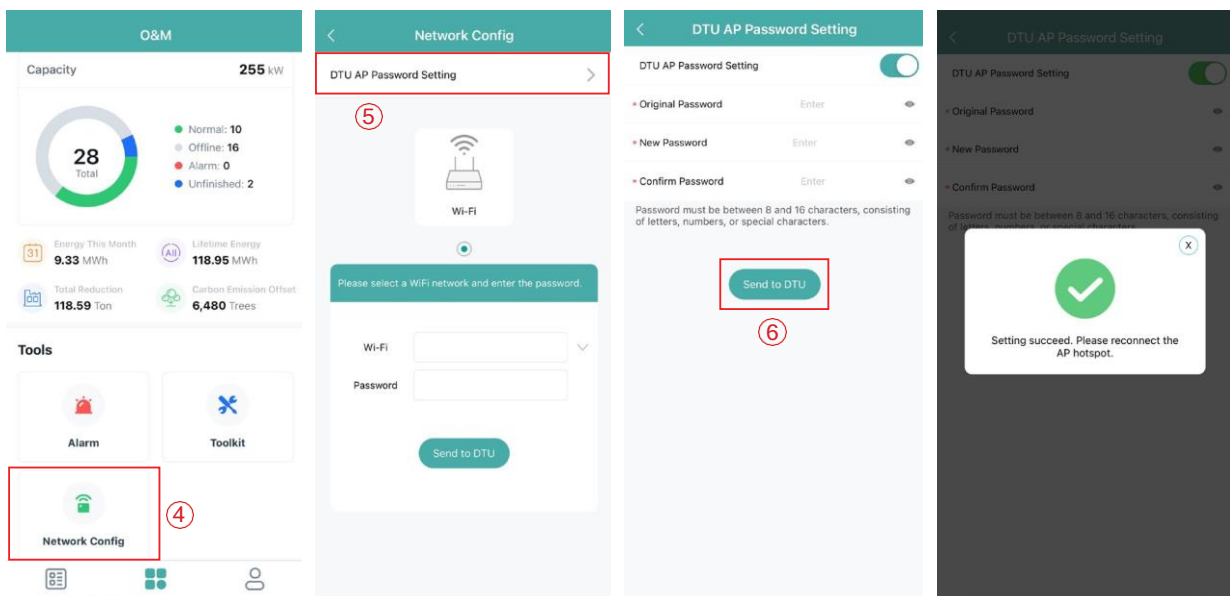


2.2 Change the Default Password

a. Choose the wireless network of DTU with serial number like “DTS-22010055” and enter the default password “**ESS12345**” to connect DTU.



b. Open the App and choose the “O&M → Network Config → DTU AP Password Setting”. Enter the original password and new password, click the button of “Send to DTU”, and wait until “Setting succeed” appears to reconnect the DTU.



Note:

The Wi-Fi name and password do not support special characters such as spaces.

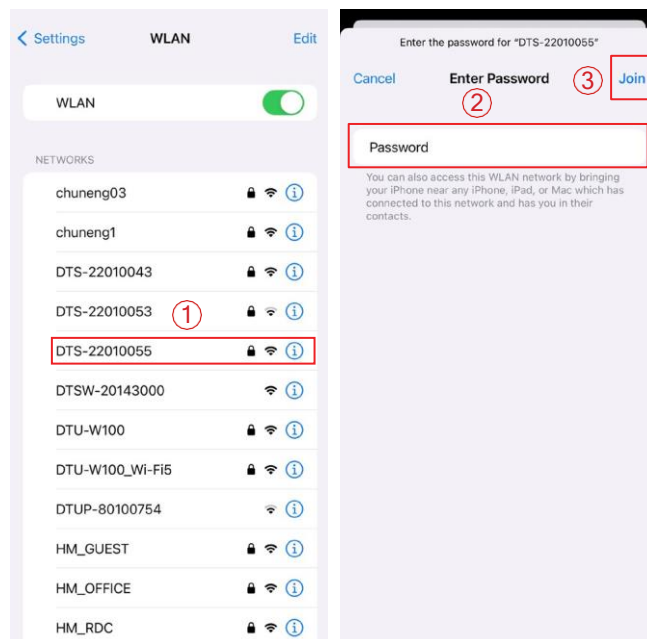
2.3 Reset the Password of DTU

When the DTU is powered on, long press the “SET” button on the left of DTU for 5 seconds (DTU indicators will be off during the long press), and then the DTU password will be restored to default password “ESS12345”.

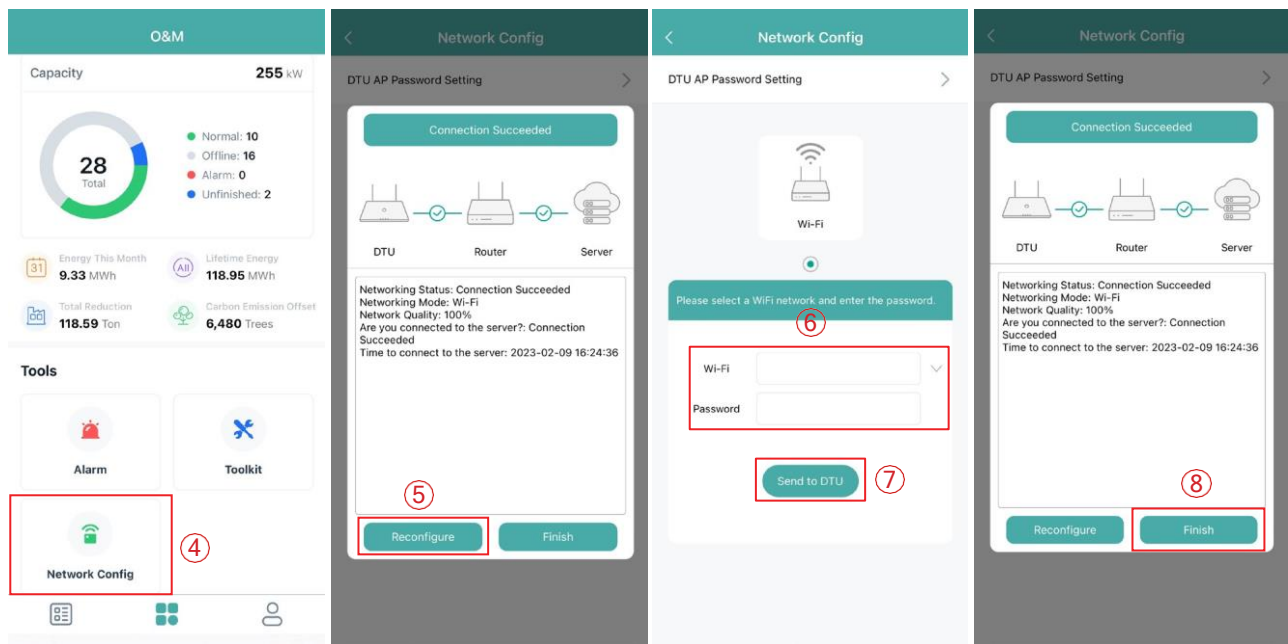


2.4 Reconfigure the Network of DTU

a. Choose the wireless network of DTU with serial number like “DTS-22010055” and enter the password to connect DTU.

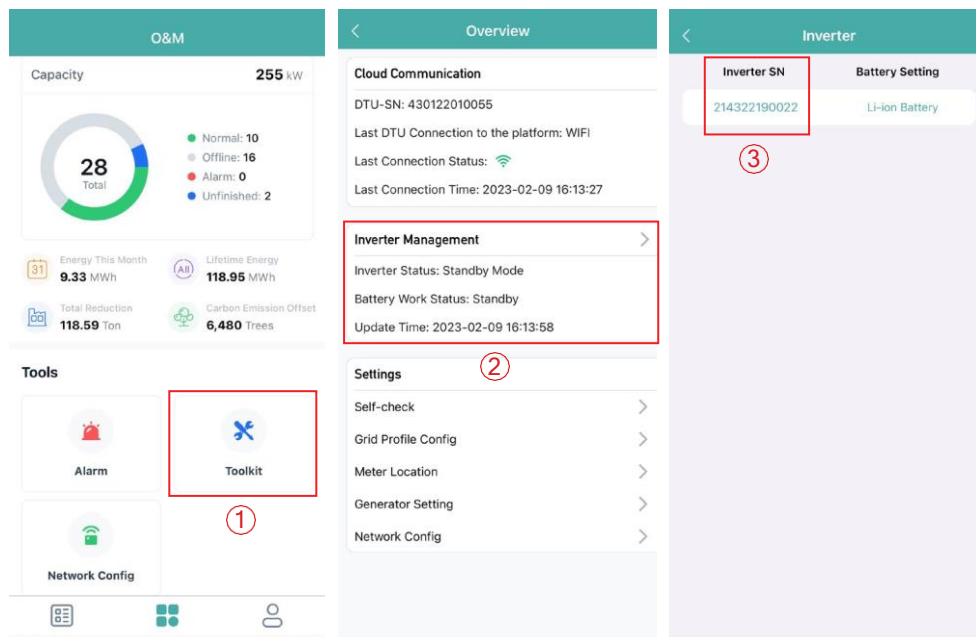


b. Open the App, choose “O&M → Network Config”, click the “Reconfigure”, and then choose a new wireless network. Enter the account and password, click the button of “Send to DTU”, and wait until “Connection Succeeded” appears to click “Finish”.



2.5 App Local Data Query

Click “Toolkit → Inverter Management”, and then choose “Inverter SN”.



You can check the real-time data of PV, battery, grid, load, diesel generator and PV inverter here.

Real-time Data	Real-time Data	Real-time Data	Real-time Data	Real-time Data
PV 1 Update Time: 2023-02-09 16:15:58 Voltage: 402.3V Current: -0.01A Power: 127W Daily Energy: 12.7kWh PV 2 Voltage: 14.6V Current: 0.01A Power: 0W Daily Energy: 0kWh Battery Battery Type: 1 Battery Work Status: 0 Battery Fault Code: 0 Battery SOC: 0% Battery KWh: 0kWh	Grid Grid Meter Connecting Status: 1 Grid Frequency: 50.02Hz Combined Power Factor: 0.98Hz Phase AVoltage: 237.3V Phase ACurrent: 1.33A Phase AActive Power: 312W Phase AReactive Power: 6Var Phase APower Factor: 0.98 Phase ADaily Export Energy: 0kWh Phase ADaily Consumption Energy: 0kWh Phase BVoltage: 236.1V Phase BCurrent: 1.3A Phase BActive Power: 302W Phase BReactive Power: -15Var Phase BPower Factor: 0.97	Loads Load Mode: 4 Frequency: 49.98Hz Phase AVoltage: 1.9V Phase AActive Power: 56W Phase BDaily Consumption Energy: 0kWh Phase BVoltage: 5V Phase BActive Power: 28W Phase BDaily Consumption Energy: 0kWh Phase CVoltage: 2.3V Phase CActive Power: 0W Phase CDaily Consumption Energy: 0kWh Energy Storage Inverter Master-slave: 0 Status: 3 Total Run Time: 0s	Diesel generators Diesel Generator Status: 1 Frequency: 0.02Hz Phase AVoltage: 2.6V Phase ACurrent: 0A Phase AActive Power: 0W Phase AReactive Power: 4Var Phase ADaily Energy: 0kWh Phase BVoltage: 4.6V Phase BCurrent: 0A Phase BActive Power: 0W Phase BReactive Power: 4Var Phase BDaily Energy: 0kWh Phase CVoltage: 0.8V Phase CCurrent: 0A Phase CActive Power: 0W	PV Inverter Diesel Generator Status: 0 Frequency: 0Hz VoltagePhase A: 0V CurrentPhase A: 0A Active PowerPhase A: 0W Reactive PowerPhase A: 0Var Daily EnergyPhase A: 0kWh VoltagePhase B: 0V CurrentPhase B: 0A Active PowerPhase B: 0W Reactive PowerPhase B: 0Var Daily EnergyPhase B: 0kWh VoltagePhase C: 0V CurrentPhase C: 0A Active PowerPhase C: 0W

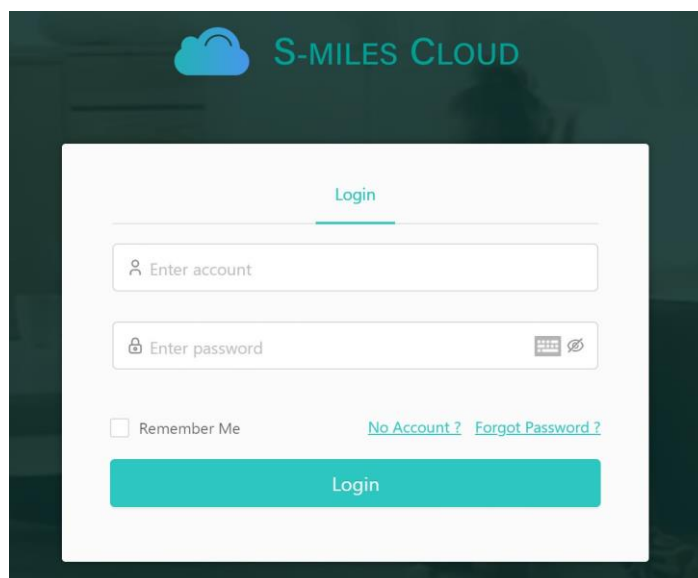
3. About Monitoring Account

3.1 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 subaccounts and plants under your existing account.

3.2 Log in to the S-Miles

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



Note:

- (1) The end-user only has the authority to check the plant data and perform smart control settings.
- (2) Dealers can create distributor and installer organizations, while installers can create installer organizations and organization users.
- (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 are not allowed to edit the plant when the "sales (view only)" role is selected.

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.

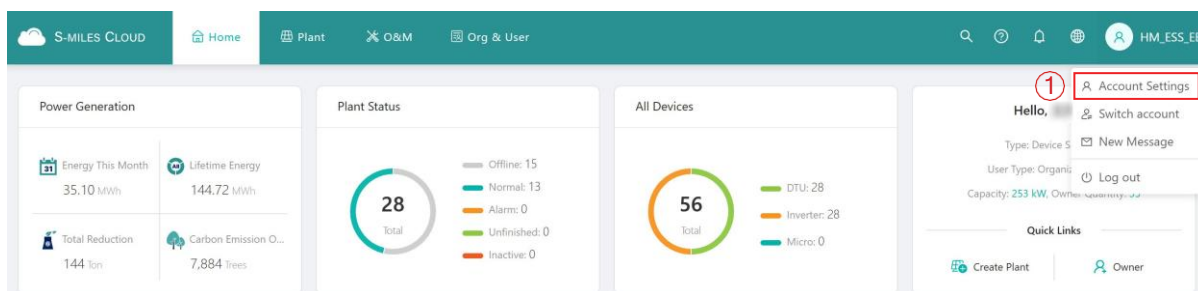
Default Role: ☒ Device Supplier

Custom Role: ☐ Sales (View only) ☐ SunSpec Modbus

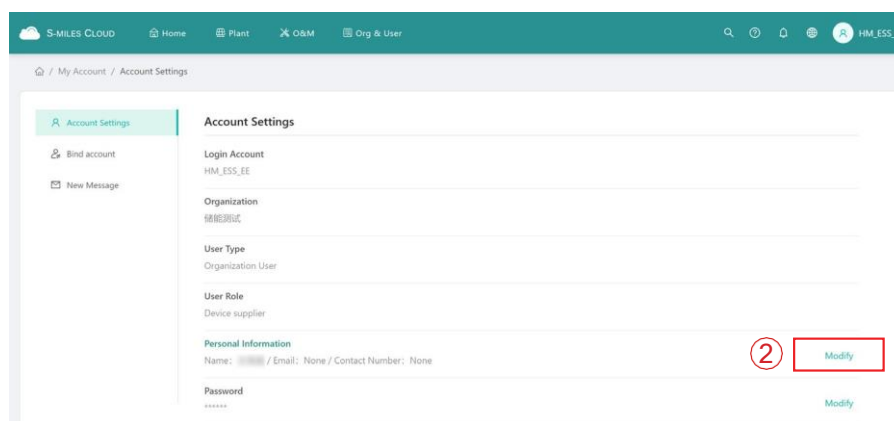
- (5) An organization can have numerous login accounts, so just select the organization name and add organization users.
- (6) Email can also be used as a login account.

3.3 Change Email and Password

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



- Click “Modify” button on the right of personal information, enter new Email, and then click “Confirm”.



Edit Basic Information

Login Account: HM_ESS_EE

* Name:

test

* Email:

Enter

Contact Number:

Enter

Cancel

Confirm

d. Click “Modify” button on the right of password, enter original password and new password, and then click “Confirm”.

S-MILES CLOUD Home Plant O&M Org & User HM_ESS_EE

/ My Account / Account Settings

Account Settings

Bind account

New Message

Account Settings

Login Account: HM_ESS_EE

Organization: 储能测试

User Type: Organization User

User Role: Device supplier

Personal Information

Name: / Email: None / Contact Number: None

Modify

Password

Modify

Edit Basic Information

Close

Login Account: HM_ESS_EE

* Original Password: Enter

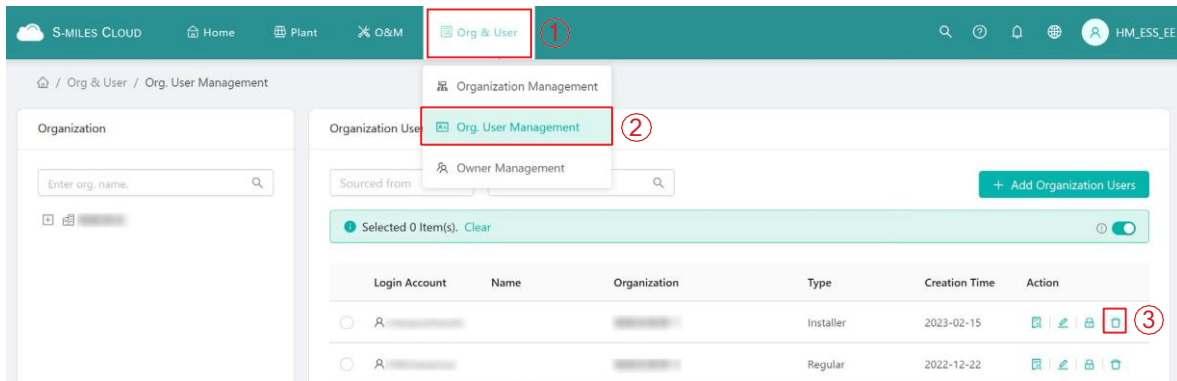
* New Password: Enter

* Confirm Password: Enter the password again

Confirm

3.4 Delete an Account

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



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



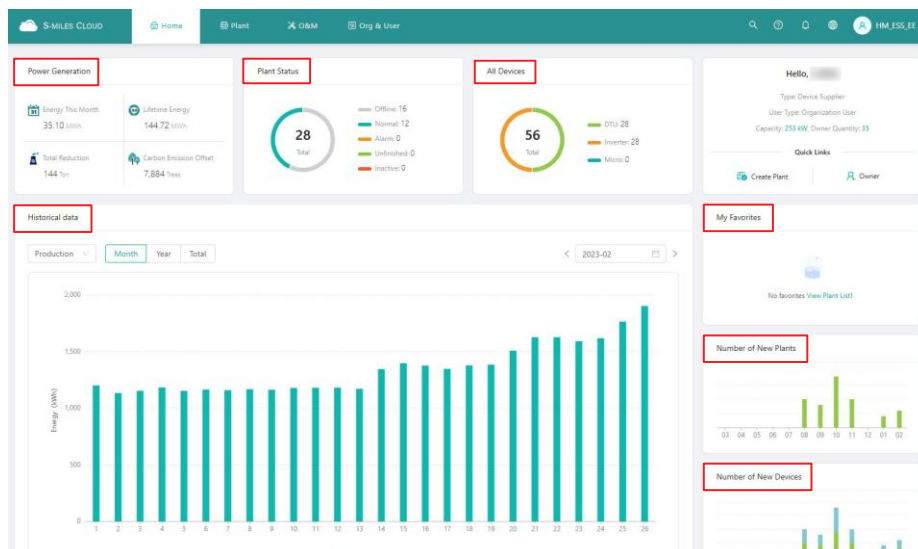
4. Web Page Introduction

The menu bar shows the main functions of S-Miles Cloud, so the user can select the corresponding pages and perform corresponding operations.



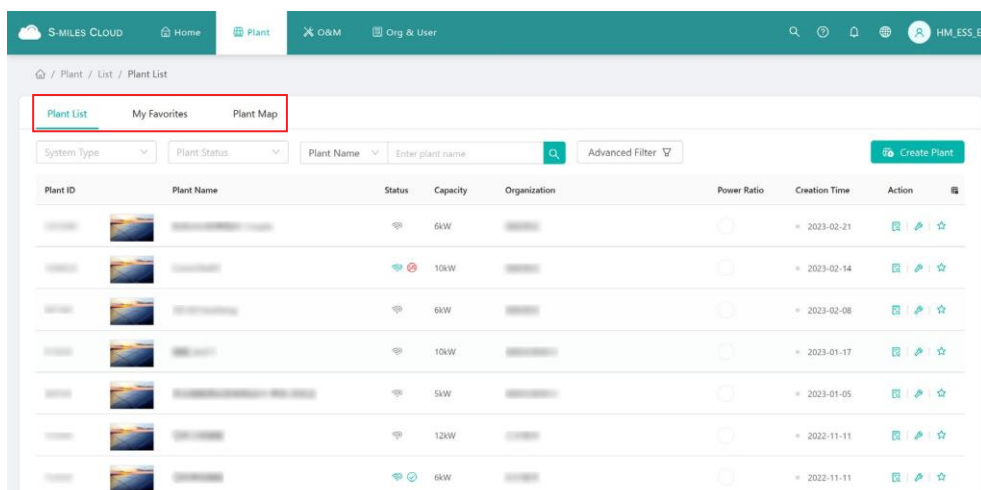
4.1 Home Page

The Home page includes the power generation, plant status, all devices, historical power generation data, number of new plants, number of new devices and your favorites.



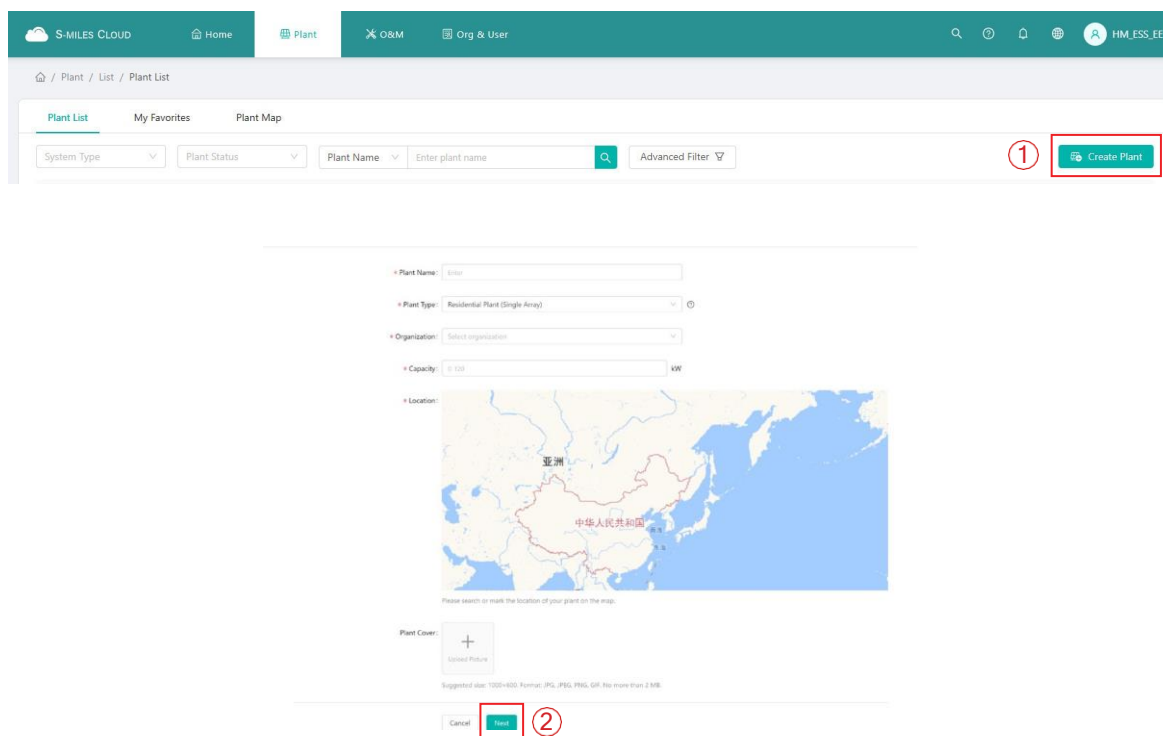
4.2 Plant Page

The Plant page includes the plant list, your favorites and the plant map.



4.2.1 Create a Plant

a. Click “Create Plant”, fill in the basic information, and then click “Next”.



b. Click “Create Owner”, fill in the owner information, and then click “Confirm”.



Please bind current owners or add new owners of the plant.



Create Owner

X

* Login Account:

Enter

Select Another Owner

Cannot be empty

* Password:

Enter the password

* Full Name:

Enter

Contact Number:

Enter

Email:

Enter

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

Cancel

Confirm

- c. Click “Next → Add Device”, fill in the DTU serial number, and then the inverter serial number will be automatically recognized. After that, click “Next” to go to the final step.

Owner (test12345)

Login Account	Name	Contact Number	Email	Creation Time	Action
test-2	test-2			2023-02-27 16:22:17	Edit Reset Password Remove

+ Create Owner

Cancel

Next

Add Device/Layout (test12345)

✓ Devices

2 Layout Design

3 Upload Installation Map

There is no device in this plant, please add.

+ Add Device

Add Device

X

7

* DTU SN: 430100000001

* Inverter SN: Enter SN

This DTU only supports auto-sync of device relationship. Make sure that the configuration has been completed in APP-Toolkit.

8

Cancel

Save

← Add Device/Layout (test12345)

DTU	Action
430100000000	<div>Edit</div> <div>Delete</div>

+ Add Device

9

Cancel

Next

d. Fill in the plant regulation information and click “Confirm” to finish the plant creation.

← Settings (test12345)

Plant Regulation

Plant Revenue

Plant Name: test12345

10

Currency: Select

Electricity Price per Unit

Buy: Enter a number.

Sell: Enter a number.

More Setting

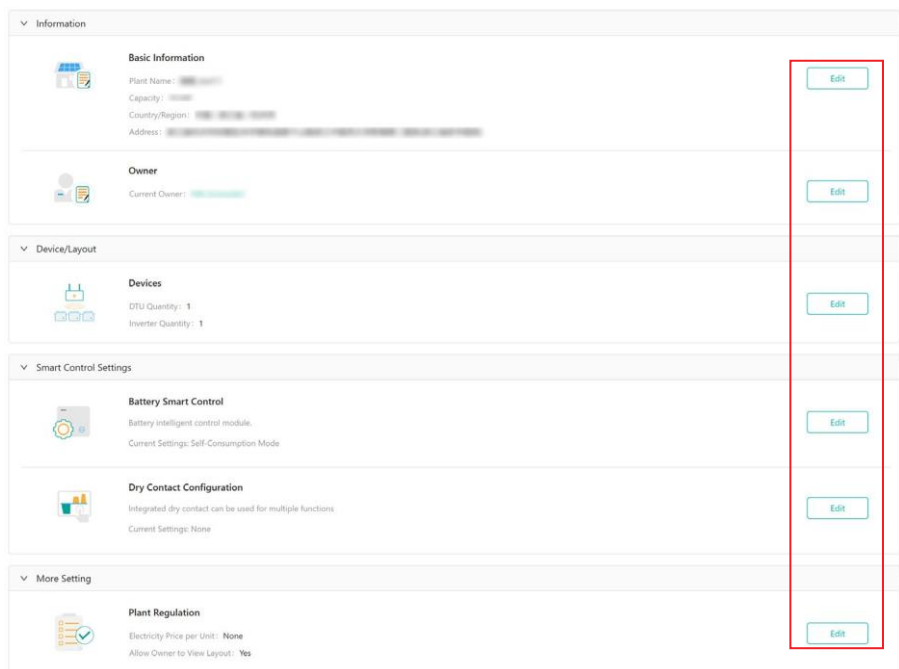
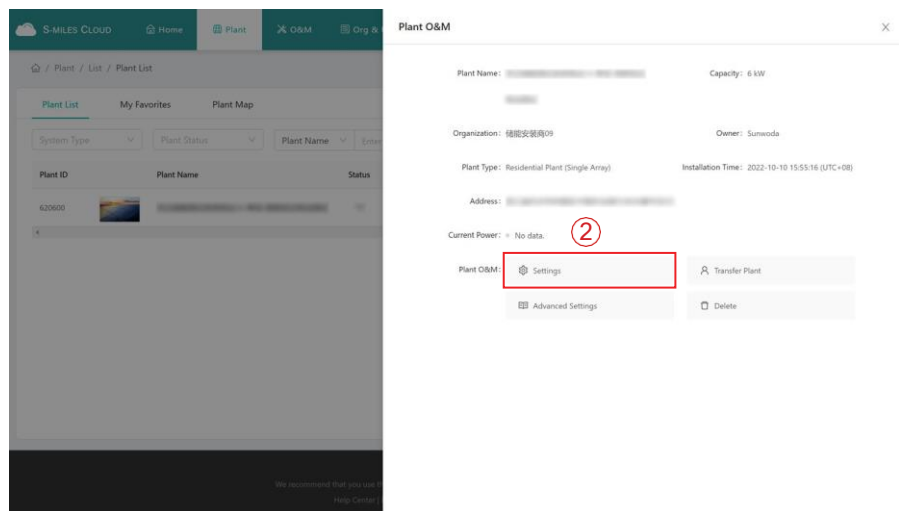
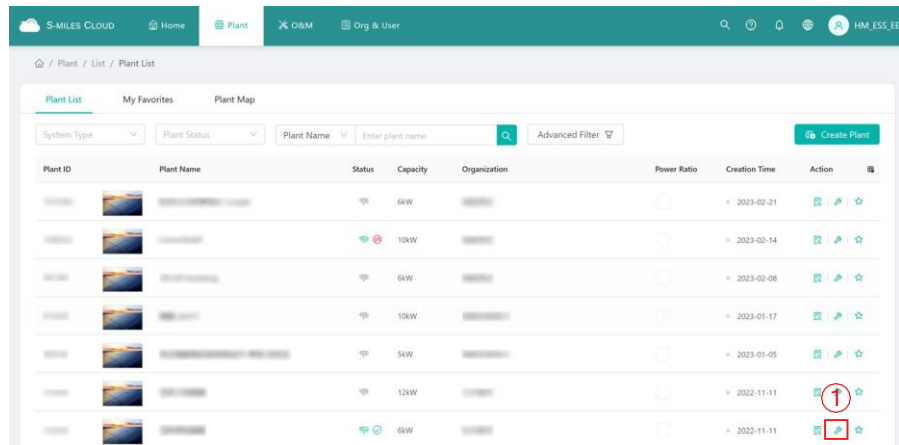
11

Cancel

Confirm

4.2.2 Edit Plant Basic Information

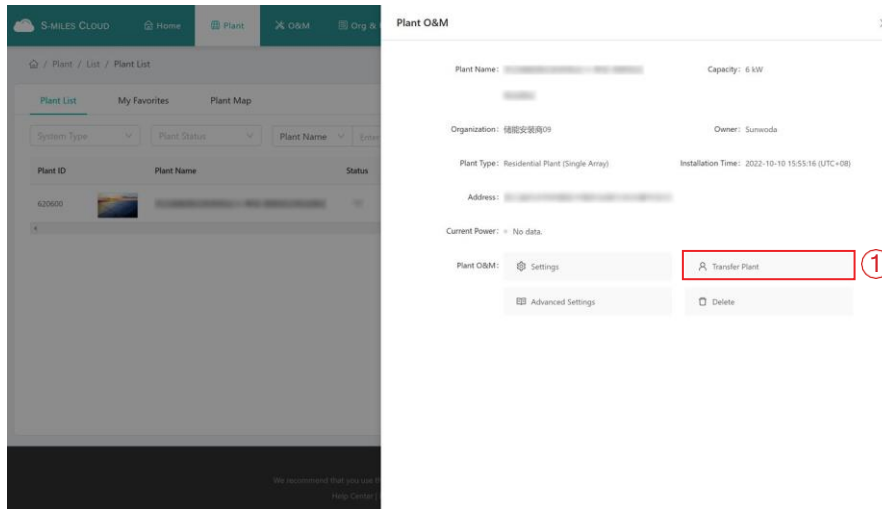
You can directly choose the plant you want to edit, or search it according to device name/ID, click the “Settings” button on the left side of the Plant O&M, and then edit the information you want to change.



* For details of Smart Control Settings, please refer to Chapter 5.

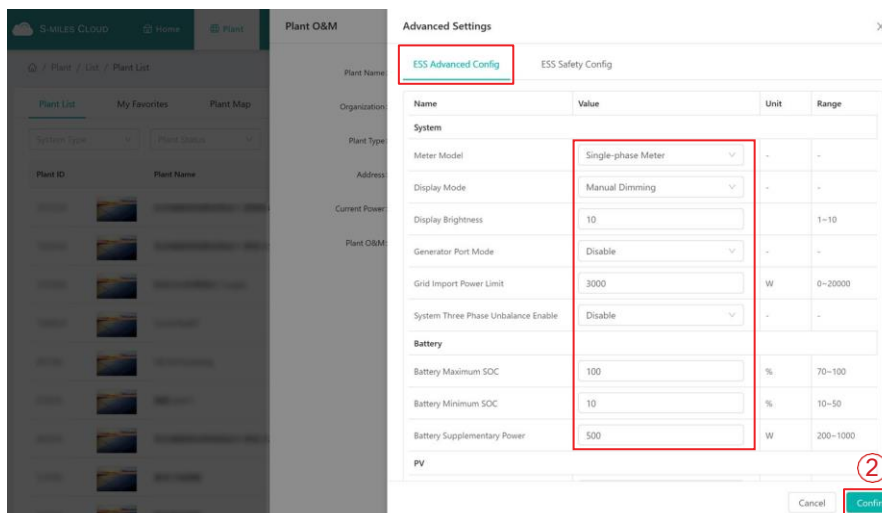
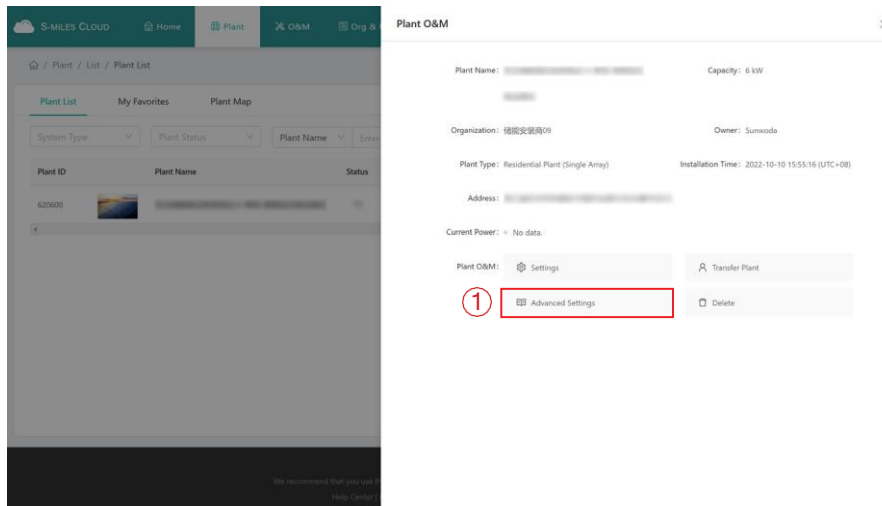
4.2.3 Transfer a PV Plant to Another Organization

Select “O&M” on the right side of the plant list, click the “Transfer Plant” button, choose the new organization that you want to transfer to, and then click “Confirm”.

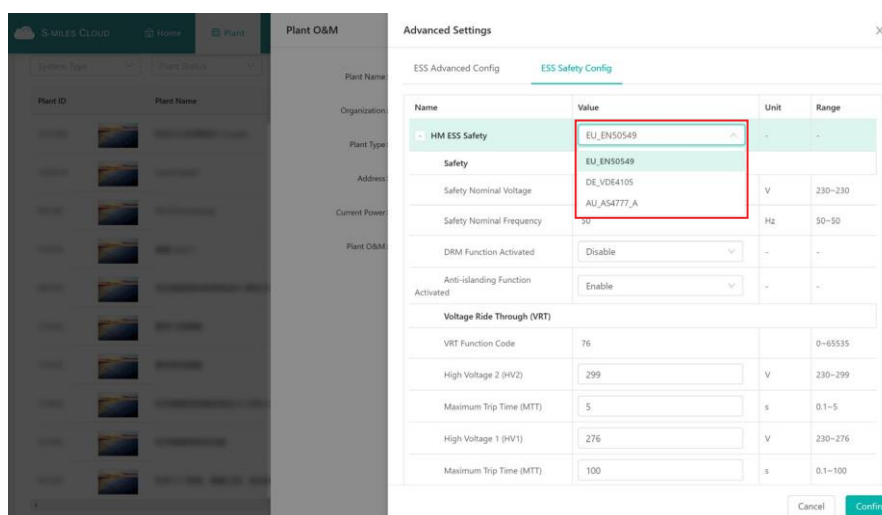


4.2.4 Update the Profile of Inverter

Choose the plant of which you want to update the profile, and then click the “Advanced Settings” button on the left side of the Plant O&M. You can change the parameters within the certain range, and then click “Confirm”.

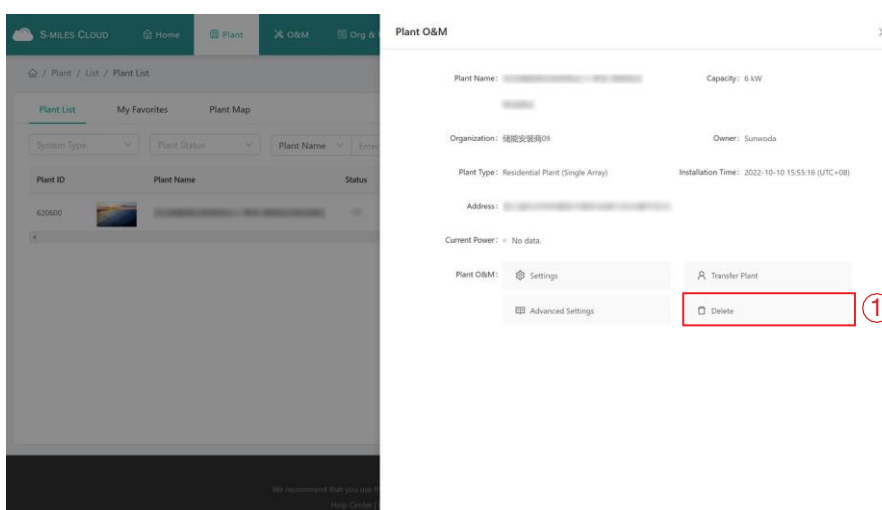


When ESS Safety Config is performed, please firstly choose corresponding grid code in your region, and in other regions, you can adjust parameters in accordance with local grid standard.



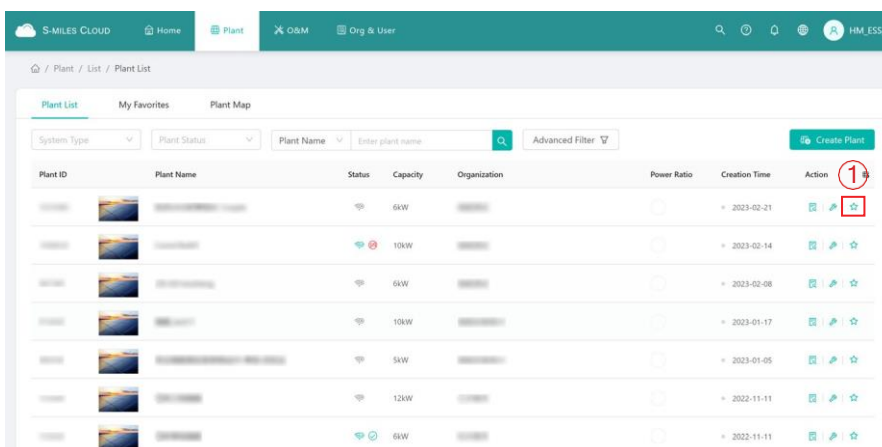
4.2.5 Delete a Plant

Choose the plant you want to delete, and then click the “Delete” button on the left side of the Plant O&M. To delete a plant, you will need to firstly delete all devices under this plant.



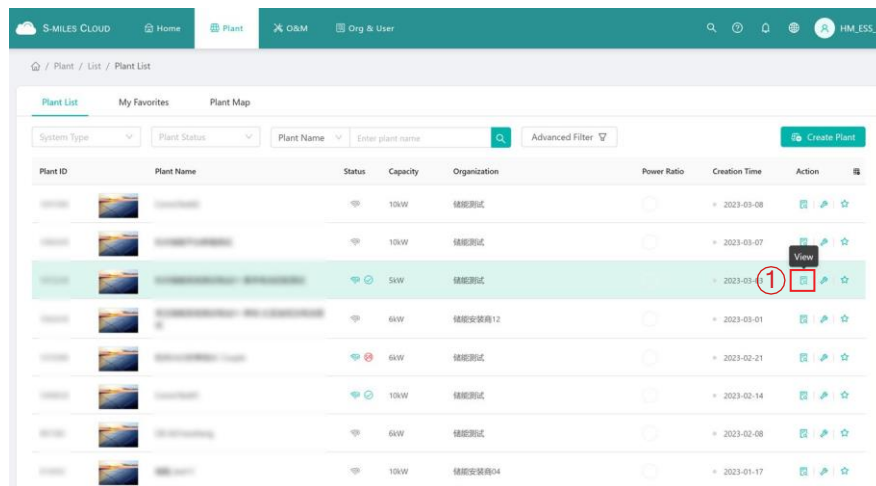
4.2.6 Add a Plant to Favorites

Choose the plant that you want to add to your favorites and click “Favorite”.

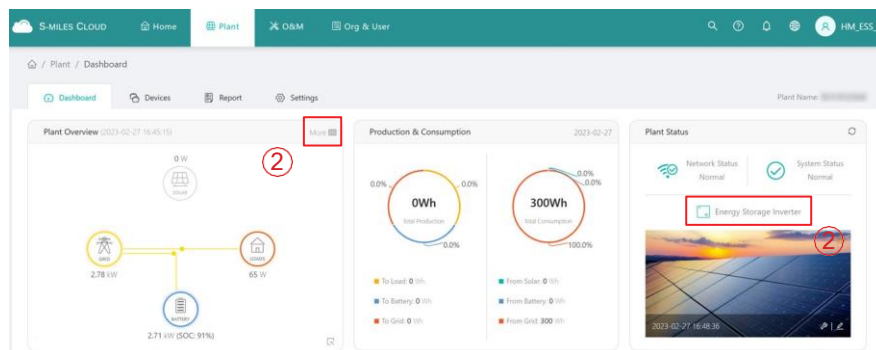
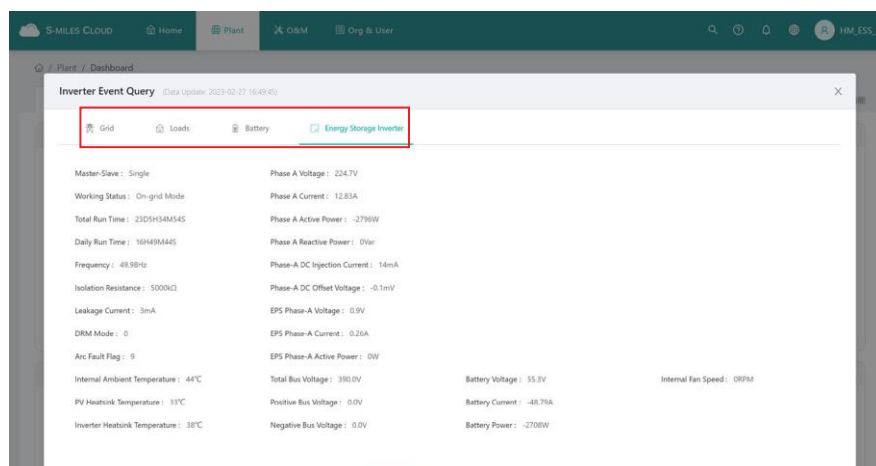


4.2.7 Check the Various Data of Device

Go to the PV plant page, select “View” and click “More” or “Energy Storage Inverter”.



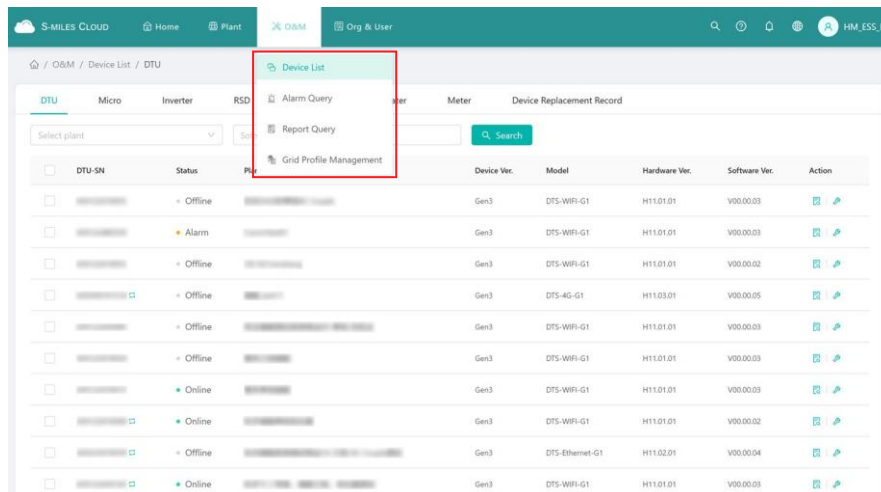
Plant ID	Plant Name	Status	Capacity	Organization	Power Ratio	Creation Time	Action
10000001	储能测试	运行	10kW	储能测试	0%	2023-03-08	View
10000002	储能测试	运行	10kW	储能测试	0%	2023-03-07	View
10000003	储能测试	运行	5kW	储能测试	0%	2023-03-01	View
10000004	储能测试	运行	6kW	储能测试	0%	2023-02-21	View
10000005	储能测试	运行	10kW	储能测试	0%	2023-02-14	View
10000006	储能测试	运行	6kW	储能测试	0%	2023-02-08	View
10000007	储能测试	运行	10kW	储能测试	0%	2023-01-17	View

Grid	Loads	Battery	Energy Storage Inverter
Master-Slave: Single	Phase A Voltage: 224.7V	Phase A Current: 12.83A	Phase A Active Power: -2790W
Working Status: On-grid Mode	Phase A Reactive Power: 0Var	Phase A DC Injection Current: 14mA	Phase A DC Offset Voltage: -0.1mV
Total Run Time: 2305H34M54S	Frequency: 49.98Hz	Isolation Resistance: 5000KΩ	Leakage Current: 3mA
Daily Run Time: 16H49M44S	Internal Ambient Temperature: 48°C	PV Heat Sink Temperature: 33°C	Inverter Heat Sink Temperature: 38°C
EPS Phase-A Voltage: 0.0V	EPS Phase-A Current: 0.26A	EPS Phase-A Active Power: 0W	Total Bus Voltage: 390.0V
Positive Bus Voltage: 0.0V	Negative Bus Voltage: 0.0V	Battery Voltage: 55.3V	Battery Current: -48.76A
Battery Power: -2708W			

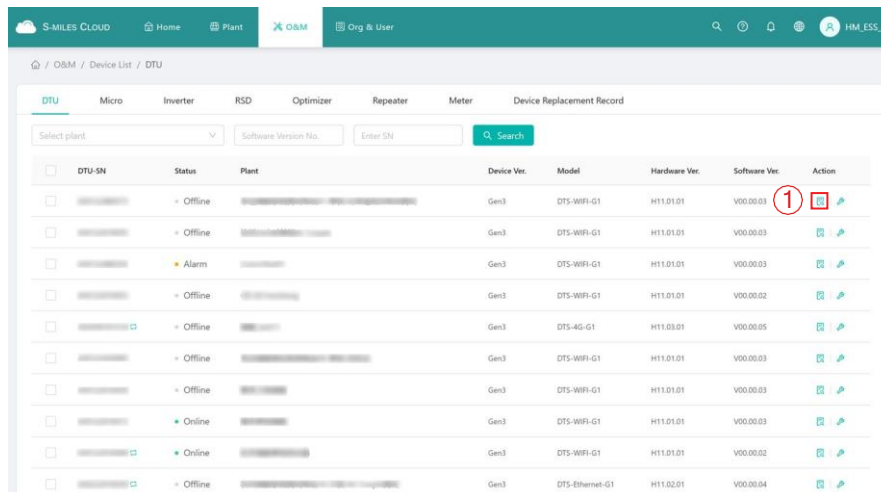
4.3 O&M

The O&M page includes device list, alarm query, report query and grid profile management.



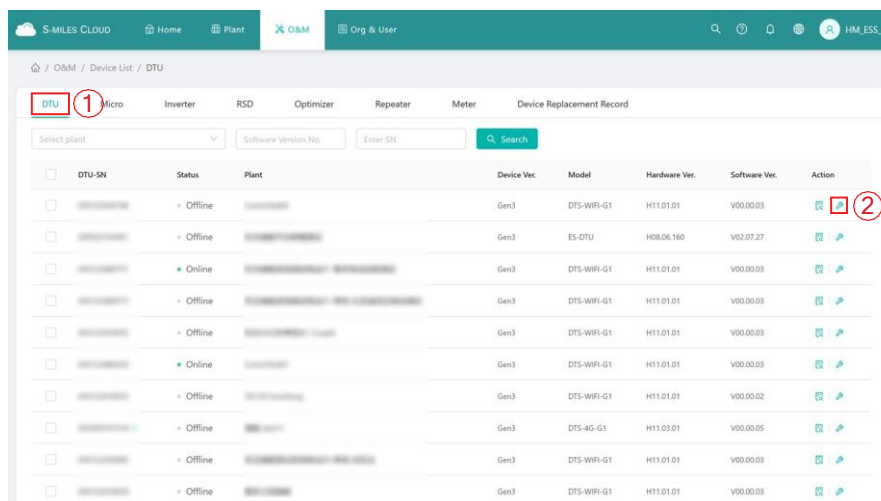
4.3.1 Device Information Query

Click “Device List → DTU”, and then click “View” to view device details.



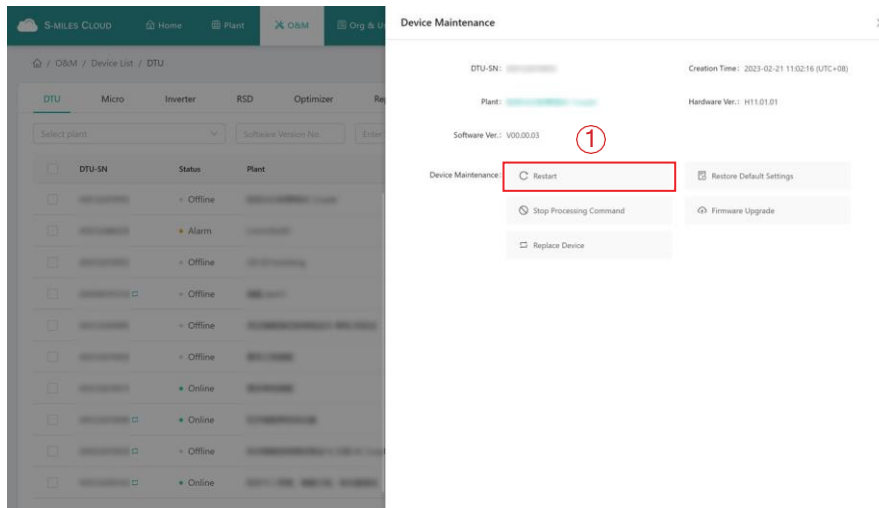
4.3.2 DTU Maintenance

Click “Device List → DTU”, choose the DTU SN and click the “Device Maintenance”.



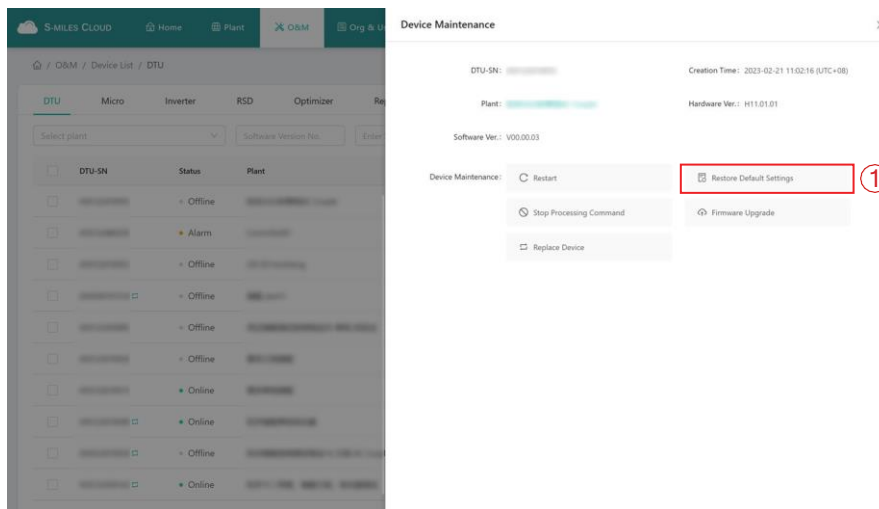
4.3.2.1 Restart the DTU

Click “Device List → DTU”, choose the DTU SN, and then click “Device Maintenance → Restart”.



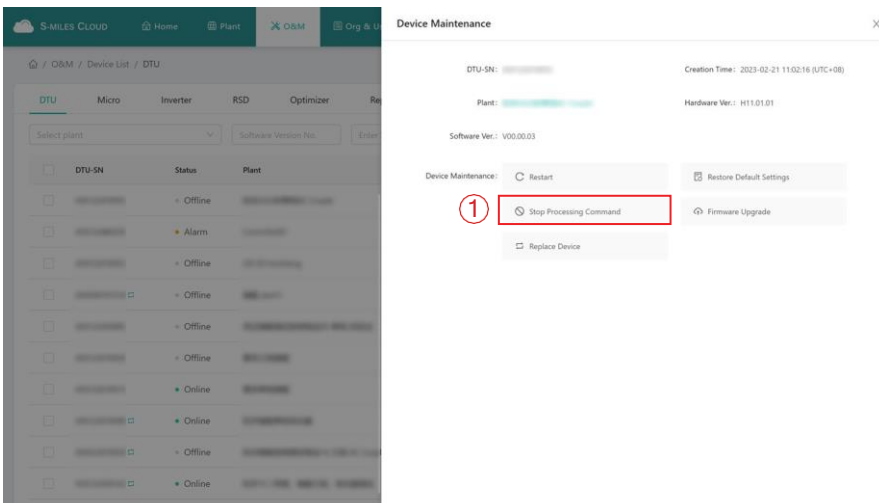
4.3.2.2 Restore the DTU Default Settings

Click “Device List → DTU”, choose the DTU SN, and then click “Device Maintenance → Restore Default Settings”.



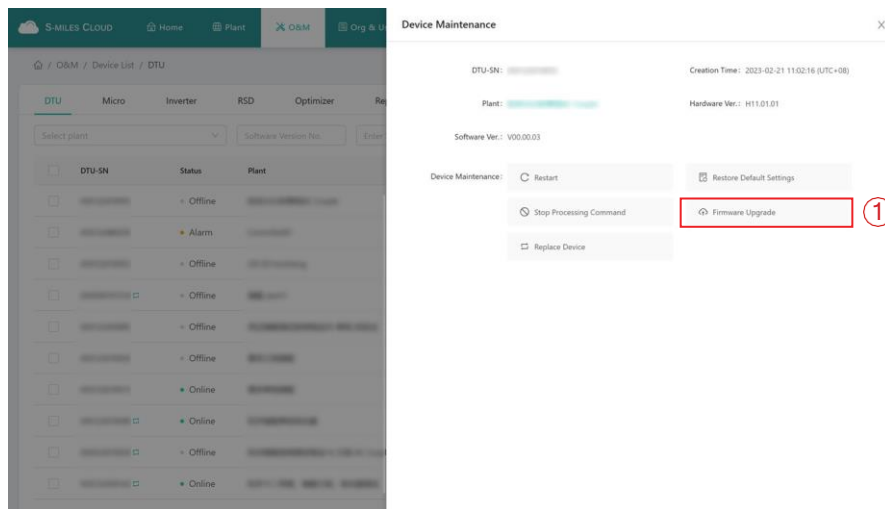
4.3.2.3 Stop the Processing Command of DTU

Click “Device List → DTU”, choose the DTU SN, and then click “Device Maintenance → Stop Processing Command”.



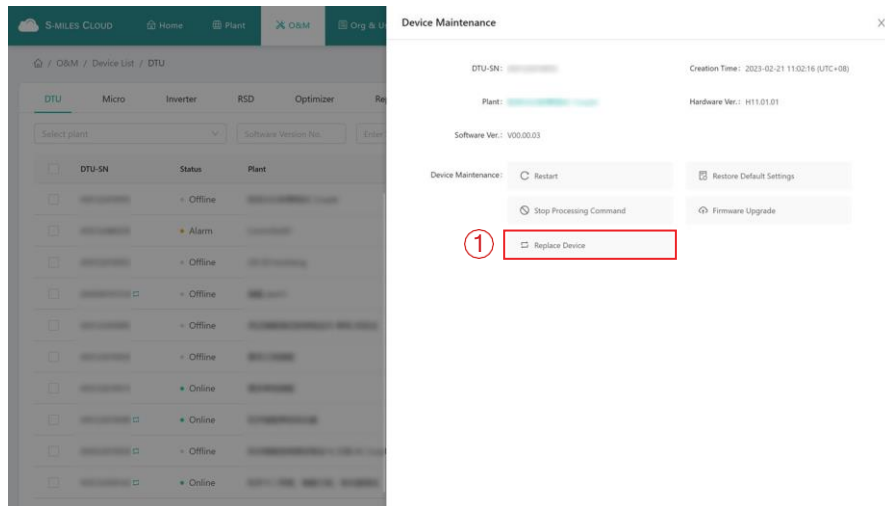
4.3.2.4 Upgrade the DTU Firmware

Click “Device List → DTU”, choose the DTU SN, and then click “Device Maintenance → Firmware Upgrade”.



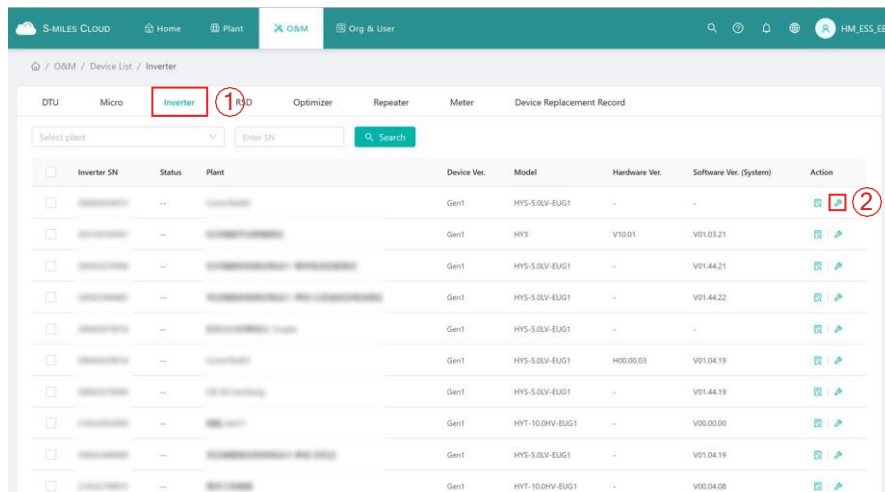
4.3.2.5 Replace the DTU

Click “Device List → DTU”, choose the DTU SN, and then click “Device Maintenance → Replace Device”.



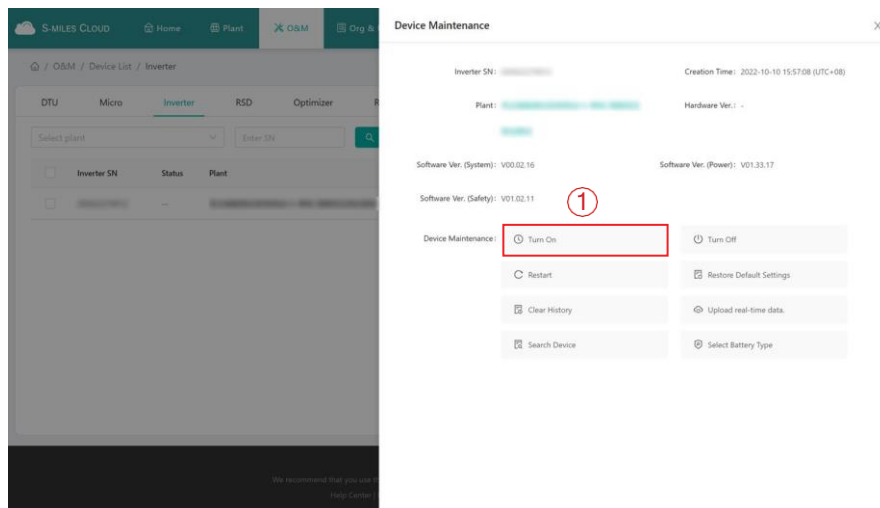
4.3.3 Inverter Maintenance

Click “Device List → Inverter”, choose the Inverter SN and click “Device Maintenance”.



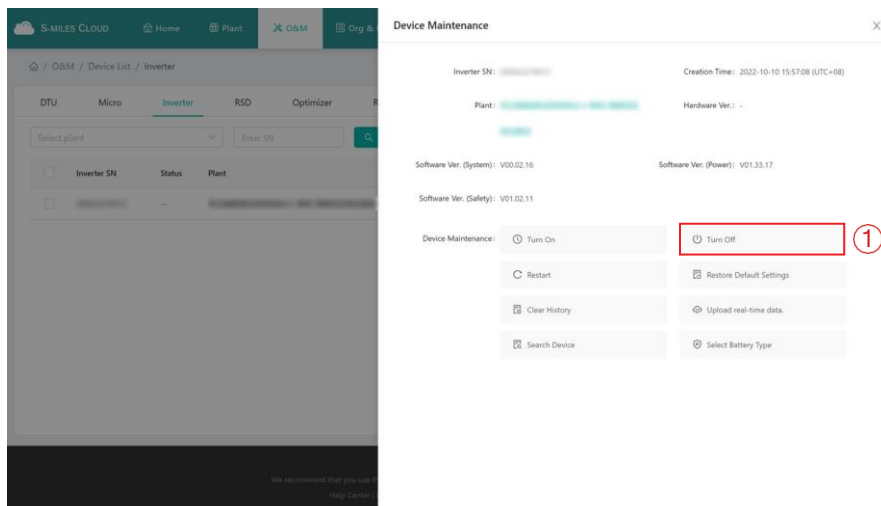
4.3.3.1 Turn on the Inverter

Click “Device List → Inverter”, choose the Inverter SN, and then click “Device Maintenance → Turn On”.



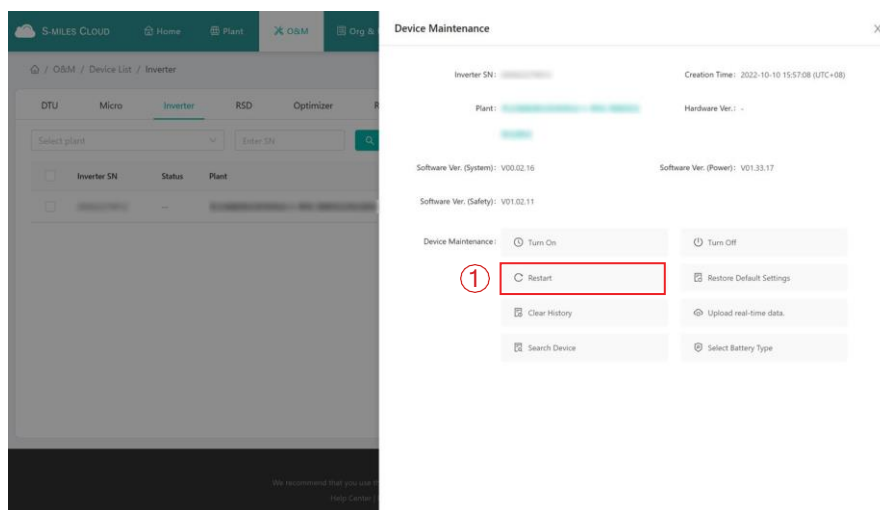
4.3.3.2 Turn off the Inverter

Click “Device List → Inverter”, choose the Inverter SN, and then click “Device Maintenance → Turn Off”.



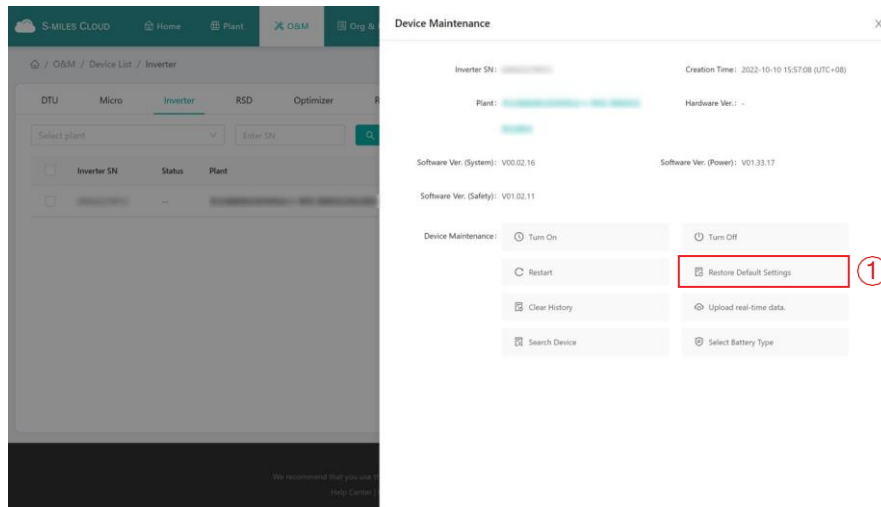
4.3.3.3 Restart the Inverter

Click “Device List → Inverter”, choose the Inverter SN, and then click “Device Maintenance → Restart”.



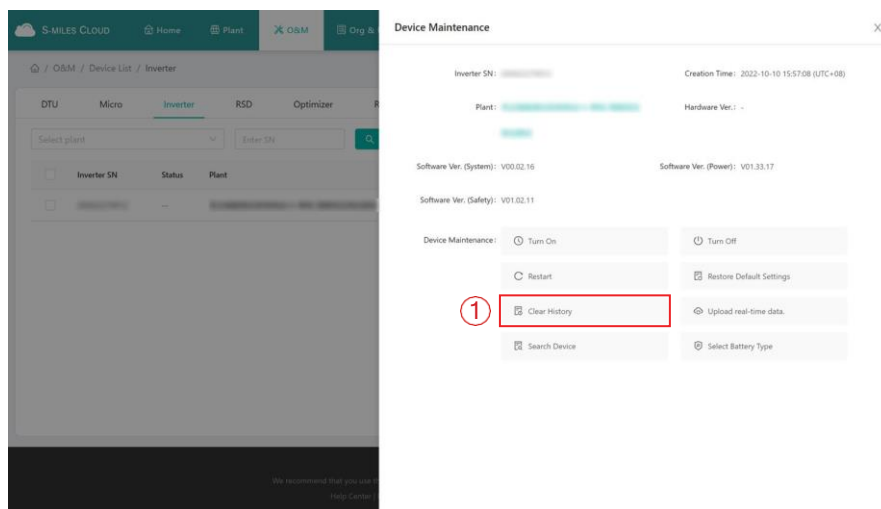
4.3.3.4 Restore the Inverter Default Settings

Click “Device List → Inverter”, choose the Inverter SN, and then click “Device Maintenance → Restore Default Settings”.



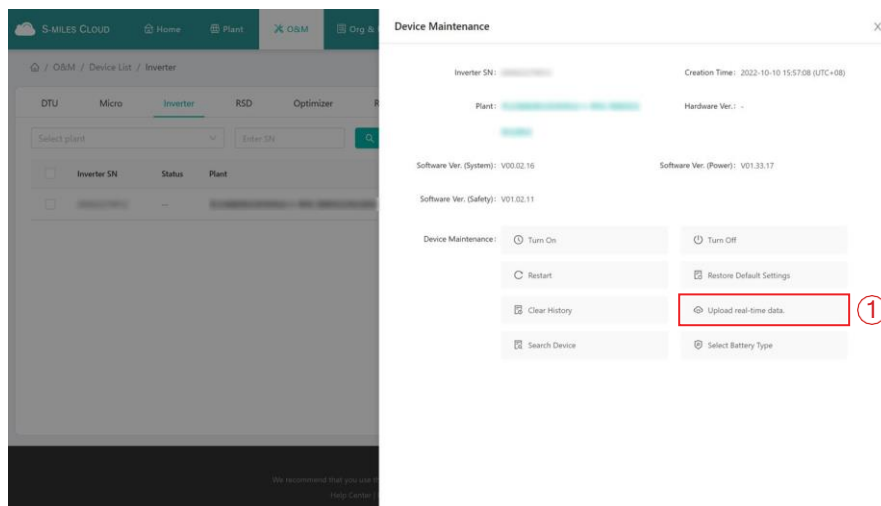
4.3.3.5 Clear the History of Inverter

Click “Device List → Inverter”, choose the Inverter SN, and then click “Device Maintenance → Clear History”.



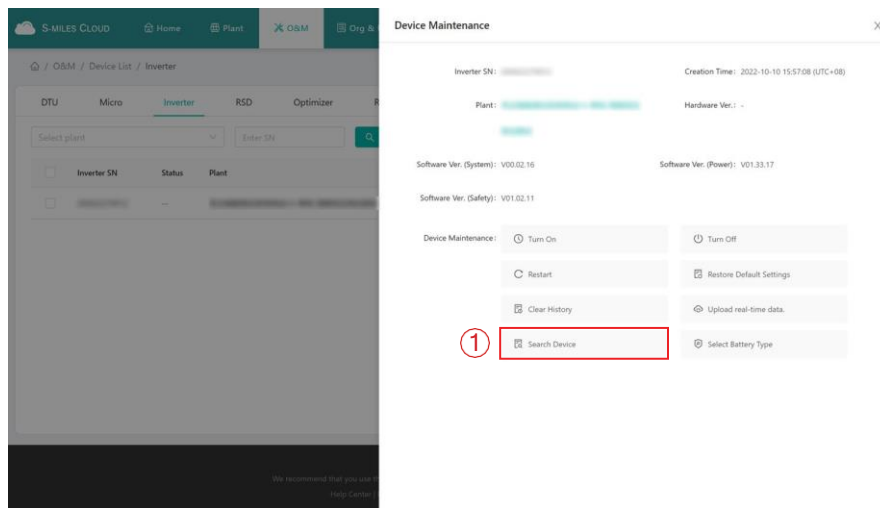
4.3.3.6 Upload the Real-time Data

Click “Device List → Inverter”, choose the Inverter SN, and then click “Device Maintenance → Upload real-time data”.



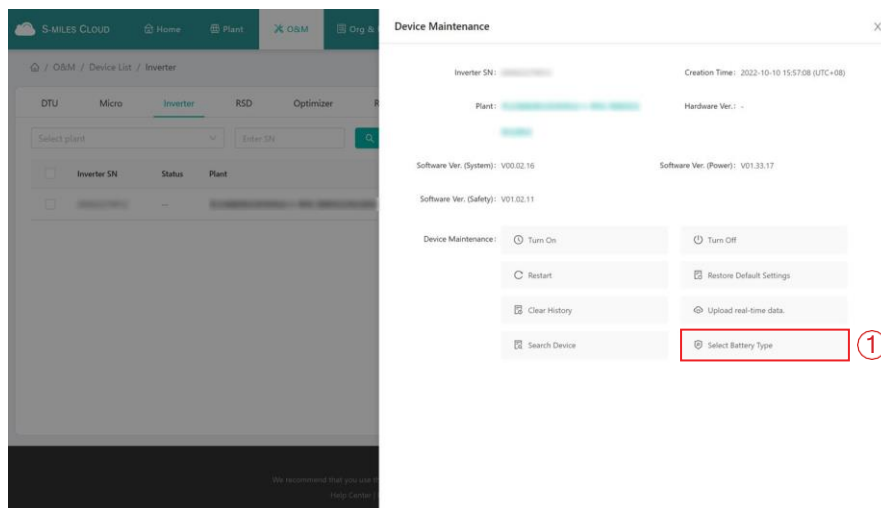
4.3.3.7 Search the Device

Click “Device List → Inverter”, choose the Inverter SN, and then click “Device Maintenance → Search Device”.



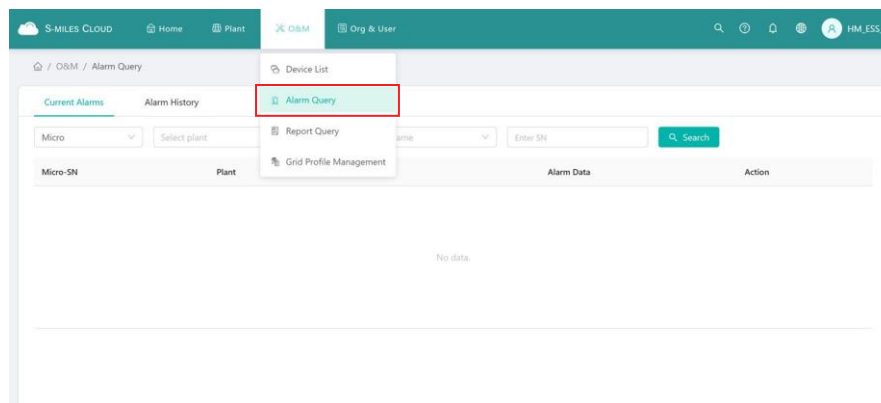
4.3.3.8 Select the Battery Type

Click “Device List → Inverter”, choose the Inverter SN, and then click “Device Maintenance → Select Battery Type”.



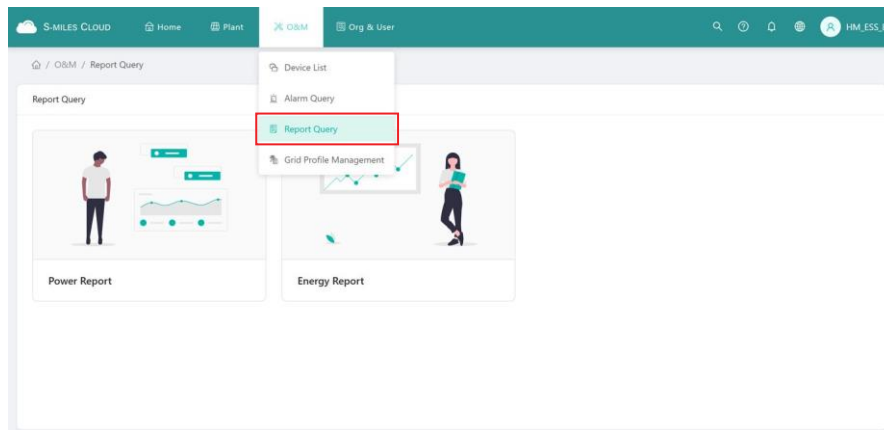
4.3.4 Alarm Query

Click “Alarm Query” to check the current alarms and alarm history.

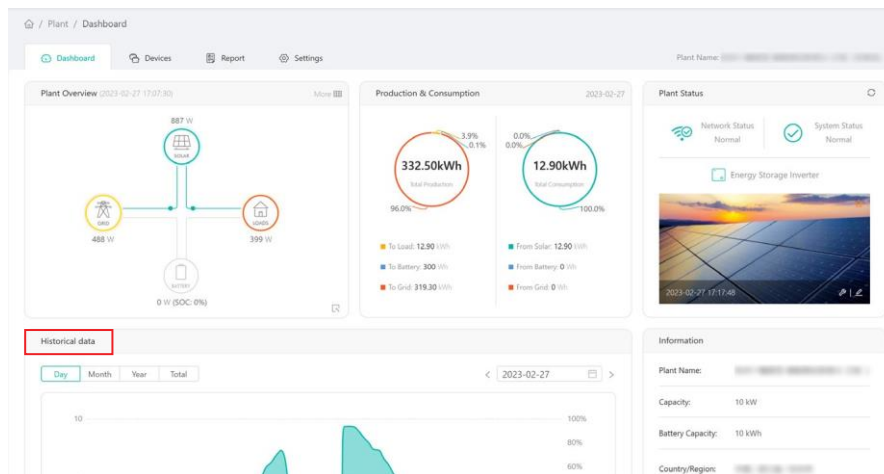


4.3.5 Report Query

Click “Report Query” to check the power report and energy report.



You can download the power report of the last 15 days and the energy report of any time. To download the power report beyond 15 days, please refer to the Plant Dashboard.



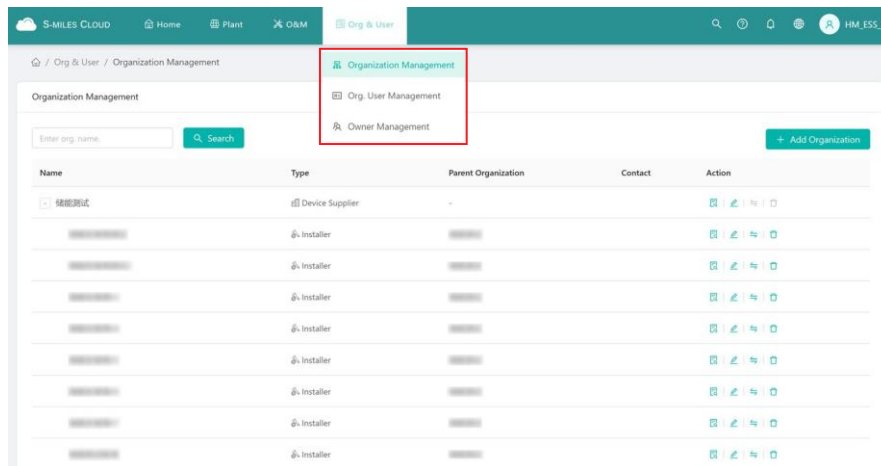
4.3.6 Grid Profile Management

Click “Grid Profile Management” to check the grid profile. And you can click “Edit” to edit the grid profile.

File Name	Alias	Device Ver.	Country	Version No.	Creation Time	Action
100-000000-0000		Gen3	China	2.0.0	2023-01-16 16:43:27	Edit
100-000000-0000		Gen3	China	2.0.0	2020-07-07 16:54:13	Edit
100-0000		Gen2	China	1.1.0	2018-10-29 14:54:34	Edit

4.4 Org & User

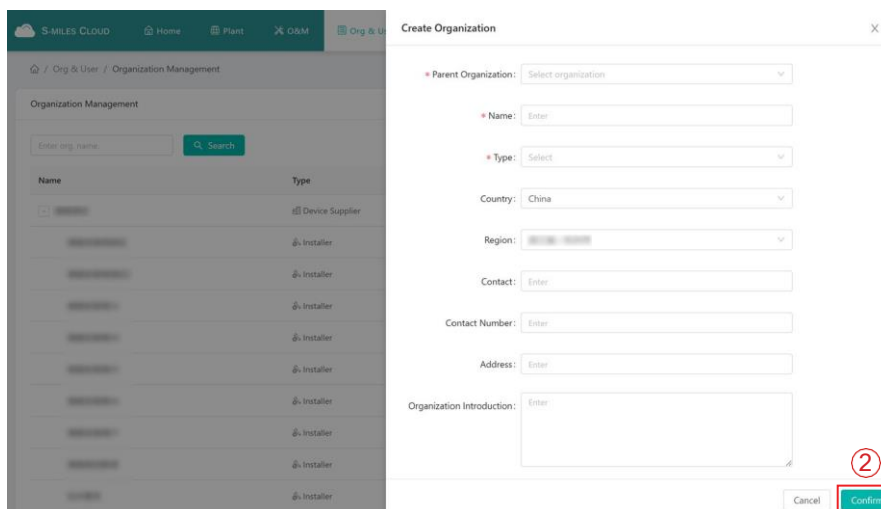
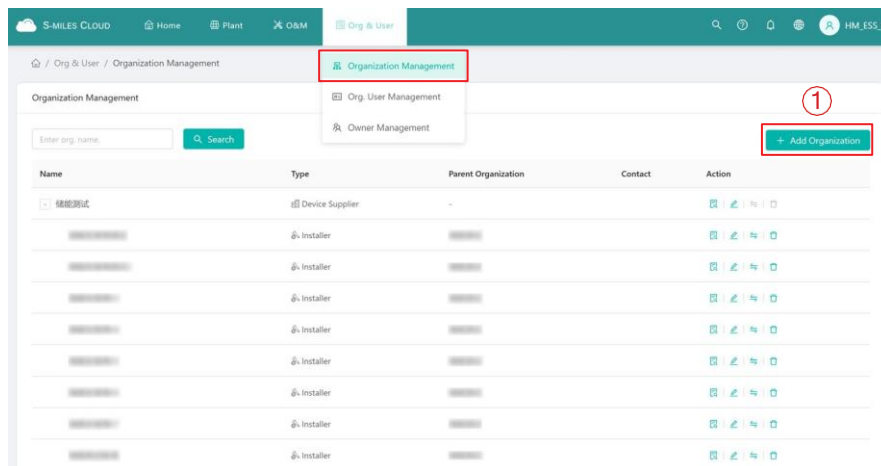
The Org & User page includes organization management, Org. User management and owner management.



4.4.1 Organization Management

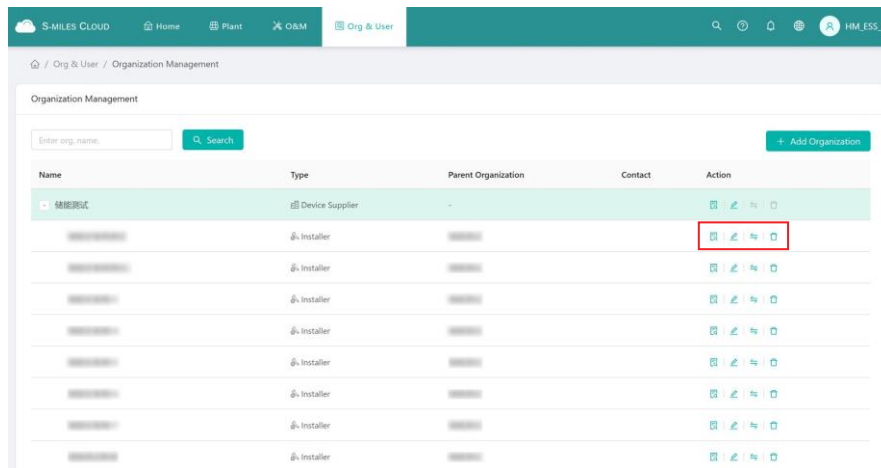
4.4.1.1 Create Organization

Click “Add Organization”, fill in the details of organization user, and then click “Confirm” to complete account creation.



4.4.1.2 Organization Management

In this page, you can check, edit, transfer and delete the organization.



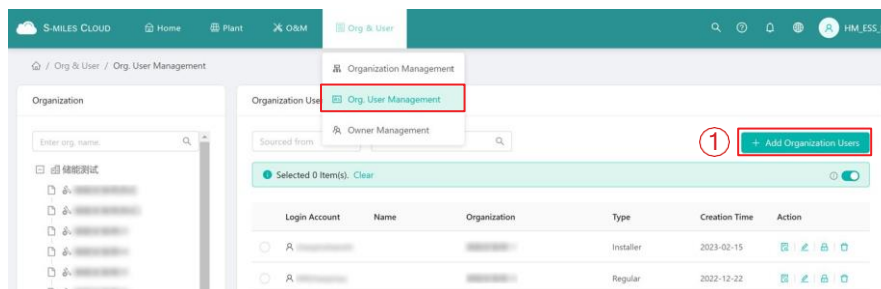
Note:

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.

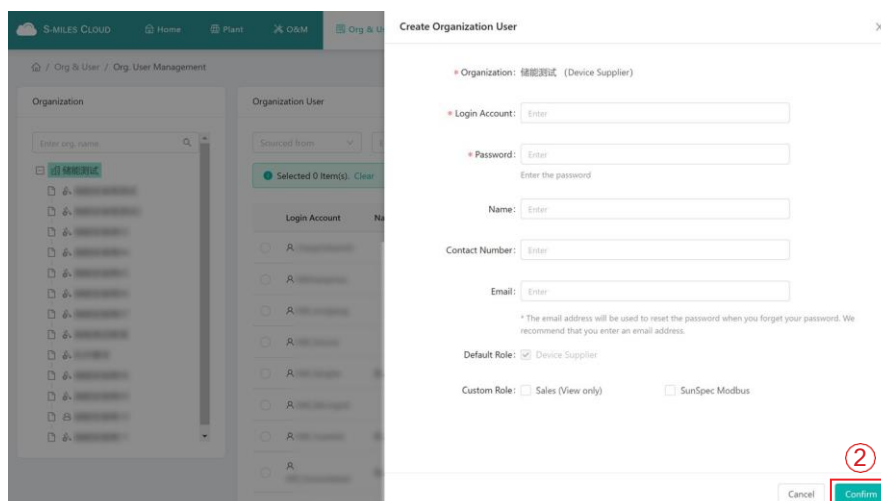
4.4.2 Org. User Management

In this page, you can add organization users:

- Select "Org. User Management", select and double click the organization name you just created on the left, and then click "Add Organization Users".

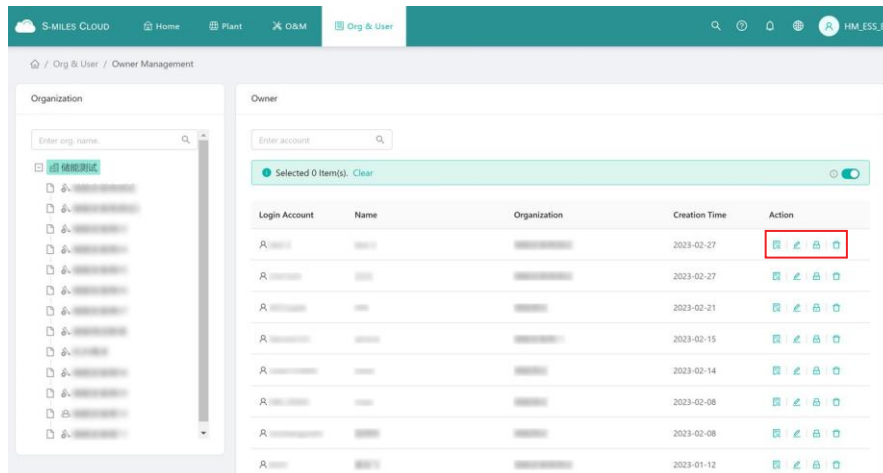


- Fill in the details of organization user and click "Confirm" to complete account creation.



4.4.3 Owner Management

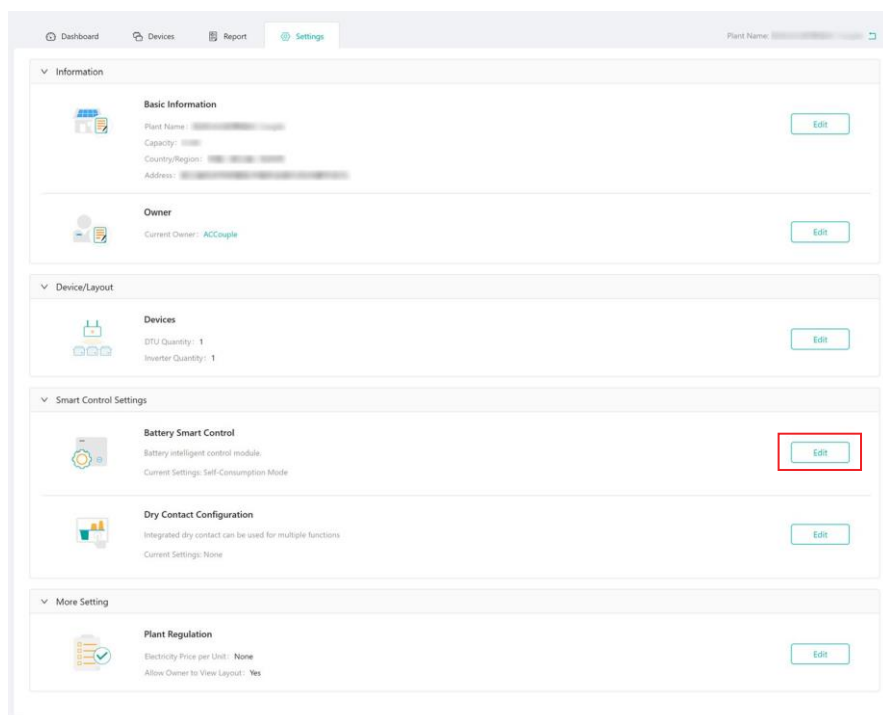
In this page, you can check and edit the account information, reset the account password and delete the account.



5. Smart Control Settings

5.1 Battery Smart Control

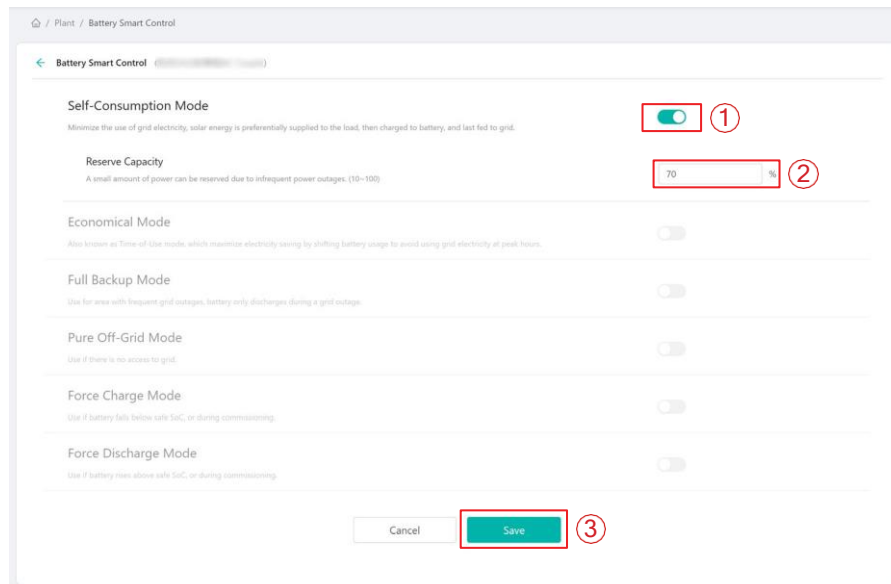
Choose the plant where you want to change the system mode and click “Settings”. Click the “Edit” button of Battery Smart Control under Smart Control Settings. Only one control mode can be selected at a time.



5.1.1 Self-consumption Mode

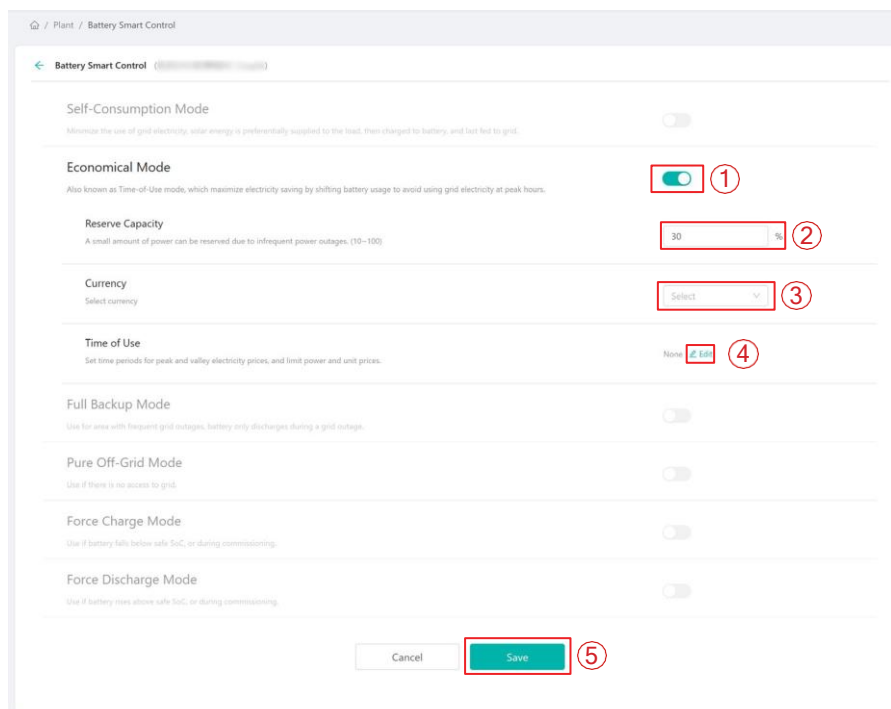
In the daytime, solar energy supports the loads firstly, and surplus energy is stored in the battery. When the battery is fully charged or reaches the maximum charge power, the surplus energy is fed into grid (or limited if required). At night, the battery discharges for the loads firstly, and the grid will supply the loads once the battery power is not enough. In this mode, battery cannot be charged from grid at night.

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 into the grid last. You can set reserve capacity within the certain range in the case of infrequent power outages, and then click “Save”.



5.1.2 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 in the case of 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”.



Electricity rate 1

Select a time period. ⓘ 01-01 To 12-31

Time Range 1 Mon X Tue X Wed X Thu X Fri X

Peak Hour Start: 20:00 End: 23:00
Electricity Price per Unit Buy: Enter a number. Sell: Enter a number.

Off-Peak Hour Start: 00:00 End: 06:00
Electricity Price per Unit Buy: Enter a number. Sell: Enter a number.

Partial-Peak Hour Electricity Price per Unit Buy: Enter a number. Sell: Enter a number.

Time Range 2 Sat X Sun X

Peak Hour Start: 18:00 End: 22:30
Electricity Price per Unit Buy: Enter a number. Sell: Enter a number.

Off-Peak Hour Start: 01:00 End: 06:00
Electricity Price per Unit Buy: Enter a number. Sell: Enter a number.

Partial-Peak Hour Electricity Price per Unit Buy: Enter a number. Sell: Enter a number.

+ Add Item ①

Cancel Save ②

If you want to delete one of the time periods, just click “delete” in the top right corner and click “Save”.

Electricity rate 2

Select a time period. ⓘ Select date To Select date

Time Range 1 Select

Peak Hour Start: Select time End: Select time
Electricity Price per Unit Buy: Enter a number. Sell: Enter a number.

Off-Peak Hour Start: Select time End: Select time
Electricity Price per Unit Buy: Enter a number. Sell: Enter a number.

Partial-Peak Hour Electricity Price per Unit Buy: Enter a number. Sell: Enter a number.

Time Range 2 Select

Peak Hour Start: Select time End: Select time
Electricity Price per Unit Buy: Enter a number. Sell: Enter a number.

Off-Peak Hour Start: Select time End: Select time
Electricity Price per Unit Buy: Enter a number. Sell: Enter a number.

Partial-Peak Hour Electricity Price per Unit Buy: Enter a number. Sell: Enter a number.

+ Add Item

Cancel Save ②

5.1.3 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 the inverter is in off-grid mode. You can also set the reserve capacity within the certain range and click “Save”.

The screenshot shows the 'Battery Smart Control' interface. It features a list of modes with toggle switches and a 'Save' button. The 'Full Backup Mode' toggle is turned on and highlighted with a red box and a circled '1'. Below it, the 'Reserve Capacity' is set to '80' and highlighted with a red box and a circled '2'. The 'Save' button at the bottom is also highlighted with a red box and a circled '3'.

Mode	Description	Toggle
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.	Off
Economical Mode	Also known as Time of Use mode, which maximize electricity saving by shifting battery usage to avoid using grid electricity at peak hours.	Off
Full Backup Mode	Use for area with frequent grid outages; battery only discharges during a grid outage.	On (1)
Reserve Capacity	Forcibly charge the battery to the set value. (80-100)	80 (2) %
Pure Off-Grid Mode	Use if there is no access to grid.	Off
Force Charge Mode	Use if battery falls below safe SoC, or during commissioning.	Off
Force Discharge Mode	Use if battery rises above safe SoC, or during commissioning.	Off

Buttons: Cancel, Save (3)

5.1.4 Pure Off-grid Mode

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

The screenshot shows the 'Battery Smart Control' interface. The 'Pure Off-Grid Mode' toggle is turned on and highlighted with a red box and a circled '1'. The 'Save' button at the bottom is highlighted with a red box and a circled '2'.

Mode	Description	Toggle
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.	Off
Economical Mode	Also known as Time of Use mode, which maximize electricity saving by shifting battery usage to avoid using grid electricity at peak hours.	Off
Full Backup Mode	Use for area with frequent grid outages; battery only discharges during a grid outage.	Off
Pure Off-Grid Mode	Use if there is no access to grid.	On (1)
Force Charge Mode	Use if battery falls below safe SoC, or during commissioning.	Off
Force Discharge Mode	Use if battery rises above safe SoC, or during commissioning.	Off

Buttons: Cancel, Save (2)

5.1.5 Force Charge Mode

The force charge mode can be used during the commissioning of inverter or when the battery capacity falls below the value of safety SoC. You can set the 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 charging power of battery if needed. Finally, save the values you have changed.

The screenshot shows the 'Battery Smart Control' interface. It lists several modes with toggle switches: Self-Consumption Mode, Economical Mode, Full Backup Mode, Pure Off-Grid Mode, Force Charge Mode, and Force Discharge Mode. The 'Force Charge Mode' toggle is turned on and is highlighted with a red box and a circled '1'. Below it, the 'Reserve Capacity' is set to 80% (highlighted with a red box and a circled '2') and the 'Charge Power' is set to 50% (highlighted with a red box and a circled '3'). At the bottom, there are 'Cancel' and 'Save' buttons, with the 'Save' button highlighted by a red box and a circled '4'.

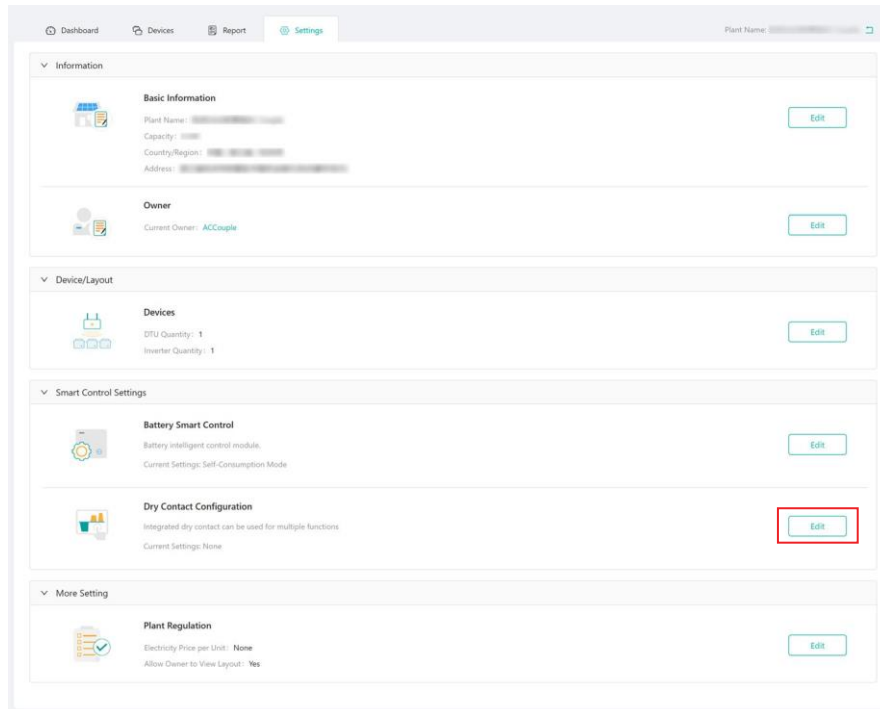
5.1.6 Force Discharge Mode

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 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 battery if needed. Finally, save the values you have changed.

The screenshot shows the 'Battery Smart Control' interface. The 'Force Discharge Mode' toggle is turned on and is highlighted with a red box and a circled '1'. Below it, the 'Reserve Capacity' is set to 20% (highlighted with a red box and a circled '2') and the 'Discharge Power' is set to 50% (highlighted with a red box and a circled '3'). At the bottom, there are 'Cancel' and 'Save' buttons, with the 'Save' button highlighted by a red box and a circled '4'.

5.2 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.

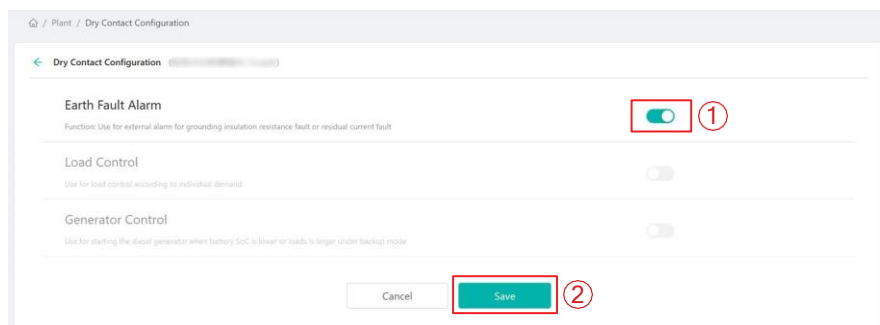


Note:

1. The current of the DO dry contact should not be larger than 2 A.
2. An AC contactor must be installed between the inverter and the load.
3. After the inverter is powered off, the AC contactor should be adjusted manually to control the load.

5.2.1 Set Earth Fault Alarm

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



5.2.2 Set the Working Mode of Load

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

(1) Switch Mode: Manually turn on or turn off the dry contact.

(2) Time Mode: Set the time period for the dry contact to work. The dry contact is closed during this set time and disconnected at other times.

(3) Intelligent Mode: Because the energy generated by PV fluctuates a lot, this mode is to make the dry contact avoid being turned on and off frequently. The dry contact 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 and the nominal power of the dry contact.

(4) Backup Load Smart Control: The unnecessary dry contact 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 if needed.

Plant / Dry Contact Configuration

← Dry Contact Configuration

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.

☒ Switch Mode ☐ Time Mode ☐ Intelligent Mode ☐ Backup Load Smart Control

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

Cancel Save

Plant / Dry Contact Configuration

← Dry Contact Configuration

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.

☐ Switch Mode ☒ Time Mode ☐ Intelligent Mode ☐ Backup Load Smart Control

Time Range: Mon X Tue X Wed X Thu X Fri X Time Range: Sat X Sun X

Time Period1: 00:00 To 06:00 Time Period1: 00:00 To 12:00

Time Period2: 00:00 To 07:00 Time Period2: 00:00 To 15:00

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

Cancel Save

Plant / Dry Contact Configuration

← Dry Contact Configuration

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.

☐ Switch Mode ☐ Time Mode ☒ Intelligent Mode ☐ Backup Load Smart Control

Time Range: Mon X Tue X Wed X Thu X Time Range: Fri X Sat X

Time Period: 00:00 To 17:00 Time Period: 00:00 To 12:00

Load Consumption Time: 30 Minute (10-1440) Nominal Power of Load: 1.00 kW (1-9999)

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

Cancel Save

Plant / Dry Contact Configuration

← Dry Contact Configuration

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.

☐ Switch Mode ☐ Time Mode ☐ Intelligent Mode ☒ Backup Load Smart Control

Protection SoC: 10 % (10-90)

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

Cancel Save

5.2.3 Generator Control

Generator control is used when there is higher power on the load side or lower battery capacity in off-grid mode. You can set the value of protection SoC within the certain range if needed. When the battery capacity is below the set protection SoC, the generator will work.

The screenshot displays the 'Dry Contact Configuration' interface. It features three main sections: 'Earth Fault Alarm', 'Load Control', and 'Generator Control'. The 'Generator Control' section is highlighted with a red box and a circled '1'. It includes a toggle switch that is currently turned on. Below this, the 'Protection SoC' section is also highlighted with a red box and a circled '2'. It shows a numerical input field set to '30' and a range indicator '(10-90)'. At the bottom of the interface, there are 'Cancel' and 'Save' buttons. The 'Save' button is highlighted with a red box and a circled '3'.



S-Miles Installer



S-Miles End-user

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+86 571 2805 6101

General inquiry: info@hoymiles.com
Technical support: service@hoymiles.com

Visit <https://www.hoymiles.com/> for more informations.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with Part 15 of the FCC RF Rules. This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and consider removing the no-collocation statement.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution!

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.