




Solar Guardian Web User Manual



About this manual

The purpose of this manual is to provide users with relevant operations and management of the EPEVER Energy Storage Service Cloud Platform.

- **Symbols Explanation**

 It means emphasizing and supplementing the descriptions or providing tips to help you solve a problem or save time.

- **Operation Instruction**

Operation	Example
Select a single menu option	Click "Sites"
Select multi-level menu options	Click "Sites> Site list"

- **The display interfaces involved in this manual are for reference only. Please refer to the real displays.**

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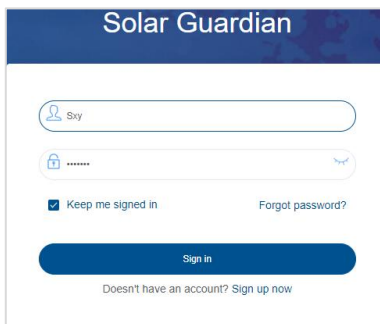
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1 Overview

EPEVER Energy Storage Service Cloud Platform (after this referred to as "cloud platform") provides users with a free site management system. After adding the devices to the cloud platform, users can directly access the cloud platform through a PC browser or mobile phone APP to perform remote monitoring and parameter settings. The cloud platform helps reduce device maintenance costs and improve work efficiency.

1.1 Register

1. Input the address <https://hncloud.epsolarpv.com/> to enter the following initial interface.



The image shows the login page for Solar Guardian. At the top, there is a dark blue header with the text "Solar Guardian" in white. Below the header, there are two input fields: the first is for the username, labeled "Six", and the second is for the password, masked with asterisks. Below the password field, there is a checkbox labeled "Keep me signed in" which is checked, and a link labeled "Forgot password?". At the bottom, there is a large blue button labeled "Sign in" and a link below it that says "Doesn't have an account? Sign up now".

2. Click "Sign up now" to enter the below registration interface:

Sign Up

* Username
● 3-30 long characters, only supports letters and numbers

* Password
● 6-16 length characters, combination of letters and numbers, cannot be all digits

* Confirm Password

* Email
● Fill in the email format correctly

* Verification Code

By signing up, you agree to our [Terms](#), [Privacy Policy](#) and [Cookies Policy](#)

[Already have an account? Sign In](#)

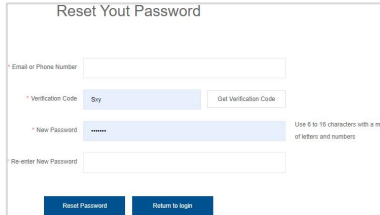
3. Input the user name, password, email, and the verification code. Select the account type (personal or business).
4. Click the "Sign UP" button to complete the registration.

1.2 Login

1. After registration, it will jump to the initial interface automatically.
2. Input the user name and password, and tick the "Keep me signed in" (which will help you log in quickly the next time).
3. Click the "Sign in" button to login into the system. After successful login, it will jump to the [Dashboard](#) (the user for first-time login will be shown the dashboard guidance page).

1.3 Reset Password

1. Click the "Forgot password?" in the initial interface to enter the password resetting interface.



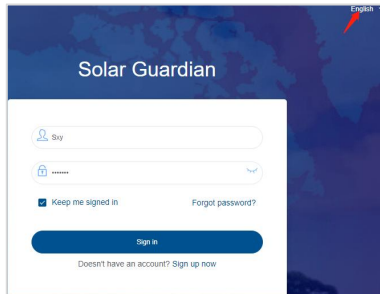
The screenshot shows a form titled "Reset Your Password". It contains the following fields and buttons:

- An input field for "Email or Phone Number".
- A "Verification Code" section with a "Send" button and a "Get Verification Code" button.
- A "New Password" input field with a strength indicator and a note: "Use 6 to 16 characters with a mix of letters and numbers".
- A "Re-enter New Password" input field.
- Two buttons at the bottom: "Reset Password" and "Return to login".

2. Input the email or phone number to get the verification code, and input the new password.
3. Click the "Reset Password" button to back to the login interface.

1.4 Switch language

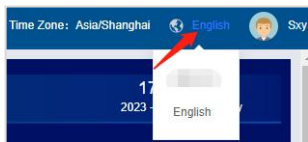
Method 1: Click the "English" in the upper right corner of the initial interface to switch the system language.



The screenshot shows the "Solar Guardian" login interface. It features a dark blue background with a world map. The login form includes:

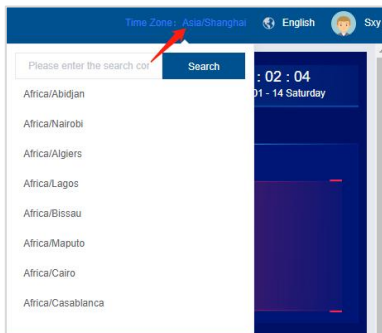
- A "Sign" input field.
- A password input field with a "Show" toggle.
- A "Keep me signed in" checkbox.
- A "Forgot password?" link.
- A "Sign in" button.
- A link at the bottom: "Doesn't have an account? Sign up now".
- A language switcher in the top right corner labeled "English" with a dropdown arrow.

Method 2: After logging into the system, click the language icon in the upper right corner to switch the system language.



1.5 Switch time zone

After logging into the system, click the "Time Zone" icon in the upper right corner to switch to the current time zone.



1.6 Log out

Click the account icon in the upper right corner to log out of the system.



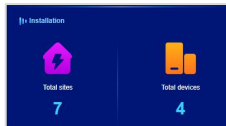
2 Dashboard

After logging into the system, the following dashboard is displayed by default, displaying all sites' overview and power information. Data supports manual refresh.



Contents displayed on the Dashboard page are listed as follows.

- **Installation:** Display the total number of sites and the EPEVER devices.

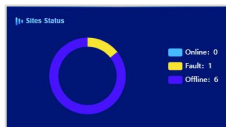


- **Sites Status:** Display the number of online/ fault/ offline sites.

Online: No offline and fault devices under the site.

Fault: Some devices alarm under the site.

Offline: All devices are offline under the site.



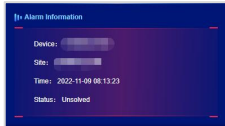
- **Site Information:** Click the "Name" drop-down list to select a site, the installed capacity, number of the device, today's generation, and the lifetime generation are displayed.



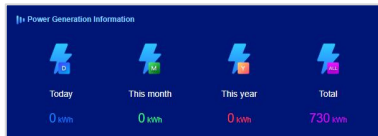
- ① **Today generation:** The sum of power generated by all associated devices today (today generation is updated in real-time with corresponding variable changing).
- ② **Lifetime generation:** The total power generated by all associated devices (lifetime generation is updated in real-time with corresponding variable changing).

 **The value of "Total installed" is configured in the "Sites > Site list > Configure" page.**

- **Alarm Information:** Display the newest alarm information.



- **Power Generation Information:** Display all sites' power generation by today, month, year, and total under the current account.



- ① **Today:** The sum of power generated by all devices today (take the latest historical record).
- ② **This Month:** The sum of power generated by all devices this month (take the latest historical record).
- ③ **This Year:** The sum of power generated by all devices this year (take the latest historical record).
- ④ **Total:** The total power generated by all devices under the current account (take the latest historical record).

- **Power Consumption Information:** Display all sites' power consumption by today, month, year, and total under the current account.



- ① **Today:** The sum of power consumption by all devices today (take the latest historical record).
- ② **This Month:** The sum of power consumption by all devices this month (take the latest historical record).
- ③ **This Year:** The sum of power consumption by all devices this year (take the latest historical record).
- ④ **Total:** The total power consumption by all devices under the current account (take the latest historical record).

- **Environmental Protection:** Display the CO2 reduction and the coal saved.

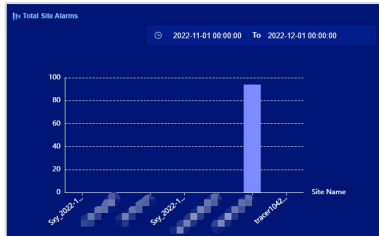


- ① **CO₂ Reduction:** The sum of power generated by all devices today (take the latest historical record)*0.997.
- ② **Coal Saved:** The sum of power generated by all devices today (take the latest historical record)*0.4.

- **Power Generation Ranking:** Display the ranking of the site's power generation by day, month, and year, ranking from high to low. Display the top five when there are many sites. Display today's site power generation ranking by default.



- **Total Site Alarms:** Display the number of site alarms by a histogram. And the displayed time can be selected freely (week by default).



3 Quick-add device

3.1 Add site

1. Click "Sites > Add new site" in the left navigation window to enter the site-adding page.

Sites > Add new site

Add New Site

Site Name: admin-3_170194863000 2020

Group: [Dropdown]

Site Description: [Text Area]

Site Image: [Image Upload]

User Name: [Text Field]

Phone Number: [Text Field]

Company: [Text Field]

Only support JPG, GIF, PNG format, recommended size is 148 * 148, the size of 5M or less

Cancel Submit

2. Input the site name, and select the group and region, etc.
3. Click the "Submit" button to complete.

3.2 Add gateway

3.2.1 Add single gateway

1. Click "Gateway > Gateway list" in the left navigation window to enter the gateway list page. Click the "Add New" button in the upper-right corner to enter the single gateway adding page.

Gateway > Gateway list > Add gateway

Add Gateway **Add Multiple Gateways**

* Gateway Name:

* Access Mode:

* Gateway SN(ID):

* Group:

* Site:

Gateway Map:

Please be aware that: The same module can only be owned by one user. If other users need to use it, the original user should delete the module.

2. Input the gateway name(The system will generate a default name in the format: username_current time) and SN (stuck on the back of the gateway). Select the site . And select the access mode and location. Check the prompt that a gateway can only be used by one user.
3. Click the "Save" button to complete.

📖 :The gateway SN/ID consists of 22-digit numbers. Only gateways in the production management system can be successfully added to the cloud platform.

3.2.2 Add multiple gateways

1. Click "Add Multiple Gateway > Download Excel Template" to input the gateway information per the template requirement.

Gateway > Gateway list > Add gateway

Add gateway Add Multiple Gateway

Import Gateway **Upload File** Download Excel Template

Tips: File size must not exceed 20M.

Save

- Click "Upload File" to select the completed file to import multiple gateways.

3.3 Add device

3.3.1 Add single device

- Click "Device > Device list" in the left navigation window to enter the device list page. Click the "Add New" button in the upper-right corner to enter the single device adding page.

Device > Device list > Add device

Add Device Add Multiple Devices

* Device Name admin3_1701948980000 2050

* Device COM ID ⓘ 1

Note: About the device communication ID
 if the device is an inverter, the default ID is 3;
 if the device is Inverter/Charger (UP.HI,UPower) or MT80, the default ID is 10;
 for other devices (eg. Charge Controller, etc), the default ID is 1.
 If the user has modified the device communication ID, please fill in the actual ID.

* Gateway [Dropdown]

* Select **Product Series**

Cancel **Submit**

- Input the device name and COM ID; select the group, gateway, and product series.
- Click the "Save" button to complete.

:About the device communication ID

if the device is an inverter, the default ID is 3;

if the device is Inverter/Charger (UP HI,UPower) or MT80, the default ID is 10;

for other devices (eg. Charge Controller, etc), the default ID is 1.

If the user has modified the device communication ID, please fill in the actual ID.

3.3.2 Add multiple devices

1. Click "Add Multiple Devices > Download Excel Template" to input the device information per the template requirement.



Device > Device list > Add device

Add Device **Add Multiple Devices**

Import device **Upload File** Download Excel Template

Tips: File size must not exceed 20M.

Save

2. Click "Upload File" to select the completed file to import multiple devices.

📖 After adding the site, gateway, and device, you can monitor the devices working status or modify related parameters via the browser.

4 Site management

Click "Sites > Site list" in the left navigation window to enter the site list page.

List Number	Site Name	Group	Create Time	Control Panel
1	smh_17011548817	RFPC	Nov 28 2023 14:33:07	Overview Edit Info Configure Delete
2	smh_17060501768	Default Group	Nov 27 2023 16:36:07	Overview Edit Info Configure Delete
3	Handover	SMALL	Oct 19 2023 10:32:06	Overview Edit Info Configure Delete

Total 3 1/3 page 1 Item per page 1

All added sites are displayed, and you can search the specified site by the site name. Click the "Show All" button to select the displayed items (at least one item). The displayed columns include site name, group, create time, and control panel (Overview, Edit info, Configure and Delete)

4.1 Site details

Click the "Overview" icon in the "Control Panel" column to enter the site details page.

4.1.1 Sites status

On the "Site details" page, the "Sites Status" tab will show, by default, display the system message, calculation information, and device list.

1. System Message: Display the system information added on the site configure page.

List Number	Property Name	Property Value	Control Panel
1	Capacity	50	Edit Info Delete

2. Calculation Information: Display the site calculation information added on the site configure page (the calculation among variable values).

Site Status

cezh_1701542376...

Location: 中恒人居社区项目...

Total Power Generation: 0.0000Wh

Total Power Consumption: 0.0000Wh

Total Devices: 1

User Name: 11111

System Message Calculation Information Device List

List Number	Parameter Name	Parameter Value	Company	Control Panel
No Data				

3. Device List: Display all devices bound to the site.

Site Status

cezh_1701542376...

Location: 中恒人居社区项目...

Total Power Generation: 0.0000Wh

Total Power Consumption: 0.0000Wh

Total Devices: 1

User Name: 11111

System Message Calculation Information Device List

Device Name	Gateway ID#
cezh_1701542376	001000000002-APP-00007

Total 1 100page < > Detail

Edit site location

- Click "Sites > Site list" in the left navigation window to enter the site list page. Click the "Edit Info" icon in the "Control Panel" column to enter the site editing page.

- Click the "Location Selection" button to pop up the location selection prompt box, displaying all gateway locations under the site. Select a new location and click "Confirm" to modify the site location.

4.2 Configure site

1. Click "Sites > Site list" in the left navigation window to enter the site list page. Click the "Configure" icon in the "Control Panel" column to enter the site configuring page.

Sites > Configure Properties and Variables

Configuration Properties and Variables

Site Name:

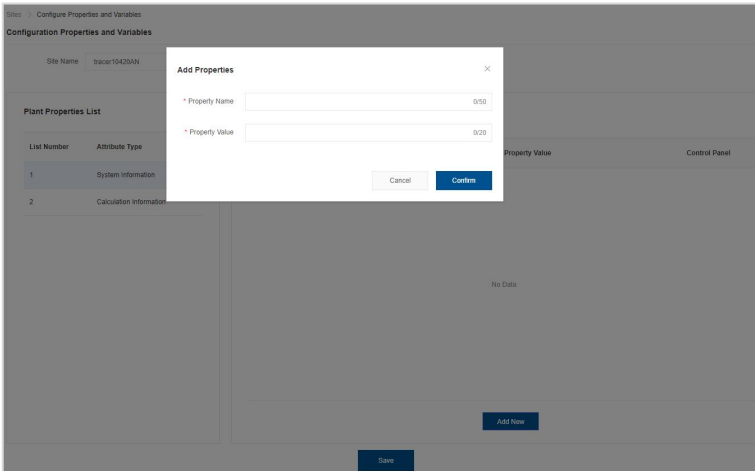
Plant Properties List

List Number	Attribute Type
1	System Information
2	Calculation Information

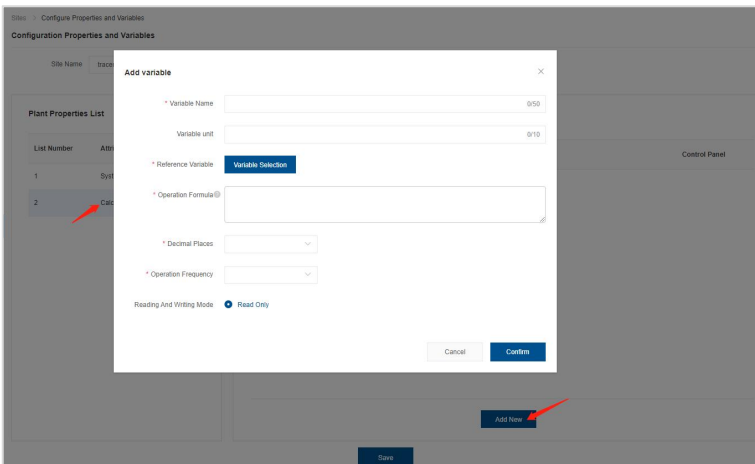
System Attribute List

List Number	Property Name	Property Value	Control Panel
No Data			

2. Click "System Information" in the "Plant Properties List," and then click the "Add New" button to a new property.



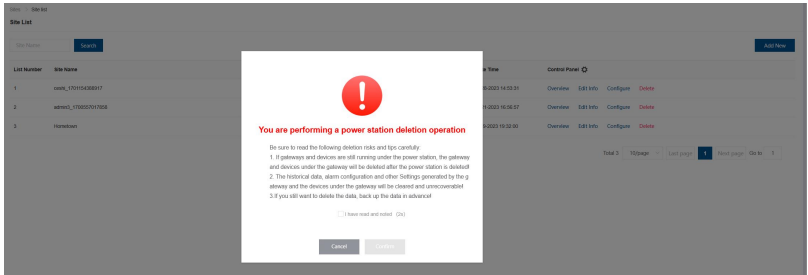
3. Click "Calculation Information" in the "Plant Properties List," and then click the "Add New" button to a new variable.



4. Click the "Variable Selection" button to select a variable.
5. Input the operation formula, select the decimal places and operation frequency, and click "Confirm" to complete.

4.3 Delete site

1. Click "Sites > Site list" in the left navigation window to enter the site list page. Click the "Delete" icon in the "Control Panel" column to open a prompt box.



2. Check I have read and understand that deleting the power station will also delete all the devices and gateways under the power station and their data. Click "Confirm" to perform the power station deletion operation, click "Cancel", no operation.

5 Gateway management

5.1 Gateway list

Click "Gateway > Gateway list" in the left navigation window to enter the gateway list page.

List Number	Gateway Name	Status	Gateway SN/ID	Group	Site	Create Time	Control Panel
1	TCPS06	Offline	20220701010407000001	Default Group	890506	2022-07-01 10:07:02	Overview Edit Info Delete
2	MP002	Offline	01000000010000000000	Default Group	admin_120010000017	2022-07-01 10:10:10	Overview Edit Info Delete
3	admin_10000000000000	Offline	20220201010407000001	Default Group	admin_120010000017	2022-02-01 11:14:14	Overview Edit Info Delete
4	20220201010407000001	Offline	20220201010407000001	Default Group	admin_120010000017	2022-02-01 11:14:14	Overview Edit Info Delete
5	EPD002-0701-0101	Offline	01000000010000000000	Default Group	admin_120010000017	2022-02-01 11:14:14	Overview Edit Info Delete
6	MP002 (REDUN F002)	Offline	01000000010000000000	Default Group	890506	2022-02-01 11:14:14	Overview Edit Info Delete
7	MP002	Offline	01000000010000000000	Default Group	admin_120010000017	2022-02-01 11:14:14	Overview Edit Info Delete
8	MP002	Offline	01000000010000000000	Default Group	admin_120010000017	2022-02-01 11:14:14	Overview Edit Info Delete
9	MP002	Offline	01000000010000000000	Default Group	admin_120010000017	2022-02-01 11:14:14	Overview Edit Info Delete
10	MP002	Offline	01000000010000000000	Default Group	890506	2022-02-01 11:14:14	Overview Edit Info Delete

All added gateways are displayed; you can search specified gateway by the gateway name or SN. Click the "Show All" button to select the displayed items (at least one item). Columns on the gateway list page include gateway name, status, SN/ID, group, site, create time, and control panel (Overview, Edit Info, Delete).

The gateway status shows offline after the actual gateway goes offline for about Three minutes.

5.1.1 Gateway details

Click the "Overview" icon in the "Control Panel" column to check the gateway details.

List Number	Gateway Name	Status	Gateway SN/ID	Group	Site	Create Time	Control Panel
1	TCPS06	Offline	20220701010407000001	Default Group	890506	2022-07-01 10:07:02	Overview Edit Info Delete
2	MP002	Offline	01000000010000000000	Default Group	admin_120010000017	2022-07-01 10:10:10	Overview Edit Info Delete
3	admin_10000000000000	Offline	20220201010407000001	Default Group	admin_120010000017	2022-02-01 11:14:14	Overview Edit Info Delete
4	20220201010407000001	Offline	20220201010407000001	Default Group	admin_120010000017	2022-02-01 11:14:14	Overview Edit Info Delete
5	EPD002-0701-0101	Offline	01000000010000000000	Default Group	admin_120010000017	2022-02-01 11:14:14	Overview Edit Info Delete
6	MP002 (REDUN F002)	Offline	01000000010000000000	Default Group	890506	2022-02-01 11:14:14	Overview Edit Info Delete
7	MP002	Offline	01000000010000000000	Default Group	admin_120010000017	2022-02-01 11:14:14	Overview Edit Info Delete
8	MP002	Offline	01000000010000000000	Default Group	admin_120010000017	2022-02-01 11:14:14	Overview Edit Info Delete
9	MP002	Offline	01000000010000000000	Default Group	admin_120010000017	2022-02-01 11:14:14	Overview Edit Info Delete
10	MP002	Offline	01000000010000000000	Default Group	890506	2022-02-01 11:14:14	Overview Edit Info Delete

Gateway Details

Gateway Name: TCPS06

Gateway SN/ID: 20220701010407000001

Access Mode: 01000001 TCP/006

Site: 890506

Update Time: 2022-07-01 10:07:02

Device location: 光伏系统运维管理中心

5.1.2 Edit site

1. Click the "Edit Info" icon in the "Control Panel" column to enter the gateway editing page.

Gateway > Gateway list > Add gateway

Edit Gateway

* Gateway Name: TCP305 6/50

* Access Mode: EPEVER TCP 305

* Gateway SNID: 2023021512345678900001

* Site: admin1_1700013916817

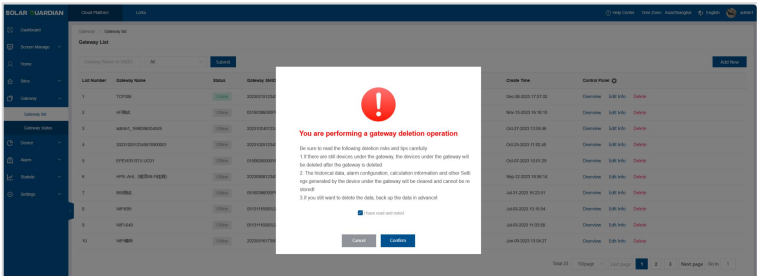
Gateway Ma: [Map]

Cancel Submit

2. Modify the gateway name, select the site and device location, and click the "Submit" button to complete.

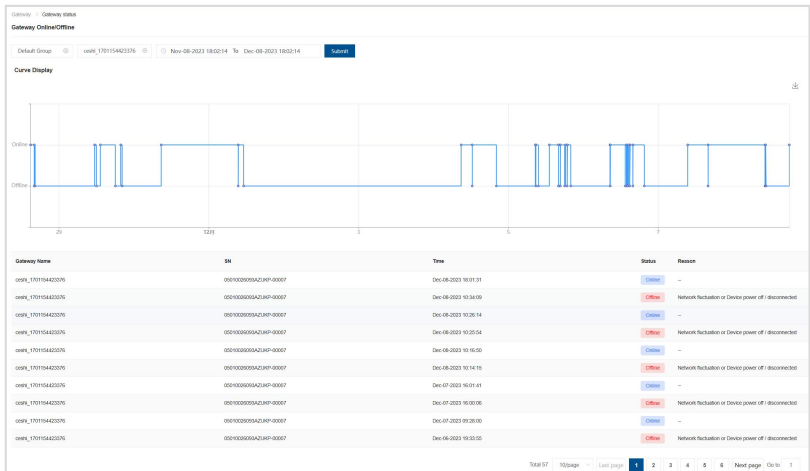
5.1.3 Delete gateway

1. Click the "Delete" icon in the "Control Panel" column to open a prompt box.
2. Check I have read and understand that deleting the gateway will also delete all devices and data under the gateway. Click "Confirm" to perform the power station deletion operation. Click "Cancel" to perform no operation.



5.2 Gateway status

1. Click "Gateway > Gateway status" in the left navigation window to enter the gateway status page.

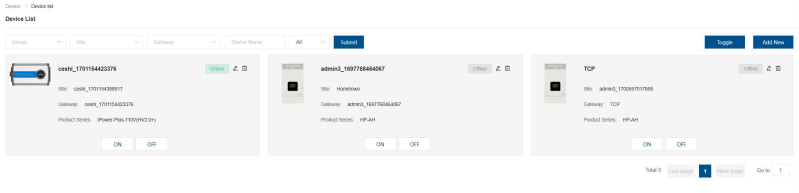


2. Select the gateway name and time, and click the "Submit" button to display the gateway status curve. The curve can be downloaded and saved as a picture.
3. The gateway status list displays the gateway name, SN, time, status, and reason.

6 Device management

6.1 Device List

Click "Device > Device list" in the left navigation window to enter the device list page.



All added devices are displayed; You can filter through the linkage of organizations, power stations, and gateways, and enter the device name to query the specified device. The displayed columns can be customized by clicking the "Filter" button and selecting at least one item. The display content of the device list includes: device name, device status, product series, organization, power station, gateway, installation location, update time, and operations (view, edit, delete).

Device status includes online, offline, and alarm.

- **Online:** The gateway bound to the device is online.
- **Offline:** The gateway bound to the device is offline.
- **Alarm:** The device triggers an alarm, or the gateway bound to the device triggers an alarm.


6.1.1 Device details

1. Click the "Overview" icon in the "Control Panel" column to enter the device details page.

Device > Device detail

Device Overview **Device Unit Diagram**

Device List



Overview:
 Size:
 Device location:
 Product Series: N+1

Data Nodes Overview

[Energy Information](#)
 [Solar Charger Overview](#)
 [Rectifier Overview](#)
 [Battery Information](#)
 [DC Branch Overview](#)
 [Inverter Overview](#)
 [Wind Overview](#)
 [Device Information](#)

Variable ID	Variable Name	Device Name	Update Time	Current Value	Control Panel	
9539377	Total power generation	 	—	—	Refresh	History
9539378	Total power consumption	 	—	—	Refresh	History
9539379	Daily PV generation	 	—	—	Refresh	History
9539380	Monthly PV generation	 	—	—	Refresh	History

- Click the "Device Overview" tab to check the device information and data nodes. Operations on the "Data Nodes Overview" page are the same as the site's status; refer to chapter [4.1.1, Sites status](#) for details.
- Click the "Device Unit Diagram" tab to view the device's configuration diagram. Zoom-in, zoom-out, or full-screen display is supported by clicking the responding icon in the lower right corner.

6.1.2 Edit device

- Click the "Edit Info" icon in the "Control Panel" column to enter the device editing page.

Device > Edit device

Edit Device

* Device Name 19/50

* Device COM ID

Note: About the device communication ID
If the device is an inverter, the default ID is 3;
If the device is Inverter/Charger (UP HI,UPower) or MT80, the default ID is 10;
for other devices (eg. Charge Controller, etc), the default ID is 1.
If the user has modified the device communication ID, please fill in the actual ID.

* Group

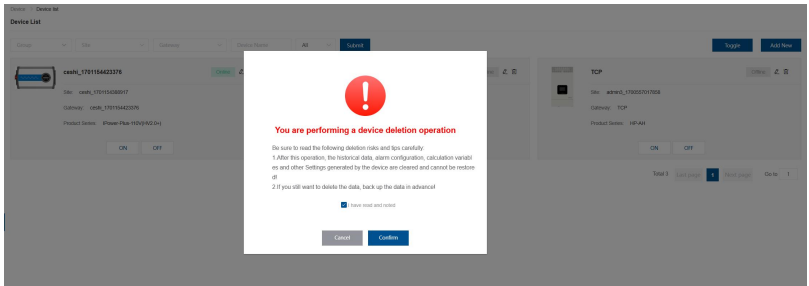
* Gateway

* Select

2. Modify the device name and COM ID, select the gateway and product series, and click the "Save" button.
3. If you switch product series, the original data of the device will be cleared. Please make a data backup in advance or add a new device. Click "Confirm" to complete the product switch and the device data will be deleted. Click "Cancel", no action.

6.1.3 Delete device

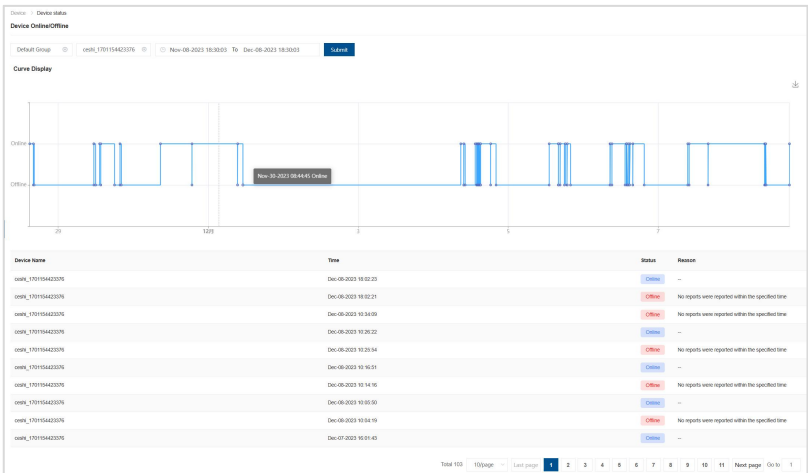
1. Click the "Delete" icon in the "Control Panel" column to open a prompt box.



2. Deleting the device will also delete all data on the device. Click "Confirm" to perform the device deletion operation, click "Cancel" and no operation will be performed.

6.2 Device status

1. Click "Device > Device status" in the left navigation window to enter the device status page.



2. Select the device name and the query time period to display the upper and lower line record curves of the device within the specified time period. The graph can be downloaded and saved as a picture.
3. The list displays the device name, online and offline status and time, as well as the reason.

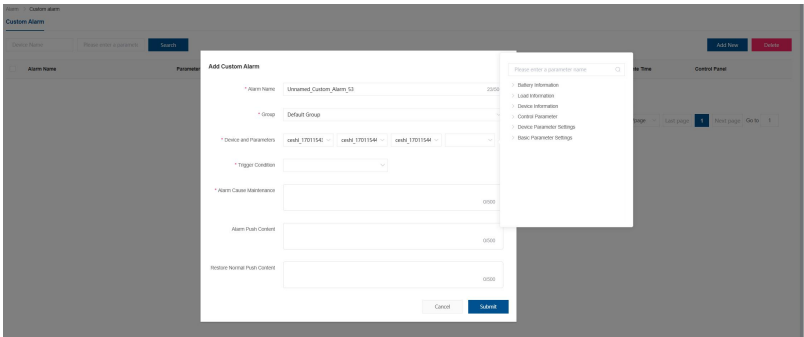
7 Alarm management

7.1 (Optional) Custom alarm

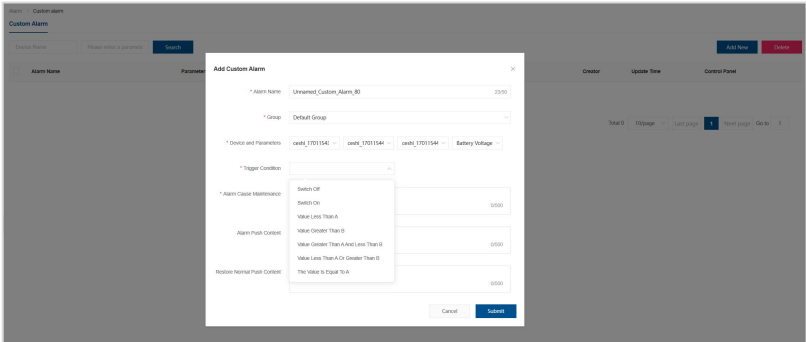


The menu is only visible to enterprise users, not to individual users.

1. Click "Alarm > Custom alarm" in the left navigation window to enter the custom alarm page.
2. Click the "Add New" button in the upper-right corner.



3. Input the alarm name, and select the group, site, gateway, device, and variables.
4. Select the "Trigger Condition" as switch ON, switch OFF, or value range. For example, select "Value less than A" and input the specific A value; the device will trigger an alarm when the variable is less than A.

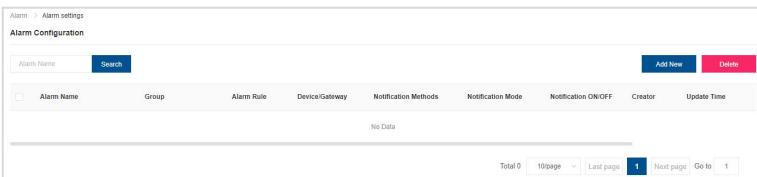


5. Input the alarm cause maintenance. Click "Submit".

 The "Alarm Push Content" and "Restore Normal Push Content" are optional items.

7.2 Alarm settings

1. Click "Alarm > Alarm settings" in the left navigation window to enter the alarm settings page.



2. Click the "Add New" button in the upper-right corner.

Add Alarm Configuration ✕

* Alarm Name

* Group

* Alarm Rule

* Notification Mode When The Variable Value Reaches The Trigger Condition

First Push Only

Interval Minutes ⊙

* Notification Methods Sms Mail

* Pusher

Check All

Total 0 < 1 >

Description

3. Input the alarm name, and select the group.
 4. Select the "Alarm Rule" as "Product Series Alarm" or "Custom Alarm."
- Note: The enterprise users can choose either of the two-alarm rules, and the individual users can only select "Product Series Alarm."**
5. Select the corresponding gateway after selecting the "Alarm Rule" as "Product Series Alarm." The system automatically recognizes the alarm rules of the product series. It triggers the alarm when the alarm rules are met.

6. Select the name of the maintained alarm after selecting the "Alarm Rule" as "Custom Alarm." The alarm will be triggered based on the maintenance alarm rule.

7. Select the "Notification Mode When The Variable Value Reaches The Trigger Condition" as "First Push Only" or "Interval X Minutes"
8. Tick the "Notification Methods" as "SMS" or "Email."
9. Select the "Pusher" (When there is no pusher, click the "New Contact" to jump to the "Alarm contacts" page for new contact adding).
10. Click the "Save" button to complete.
11. You can turn on/off the notification switch manually after adding the new alarm.

Alarm > Alarm settings

Alarm Configuration

Alarm Name:

<input type="checkbox"/>	Alarm Name	Group	Alarm Rule	Device Gateway	Notification Methods	Notification Mode	Notification ON/OFF	Creator	Update Time	Control Panel
<input type="checkbox"/>	CVT	All	Product Series ...	Rel	Sms, Mail	First Push Only	<input checked="" type="checkbox"/>	inv	2023-01-15 10:25:48	Developer Edit Info Delete

Total 1 | 10page |

7.3 Alarm logs

1. Click "Alarm > Alarm logs" in the left navigation window to enter the alarm logs page.

Alarms > Alarm logs

Alarm Record

Please select device: All

Now-08-2023 19:05:13 To Dec-08-2023 19:05:13 **Submit**

List Number	Alarm Time	Alarm Content	Site	Device/Gateway	Alarm Status	Processing Status	Control Panel
1	Dec-08-2023 14:00:41	The battery overvoltage alarm is cleared.	caah_1701054889017	caah_1701054420307	Normal	---	Receive Notification log Details
2	Dec-08-2023 14:01:40	Battery Over Voltage	caah_1701054889017	caah_1701054420307	Alarm	Unsolved	Receive Notification log Details
3	Dec-08-2023 15:58:30	The System voltage error is cleared.	caah_1701054889017	caah_1701054420307	Normal	---	Receive Notification log Details
4	Dec-08-2023 09:13:45	☑Check whether the battery voltage.	caah_1701054889017	caah_1701054420307	Alarm	Unsolved	Receive Notification log Details
5	Dec-08-2023 16:40:29	The Battery overcharged alarm is cleared.	caah_1701054889017	caah_1701054420307	Normal	---	Receive Notification log Details
6	Dec-08-2023 16:38:41	Battery Overcharged	caah_1701054889017	caah_1701054420307	Alarm	Unsolved	Receive Notification log Details
7	Dec-08-2023 16:38:39	The battery overvoltage alarm is cleared.	caah_1701054889017	caah_1701054420307	Normal	---	Receive Notification log Details
8	Dec-08-2023 16:38:39	Battery Over Voltage	caah_1701054889017	caah_1701054420307	Alarm	Unsolved	Receive Notification log Details
9	Dec-08-2023 16:25:30	The Battery overcharged alarm is cleared.	caah_1701054889017	caah_1701054420307	Normal	---	Receive Notification log Details
10	Dec-08-2023 16:20:43	Battery Overcharged	caah_1701054889017	caah_1701054420307	Alarm	Unsolved	Receive Notification log Details

Total 41 10/page Last page 1 2 3 4 5 Next page Go to 1

2. All alarm logs are displayed. Search specified alarm logs by device/gateway name, processing status, and time.
3. For the "Unsolved" alarm, click the "Resolve" icon in the "Control Panel" column to process it.
4. Click the "Notification log" icon in the "Control Panel" column to check the alarm notification and push status.
5. Click the "Details" icon in the "Control Panel" column to check the alarm cause prompt.

7.4 Alarm contacts

1. Click "Alarm > Alarm contacts" in the left navigation window to enter the alarm contacts page.

Alarms > Alarm contacts

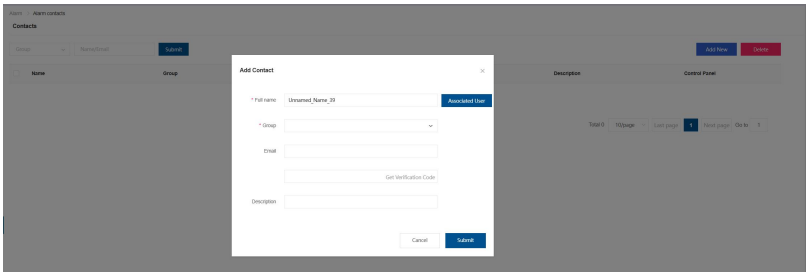
Contacts

Group: Name phone: **Submit** **Add New** **Delete**

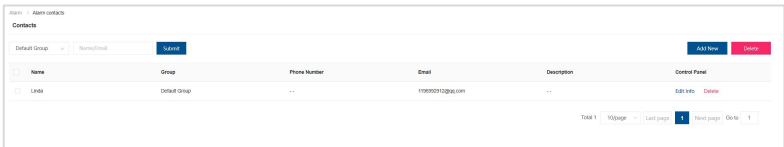
<input type="checkbox"/>	Name	Group	Phone Number	Email	Description	Control Panel
No Data						

Total 0 10/page Last page 1 Next page Go to 1

2. Click the "Add New" button in the upper-right corner.



3. Input the contact name, group, email, Verification Code. And click the "Submit" button.

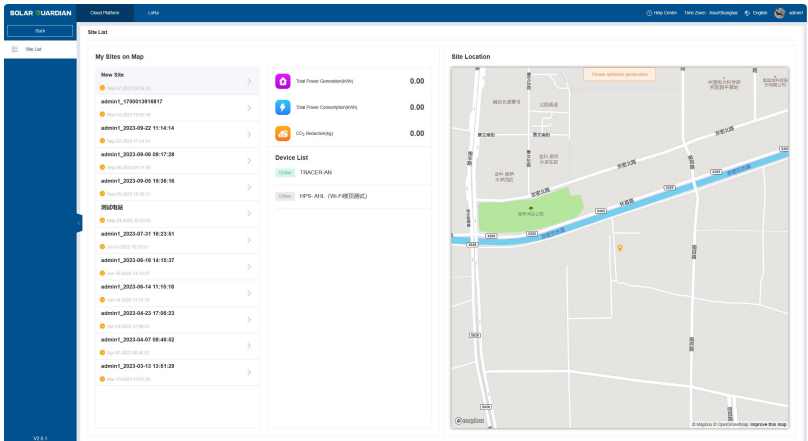


4. On the alarm contacts page, click the "Edit Info" or "Delete" icons in the "Control Panel" column to edit or delete the alarm contact.
5. On the alarm contacts page, multi-select alarm contacts and click the "Delete" button in the upper-right corner to delete multiple alarm contacts.

8 Home

8.1 Site list

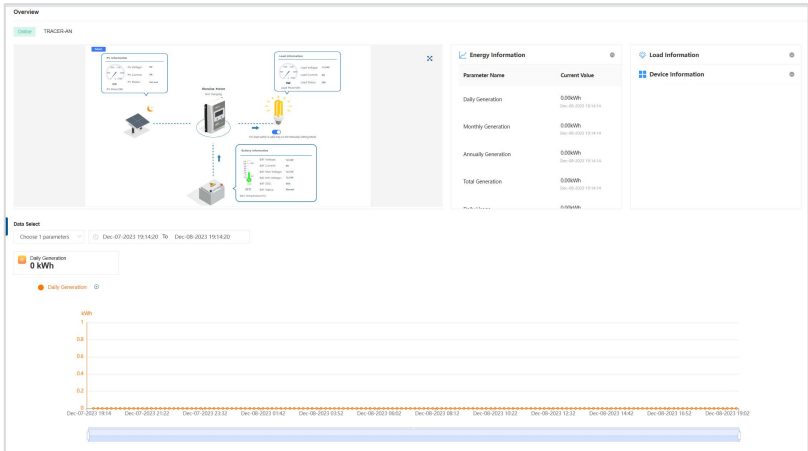
Click "User Center" in the left navigation window to enter the "Power Station List" page. By default, the information of the first power station is displayed: cumulative power generation, cumulative power consumption, CO2 emission reduction, and the list of equipment under the power station. Display the current location of the power station on the map.



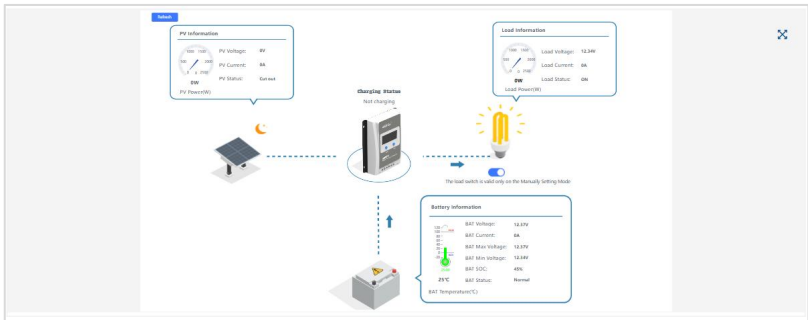
Instructions:

1. Click "Return" to return to the homepage (energy storage service cloud platform monitoring screen).
2. Click a device under "Device List" to enter the device overview page.

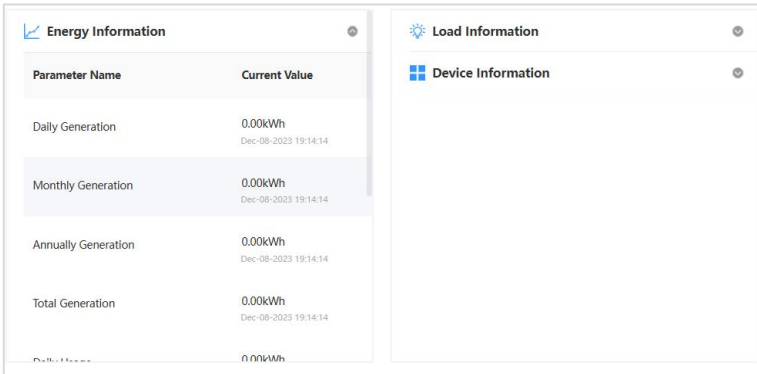
8.2 Overview



1. The configuration diagram of the device is displayed on the left side of the "Overview" page. The device configuration diagram supports enlargement, abbreviation and full-screen display.



2. The right side of the "Overview" page displays the read-only variable groups and real-time data of the device, which are displayed in two columns. The first variable group's parameter names and current values are expanded by default.



3. The bottom of the "Overview" page displays the power analysis curve. 24H-curve for the first data in the first variable group is displayed by default.

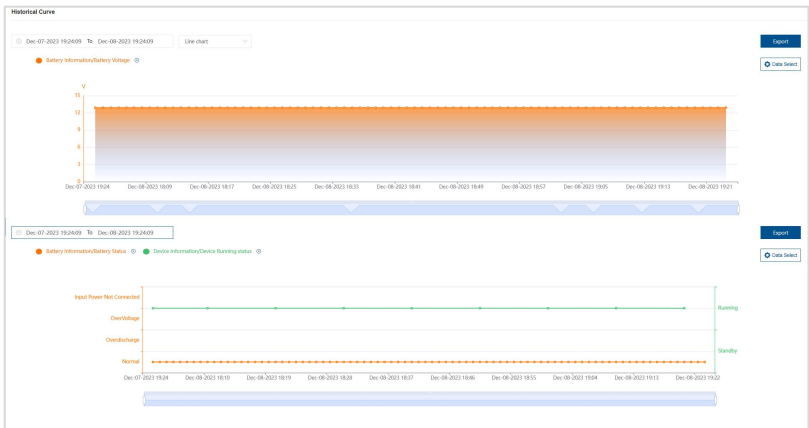


4. Click the "Data select" drop-down list to select data; up to 5 parameters can be selected.

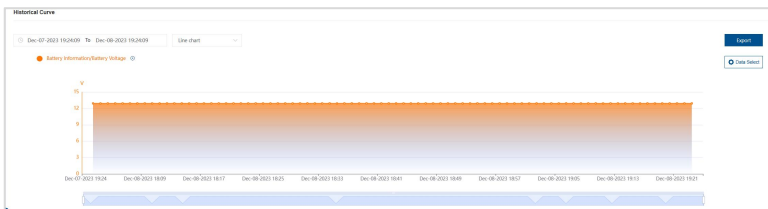


8.3 Historical curve

1. Click "History" in the left navigation window to display the historical curve of the module information and status statistics. The first statistics variable and the first status variable are displayed by default. And the displayed time is defaulted to 24h (if there is no data, the graph is not displayed).



2. Check module information curve: Click  to select data (up to 3); and then select the time to display the historical curve. Two curve display types (Line chart and Bar chart), and the curve can be exported.



3. Check the "Status Statistics" curve: Click  to select data; and then select

the time to display the historical curve. The "Status Statistics" is displayed in a line chart and can be exported.



8.4 Device information

1. Click "Device" in the left navigation window to view gateways and device information.

Device List

Gateway ceshi_1701154423376


Device ceshi_1701154423376 ▼

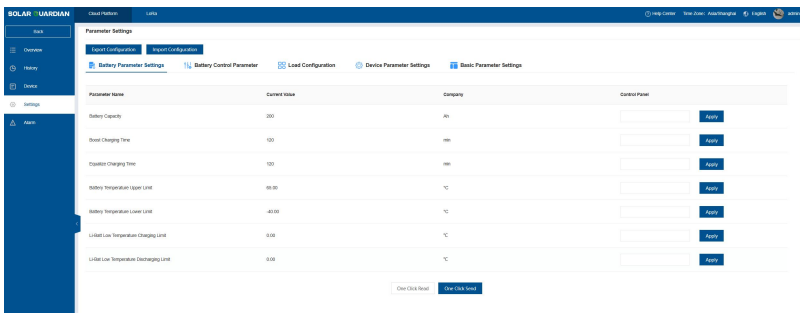
Battery Rated Voltage	12 V
Load Rated Power	-- W
Rated Output Frequency	-- Hz

2. The gateway information shows the gateway picture and gateway name. Click the device picture to view the device's static configuration information.

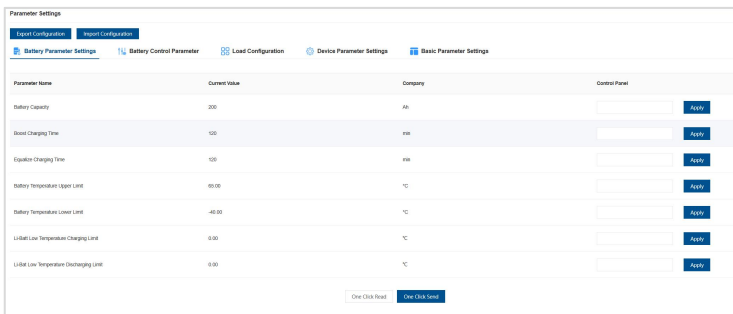
8.5 Parameter settings

Click "Settings" in the left navigation window. The page displays all setting parameter groups and data points. Taking TRACER-AN (10-40A) as an example, this page includes: battery parameters settings, battery control parameters, load configuration, device parameter settings, and basic parameter settings. Every time you enter the page, the data is automatically refreshed.

: When sending data, if the device receives a successful command within 9 seconds, it will prompt "communication successful". If no reply is received within 9 seconds, "communication timeout" will be prompted. Regardless of whether the communication is successful or times out, the device will immediately read back the data and display the latest data in the "Current Value" column.



① **Battery Parameter Settings:** Enter the value in the operation column and click "Apply" to complete the single-point delivery of data. Click "One Click Send" to complete the delivery of all data.



② **Battery Control Parameters:** Click the drop-down box to set the battery type or rated voltage level. Each voltage point of the battery can be set under certain rules. Click "Write" below to set all data to the device. Click "Read" to obtain all current data of the device. Click "Restore Default" to deliver the default values of all data to

the device.

Parameter Name	Default value	Current value	Company
Battery Type	SLA	SLA	-
Rated Voltage	12V	12V	-
Overvoltage Disconnect Voltage	16.00	16.00	✓
Charging Limit Voltage	15.00	15.00	✓
Overvoltage Recovery Voltage	16.00	16.00	✓
Equalize Charging Voltage	14.00	14.00	✓
Bulk Charging Voltage	14.40	14.40	✓
Float Charging Voltage	13.80	13.80	✓
Bulk Voltage Recovery Voltage	13.20	13.20	✓
Low Voltage Recovery Voltage	12.80	12.80	✓
Undervoltage Alarm Recovery Voltage	12.20	12.20	✓
Undervoltage Alarm Voltage	12.00	12.00	✓
Low Voltage Disconnect Voltage	11.10	11.10	✓
Discharging Voltage Limit Voltage	0.00	0.00	✓
Temperature Compensation	-1	-1	mpc20V

📖: When the battery fixed parameter points are delivered, there is a logic check and upper and lower limit verification. Parameters that do not comply with the logic and upper and lower limit ranges are not allowed to be delivered.

- ③ **Load Configuration:** Click the drop-down box of the load control mode to select a certain load control mode, such as light control mode, enter the values to be set in the input boxes of other parameters, and click "Apply" to separately deliver the load control mode. Click "One Click Send" to deliver all parameters. If you click "One Click Read", you can obtain the value of the current load mode setting of the current device.

Parameter Settings

Export Configuration Import Configuration

Battery Parameter Settings Battery Control Parameter Load Configuration Device Parameter Settings Basic Parameter Settings

Load Control Mode: Light ON/OFF

Light-Control Starting Voltage: Manual Control V

Light-Control Start-up Delay: Light ON+ Timer min

Light-Control Turn-Off Voltage: Time Control V

Light-Control Turn-Off Delay: 6.00 V

Light-Control Turn-Off Delay: 10 min

- ④ **Device Parameter Settings:** Edit the input box corresponding to the parameter, click "Apply" to deliver the parameter individually, click "One Click Send" to deliver all parameters; click "One Click Read" to obtain the values of all current parameters of the device.

Parameter Settings

Export Configuration Import Configuration

Battery Parameter Settings Battery Control Parameter Load Configuration Device Parameter Settings Basic Parameter Settings

Parameter Name	Current Value	Company	Control Panel
Daylight Time	00	s	<input type="text" value=""/> <input type="button" value="Apply"/>
Device Temperature Upper Limit	60.00	°C	<input type="text" value=""/> <input type="button" value="Apply"/>
Device Over Temperature Recovery	70.00	°C	<input type="text" value=""/> <input type="button" value="Apply"/>
Device Time	Nov-08 2023 10:16:03	-	<input type="text" value="00"/> <input type="button" value="Apply"/>

- ⑤ **Basic Parameter Settings:** Operations for load switch, restore default, and clear battery.

Parameter Settings

Export Configuration Import Configuration

Battery Parameter Settings Battery Control Parameter Load Configuration Device Parameter Settings Basic Parameter Settings

Load Switch

ON OFF

Return To Default

Recovery

Clear Accumulated Energy

Clear

⑥ Import/Export Configuration:

Export Configuration: Export all parameters and current values.

Import Configuration: Import new values for all parameters.

8.6 Alarm information

1. Click "Alarm" in the left navigation window to display all devices' alarm information.
2. Search specified alarm by alarm status and time. Support alarm exporting and alarm reason viewing.

TRACER-AN

Processing Time: Nov-08-2023 19:48:52 To Dec-08-2023 19:48:52 [Refresh](#) [Data Export](#)

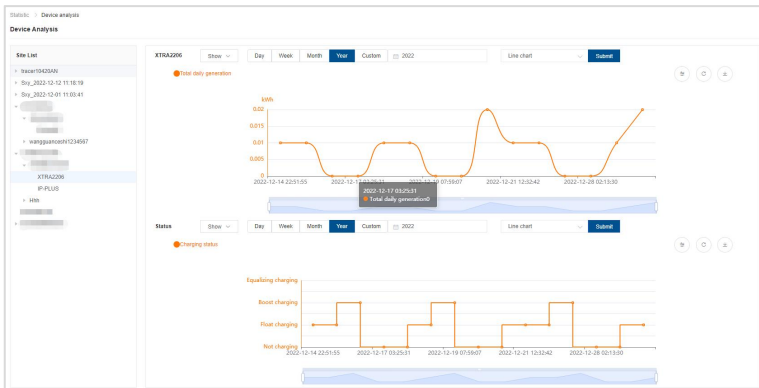
List Number	Device/Station	Alarm Content	Site	Alarm Time	Processing Status	Reason
1	TRACER-AN/TC1306	The Battery overcharged alarm is cleared.	BT506	Nov-23-2023 09:15:18	--	Details
2	TRACER-AN/TC1306	Battery Overcharged	BT506	Nov-23-2023 16:28:07	Unread	Details

Total: 2 | 10 items | [Last page](#) | [1](#) | [First page](#) | [Data](#) | [1](#)

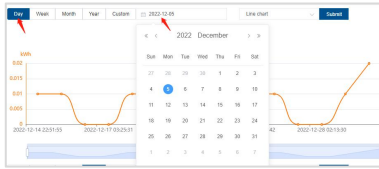
9 Statistic

9.1 Device analysis

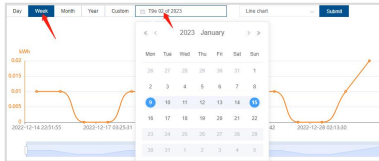
1. Click "Statistic > Device analysis" in the left navigation window to display the first statistic data and first status data chart (no data, the chart displays blank). The first statistic data and first status data come from the first device of the first gateway under the first site.



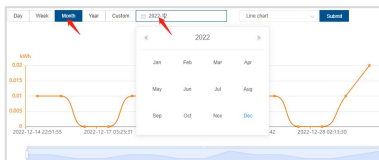
2. Select the device in the site list and click the "Show" drop-down list to select parameters (up to 2, selection across groups is supported).
3. Select the time and chart type (line chart or bar chart, line chart by default).
4. Click the "Submit" button to display the chart.
5. The time includes day, week, month, year, and custom.
 - 1) Day: ① The time box displays the current date (y, mm, day).
② Click the time box to switch to another day.
③ The curve shows the historical data on the selected day, and scroll the mouse to the subdivision time.
④ Available day: Any day in the last three years.



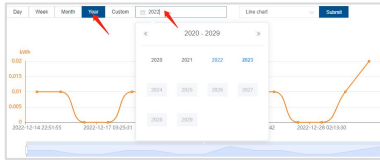
- 2) Week:**
- ① The time box displays the current week (from this Monday at 0:00 to this Sunday at 23:59).
 - ② Click the time box to switch to another week.
 - ③ The curve shows the historical data in the selected week.
 - ④ Available week: Any week in the last three years.



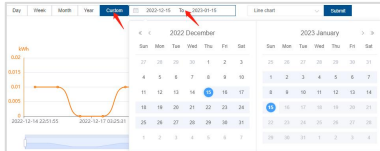
- 3) Month:**
- ① The time box displays the current month (from 0:00 on the 1st of this month to 23:59 at the end of the month).
 - ② Click the time box to switch to another month.
 - ③ The curve shows the historical data in the selected month.
 - ④ Available month: Any month in the last three years.



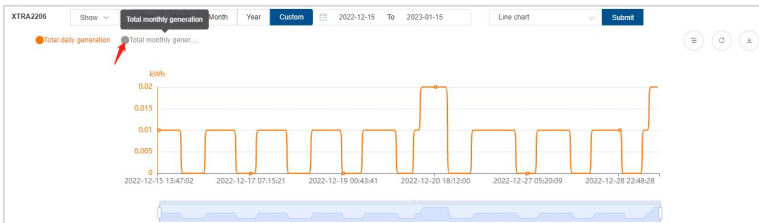
- 4) Year:**
- ① The time box displays the current year (January 1 of this year to the current time).
 - ② Click the time box to switch to another year.
 - ③ The curve shows the historical data in the selected year.
 - ④ Available year: Any year in the last three years.






- 5) **Custom time:** ① Click the time box to select the start and end times.
 ② Data for up to three years can be queried.



6. Click the parameter flag in the chart, and the parameter data will disappear.



7. The    button on the right means switching the data display from the list to the chart, refreshing the data, and exporting the data.



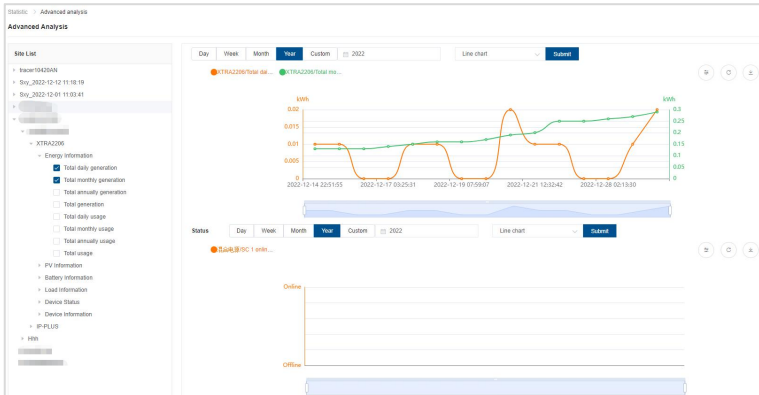
- 1) After selecting parameters from the "Show" drop-down list, the historical data will be displayed in the chart.
- 2) Dates within three years are available, and other dates are disabled.
- 3) The time box displays the current time by default, which will be refreshed according to the new time zone.
- 4) When the historical data is less than 500, the curve displays all the data in the specified time without paging (single variable and multi-variable follow the same display rules). When the historical data exceeds 500, the curve displays the data by

sampling. The sampled data is the first value in each time point.

5) When the parameter has no value at a time, there is a curve while the value is displayed as "--." When the historical data is huge, zoom in on the curve expansion bar to view the specific data.

9.2 Advanced analysis

1. Click "Statistic > Advanced analysis" in the left navigation window to display the first statistic generation data and first status data chart (no data, the chart displays blank). The first statistic data and first status data come from the first device of the first gateway under the first site.






2. Select parameters in the site list (up to 2, selection across the site/gateway/device is supported).

3. Select the time and chart type (line chart or bar chart, line chart by default).

4. Click the "Submit" button to display the chart.

5. The time includes day, week, month, year, and custom. For time selection, refer to chapter [9.1. Device analysis](#).

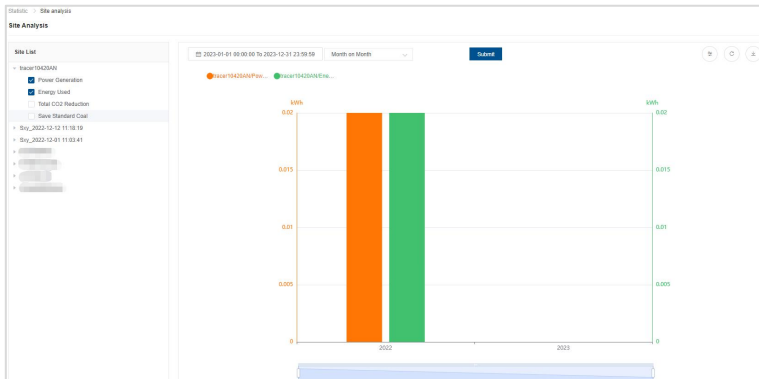
6. Click the parameter flag in the chart, and the parameter data will disappear.

7. The    button on the right means: Switching the data display from the list

to the chart, refreshing the data, and exporting the data.

9.3 Site analysis

1. Click "Statistic > Site analysis" in the left navigation window to display a year-on-year histogram of specified parameters in the first site. By default, display data of the current week. No data, the chart displays blank.



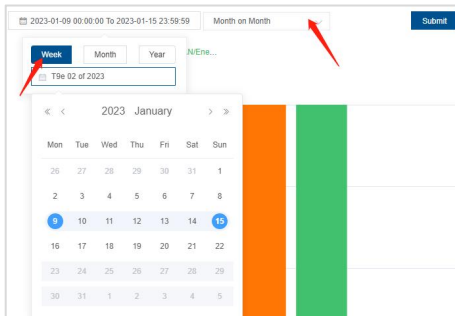
2. Select parameters in the site list, including power generation, energy used, total CO2 reduction, and save standard coal (up to 2, selection across sites is supported).
3. Click the time box to select the time (week, month, or year), and click the "Submit" button to display the chart.

1) Week: Power Generation--The sum of power generation from Monday 0:00 to the current time.

Energy Used--The sum of energy used from Monday 0:00 to the current time.

Total CO2 Reduction--Week power generation*0.997

Save Standard Coal--Week power generation*0.4

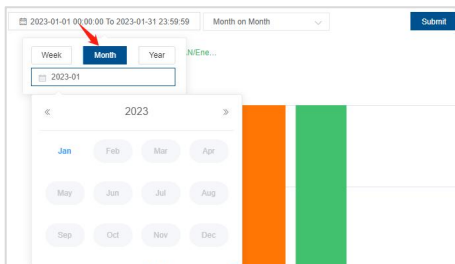


2) Month: Power Generation--The sum of power generation in the selected month.

Energy Used--The sum of energy used in the selected month.

Total CO2 Reduction--Month power generation*0.997

Save Standard Coal--Month power generation*0.4

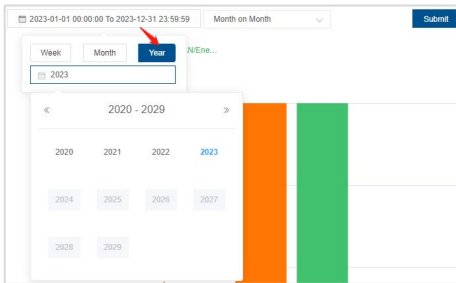



3) Year: Power Generation--The sum of power generation in the selected year.


Energy Used--The sum of energy used in the selected year.

Total CO2 Reduction--Year power generation*0.997

Save Standard Coal--Year power generation*0.4



4. Click the parameter flag in the chart, and the parameter data will disappear.
5. The  button on the right means: Switching the data display from the list to the chart, refreshing the data, and exporting the data.

 The Year-on-Year and Month-on-Month lists show data for each day during that time.

9.4 Analysis report

1. Click "Statistic > Analysis report" in the left navigation window to display the first site analysis report (data displays by day default and shows "--" without data).

Statistic > Analysis report

Statistical Report

Site List

Site: 2023-12-12 11:18:19

Site: 2023-12-01 11:03:41

Site: 2023-12-01 11:03:41

Site: 2023-12-01 11:03:41

Site: 2023-12-01 11:03:41

Site: 2023-12-01 11:03:41

Name	Time	Daily Power Generation(kWh)	Total Power Generation(kWh)	Daily Electricity Consumption(kWh)	Total Power(kWh)	Total CO2 Reduction(kg)	Save Standard
Yincan1942	2023-01-15 00:00:00	--	--	--	--	--	--
Yincan1942	2023-01-15 01:00:00	--	--	--	--	--	--
Yincan1942	2023-01-15 02:00:00	--	--	--	--	--	--
Yincan1942	2023-01-15 03:00:00	--	--	--	--	--	--
Yincan1942	2023-01-15 04:00:00	--	--	--	--	--	--
Yincan1942	2023-01-15 05:00:00	--	--	--	--	--	--
Yincan1942	2023-01-15 06:00:00	--	--	--	--	--	--
Yincan1942	2023-01-15 07:00:00	--	--	--	--	--	--
Yincan1942	2023-01-15 08:00:00	--	--	--	--	--	--
Yincan1942	2023-01-15 09:00:00	--	--	--	--	--	--
Yincan1942	2023-01-15 10:00:00	--	--	--	--	--	--
Yincan1942	2023-01-15 11:00:00	--	--	--	--	--	--
Yincan1942	2023-01-15 12:00:00	--	--	--	--	--	--

2. The time includes day, week, month, year, and total. To select a day, month, and year, refer to chapter [9.1. Device analysis](#).

- Click "Total" to hide the time box, and the list data shows the power generation and energy information of the selected site in the past three years (no data shows "--")

Day	Month	Year	Total
Name	Time	Annual Power Generation(kWh)	
Tracer10420...	2021	--	
Tracer10420...	2022	0.82	
Tracer10420...	2023	--	

- Support data export.

9.5 Report download

Click "Statistic > Report download" in the left navigation window to add a new report.

Statistic > Report download

Custom Report Report Download

Group: [dropdown] Report Name: [input] Search [button] Report Download [button] New Report [button]

Report Name	Group	Type	Time Period	Update Time	Creator	Control Panel
111	[dropdown]	Device	2022-10-29 13:46 ~ 2022-10-29 13:48	2022-10-29 13:48	Sry	Edit Info Delete

Total 1 Message [dropdown] Last page [button] 1 Next page [button] Go to [input] 1

● Add report

- Click the "New Report" button in the upper-right corner.

Statistic > Add report

New Report

Report Name: [input]

Group: [dropdown]

Time Period: **Please go to "Report Download" to export the report.**

Time Period: Manual download Auto download

Time: 2022-01-15 10:52:06 To: 2022-01-15 10:52:06

Report Rules: **You can download 50,000 data over that will not be shown.**

Unit: By Minute

Type: Device Site

[button: Add New]

Device name: [dropdown] Variable Grouping: [dropdown]

Variable: [input]

Report Structure: **The report structure only displays the data frame, up to the first 25 pieces of data are displayed, and you can view more in "Report Download"**

No Data

[button: Cancel] [button: Save]

- Input the report name, and select the group.
- Select the time to download the report (manual and auto download).
- Select the time unit of data aggregation (the unit interval in which the final variable is calculated or presented). It can be understood as the unit in which time is divided into

segments. For example, by minute, every minute is a segment. By day, that is, every day is a period. Aggregate the data generated during this time), including by minute, hour, and day.

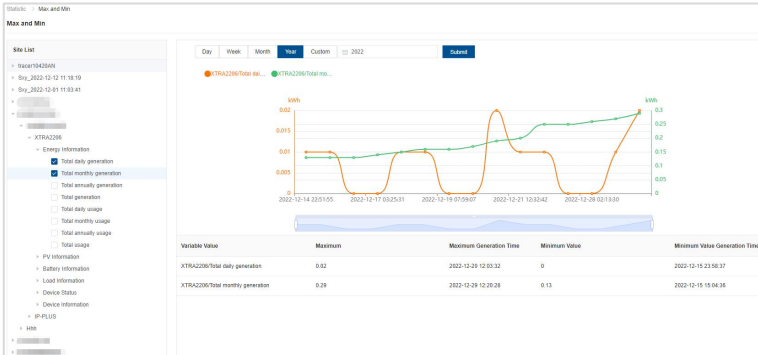
5. Select the data dimension as a device or site. Click the "Add New" button to add multiple data dimensions, and multiple variables can be selected in each data dimension.
6. Select the variable statistic values (average, maximum, minimum, and cumulative).

The screenshot shows the 'Add Report' configuration page. At the top, there's a 'Report Name' field and a 'Group' dropdown set to 'BU BUS'. The 'Time Period' section has radio buttons for 'Manual download' (selected) and 'Auto download', with a date range from 2023-01-15 10:02:06 to 2023-01-15 10:02:06. A warning message states: 'You can download 50,000 data over that will not be shown.' The 'Report Rules' section has a 'Unit' dropdown set to 'By Minute' and a 'Type' dropdown set to 'Device'. A 'Variable Grouping' section is expanded for 'Energy Information', showing a list of variables. 'Total daily generation (Average)' is selected, and a red arrow points to its dropdown menu, which is open to show options: 'Average', 'Maximum', 'Minimum Value', and 'Cumulative value'. Below this, the 'Report Structure' section shows a table with columns for 'Device name' and 'Variable'. The table contains one row: 'XTFA2206' and 'Total daily generation(Average)'. A note says 'The report structure only displays 100 pieces of data are displayed, and you can view more in "Report Download"'. At the bottom right, there are 'Cancel' and 'Save' buttons.

7. Click the "Save" button to add a new report.
8. Click the "Report Download" to download the report and view the progress.

9.6 Max and Min

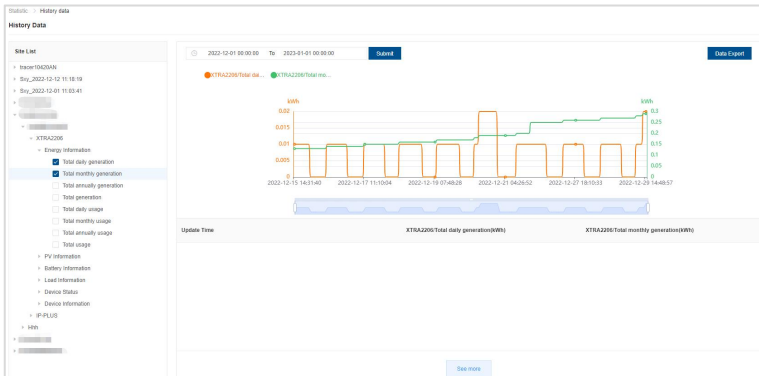
1. Click "Statistic > Max and Min" in the left navigation window to display the first variable's Max and Min chart (no data, the chart displays blank). The first variable comes from the first device of the first gateway under the first site.



2. Select variables in the site list (up to 2, selection across the site/gateway/device is supported).
3. Select the time and click the "Submit" button to display the chart.
4. The time includes day, week, month, year, and custom. For time selection, refer to chapter [9.1, Device analysis](#).
5. Click the parameter flag in the chart, and the parameter data will disappear.

9.7 History data

1. Click "Statistic > History data" in the left navigation window to display the first variable's history data chart (no data, the chart displays blank). The first variable comes from the first device of the first gateway under the first site.

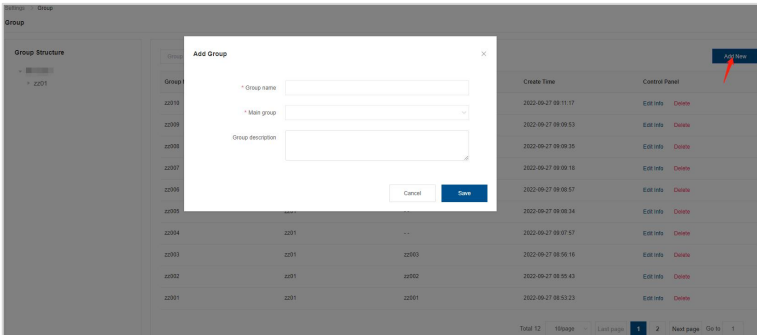


2. Select variables in the site list (up to 2, selection across the site/gateway/device is supported).
3. Select the time and click the "Submit" button to display the chart.
4. Click the parameter flag in the chart, and the parameter data will disappear.
5. Support data export.

10 Settings

10.1 Group

1. Click "Settings > Group" in the left navigation window to enter the group list page. Click the "Add New" button in the upper-right corner to enter the group adding page.



2. Input the group name and select the main group (group description is not required). Click the "Save" button to add a new group.
3. Group editing and deleting are supported.

10.2 History file read

1. Click "Settings > History file read" in the left navigation window to search the history file by group and time.

List Number	Device Name	Site	Gateway	Start Date	End Date	Status	File Type	Control Panel
1	TCF	arwah_178800017888	TCF	Nov-23-2023 17:37:00	Nov-23-2023 17:38:37	Fail (0)	Historical Data	Delete
2	arwah_180778844007	HarauBatu	arwah_180778844007	Nov-23-2023 11:30:45	Nov-23-2023 11:31:04	Fail (0)	Historical Data	Delete
3	arwah_180778844007	HarauBatu	arwah_180778844007	Nov-23-2023 11:13:38	Nov-23-2023 11:13:54	Fail (0)	Historical Data	Delete
4	TCF	arwah_178800017888	TCF	Nov-21-2023 11:26:48	Nov-21-2023 11:27:25	Stop	Historical Data	Download Delete
5	TCF	arwah_178800017888	TCF	Nov-20-2023 08:40:39	Nov-20-2023 08:41:08	Success	Historical Data	Download Delete
6	TCF	arwah_178800017888	TCF	Nov-20-2023 08:30:00	Nov-20-2023 08:41:19	Success	Historical Data	Download Delete
7	TCF	arwah_178800017888	TCF	Nov-20-2023 08:40:38	Nov-20-2023 08:41:07	Fail (0)	Historical Data	Delete
8	TCF	arwah_178800017888	TCF	Nov-21-2023 10:51:00	Nov-21-2023 10:52:17	Fail (0)	Historical Data	Delete
9	TCF	arwah_178800017888	TCF	Nov-21-2023 10:40:50	Nov-21-2023 10:41:44	Stop	Historical Data	Download Delete
10	TCF	arwah_178800017888	TCF	Nov-21-2023 10:30:00	Nov-21-2023 10:30:20	Fail (0)	Historical Data	Delete

2. Click the "Create Tasks" button in the upper-right corner.
3. Select the group, site, gateway, device and file type . Click the "Create Tasks" button to create a new task.

Create Task

Group: Default Group

Site: arwah_178154328817

Gateway: arwah_178154328817

Select Device: arwah_178154328817

File Type:

- Historical Data
- Alarm System Data
- Inverter Logging
- New Historical Data
- New Alarm System Data
- New Inverter Logging

Buttons: Cancel, Create Task

4. Multi-select the history files and click the "Bulk Download" button in the upper-right corner to bulk download the selected files.
5. Click "Delete" on the right side of a task to delete the task.

Task ID	Device Name	Site	Subway	Start Date	End Date	Status	File Type	Control Panel
1	TCP	ARHWL_1087084687	TCP	Nov-07-2023 17:37:50	Nov-07-2023 17:38:37	Fail (0)	Historical Data	Delete
2	ARHWL_1087084687	HAIRSHAW	ARHWL_1087084687	Nov-29-2023 11:38:42	Nov-29-2023 11:38:44	Fail (0)	Historical Data	Delete
3	ARHWL_1087084687	HAIRSHAW	ARHWL_1087084687	Nov-29-2023 11:32:58	Nov-29-2023 11:33:04	Fail (0)	Historical Data	Delete
4	TCP	ARHWL_170800707826	TCP	Nov-22-2023 11:20:48	Nov-22-2023 11:21:25	Stop	Historical Data	Delete
5	TCP	ARHWL_170800707826	TCP	Nov-22-2023 09:42:36	Nov-22-2023 09:53:00	Success	Historical Data	Delete
6	TCP	ARHWL_170800707826	TCP	Nov-22-2023 09:42:36	Nov-22-2023 09:53:00	Success	Historical Data	Delete
7	TCP	ARHWL_170800707826	TCP	Nov-21-2023 19:43:56	Nov-21-2023 19:43:56	Fail (0)	Historical Data	Delete
8	TCP	ARHWL_170800707826	TCP	Nov-21-2023 19:43:56	Nov-21-2023 19:43:56	Fail (0)	Historical Data	Delete
9	TCP	ARHWL_170800707826	TCP	Nov-21-2023 19:43:56	Nov-21-2023 19:43:56	Stop	Historical Data	Delete
10	TCP	ARHWL_170800707826	TCP	Nov-21-2023 19:39:02	Nov-21-2023 19:39:02	Fail (0)	Historical Data	Delete

- Click "Download" of a task. If the status of the task is successful, the historical data file can be downloaded. If the status of the task is failed or stopped, "Download" will not be displayed.

10.3 (Optional) Role management

The menu is only visible to enterprise users, not to individual users.

- Click "Settings > Role management" in the left navigation window to enter the role list page. Click the "Add" button in the upper-right corner to enter the role-adding page.

Add

* Role Name:

Role Description:

Menu Permission:

- Check All
- Navigation
- Home
- Sites
- Gateway
- Device
- Alarm
- Statistic
- Maintenance Management
- Settings
- Site List
- Overview
- History
- Device

Buttons:

- Input the role name and tick the menu permission for the role (role description is not required). The selected menu and button permissions are only visible to users bound

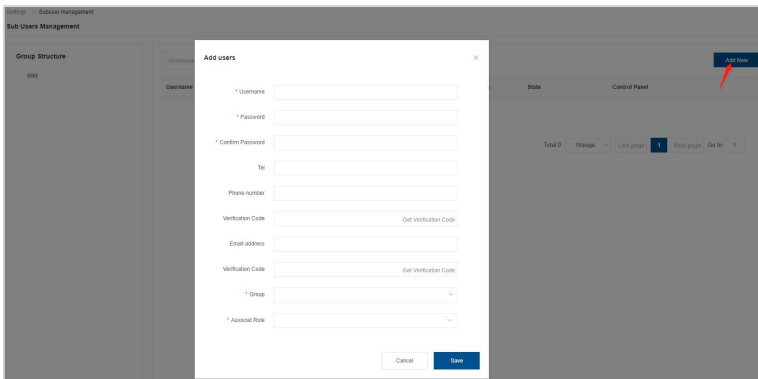
to the role.


3. Role editing and deleting are supported.

10.4 (Optional) Sub user management

 **The menu is only visible to enterprise users, not to individual users.**

1. Click "Settings > Sub user management" in the left navigation window to enter the sub-user list page. Click the "Add New" button in the upper-right corner to enter the user-adding page.



 **Before adding a user, you must have already added a role. Otherwise, you will be prompted with, "You don't have an associated role yet; do you want to add one?"**

2. On the user adding page, input the user name and password; the phone number and email are also required (at least one).
3. Select the group.
4. Select the associated role. The menu permissions after the user logging in are the same as configured on the "Role management" page.

10.5 Notification

1. Click "Settings > Notification" in the left navigation window to display all notifications today.

2. Search a specified notification by the notification title and time.

10.6 Profile

The screenshot shows the 'Profile' settings page in the SOLAR GUARDIAN interface. The page is titled 'Personal Information Management' and contains the following elements:

- Avatar:** A circular profile picture with an 'Edit' button. A note below it states: 'The image size should be less than 2M'.
- User name:** A text input field containing 'admin1'.
- Password:** A text input field with a 'Change Password' button.
- Email Address:** A text input field containing 'solar0011342375@163.com', with 'Remove' and 'Edit' buttons to its right.
- Phone Number:** A text input field with an 'Edit' button to its right.
- Account type:** A dropdown menu set to 'Personal'.
- Alarm PopUp:** A section with three radio button options:
 - Alarm pop-ups will appear when the device alarms and when the alarm is restored.
 - There will be no alarm popup when the device alarms or recovers from the alarm.
 - The alarm popup will only appear when the device alarms.
 - The alarm recovery pop-up box will be displayed only when the device alarm is restored.
- Online/Offline PopUp:** A section with three radio button options:
 - Pop-ups appear when the gateway is online and offline.
 - There will be no pop-up window when the gateway is online or offline.
 - The online pop-up box will only appear when the gateway is online.
 - Only perform offline pop-up when the gateway is offline.
- One-Click reset:** A blue button labeled 'One-Click reset'.
- Open API:** A blue button labeled 'Apply Fix Open Account'.
- Cancel Account:** A red button labeled 'Delete Your Account'.
- Submit:** A blue button at the bottom right.

Below the 'One-Click reset' button, there is a small note: 'Explanation: After clicking the one-click reset button, the electricity and energy information on the homepage and large screen are both 0, and the data will be recalculated next time.'

1. Click "Settings > Profile" in the left navigation window to view or modify personal information.
2. Support user avatar and password modification, support email unbinding and modification. Support account logout.
3. Supports editing of alarm pop-ups and online and offline pop-ups.
4. Supports one-click clearing to clear the power and energy information on the homepage and large screen, and start calculation from 0.
5. Support the use of account and secret key when applying for API documents.

10.7 Event log

1. Click "Settings > Event log" in the left navigation window to display all operation events in 24H.

The screenshot shows the 'Event log' interface. At the top, there is a breadcrumb 'Settings > Event log' and a title 'Log Management'. Below the title is a date range filter: '2023-01-14 10:00:00 To 2023-01-15 10:00:00' with a 'Submit' button. The main content is a table with three columns: 'Operating User', 'Event Content', and 'Time'. The table contains 11 rows of data. At the bottom right, there is a pagination bar showing 'Total: 23', '10page', and page numbers '1', '2', '3', with 'Next page' and 'Go to 1'.

Operating User	Event Content	Time
Sry		2023-01-15 00:30:58
Sry	Login	2023-01-14 17:49:41
Sry	Logout	2023-01-14 17:49:53
Sry	Data distributed by equipment	2023-01-14 17:26:04
Sry	Data distributed by equipment	2023-01-14 17:25:58
Sry	Add operation Records	2023-01-14 17:25:58
Sry	Data distributed by equipment	2023-01-14 17:25:55
Sry	Add operation Records	2023-01-14 17:25:55
Sry	Login	2023-01-14 17:25:10
Sry	Logout	2023-01-14 17:25:08

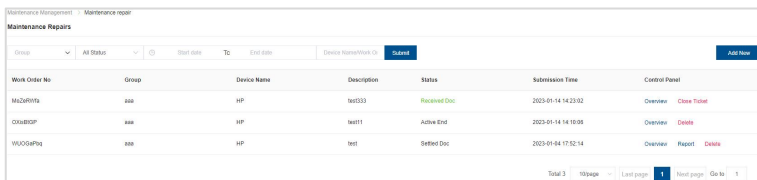
2. Select the time and click the "Submit" button to search the event logs.

11 (Optional) Maintenance

 The menu is only visible to enterprise users, not to individual users.

11.1 Maintenance repair

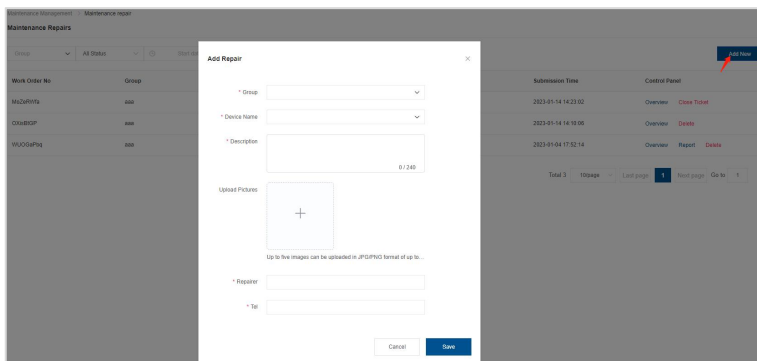
1. Click "Maintenance > Maintenance repair" in the left navigation window to manage the maintenance repairs.



The screenshot shows a table titled "Maintenance Repairs" with the following columns: Work Order No., Group, Device Name, Description, Status, Submission Time, and Control Panel. There are three rows of data. The first row has status "Received Doc", the second "Active End", and the third "Settled Doc". Each row has "Overview" and "Close Ticket" links in the Control Panel column. At the bottom right, there is a pagination bar showing "Total 3", "100page", "Last page", "1", "Next page", and "Go to 1".

Work Order No.	Group	Device Name	Description	Status	Submission Time	Control Panel
M5206Pfc	aaa	HP	test03	Received Doc	2023-01-14 14:23:02	Overview Close Ticket
C5006P	aaa	HP	test1	Active End	2023-01-14 14:10:06	Overview Details
M5206Pfc	aaa	HP	test	Settled Doc	2023-01-04 17:52:14	Overview Report Details

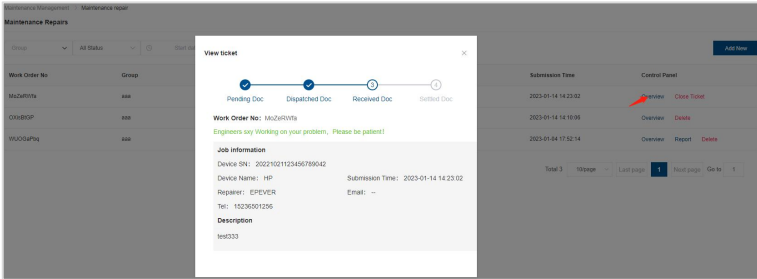
2. **Search maintenance repair:** Search the specified maintenance repair by group, work order status, time, or device name/work order No.
3. **Add maintenance repair:** Click the "Add New" button in the upper-right corner to enter the work order adding page.



The screenshot shows the "Add Repair" form overlaying the table. The form has the following fields: "Group" (dropdown menu), "Device Name" (dropdown menu), "Description" (text input with "B1240" entered), "Upload Pictures" (a large box with a plus sign and a note: "Up to five images can be uploaded in JPEG/PNG format of up to..."), "Repairer" (text input), and "Tel" (text input). At the bottom of the form are "Cancel" and "Save" buttons. In the background, the "Add New" button in the top right corner of the table is highlighted with a red arrow.

4. Select the group and device name, input the work order description (uploading pictures is not required), repairer, and tel-phone. Click the "Save" button to complete. Click the "Close Ticket" icon in the "Control Panel" column to close the work order.

5. **View work order:** View the processing progress and basic work order information. Click the "Overview" icon in the "Control Panel" column to display the processing progress, work order No., and basic information.



1) Work order status including:

- ① **Pending Doc:** The newly added work order or the regular maintenance work order is automatically generated by the maintenance plan; the work order administrator has not yet dispatched it.
- ② **Dispatched Doc:** The work order has been dispatched to the repair engineer.
- ③ **Received Doc:** The repair engineer receives the work order and clicks the "Dispatch ticket" button.
- ④ **Settled Doc:** After processing the device, the repair engineer submits the maintenance report. Only the "Settled Doc" work orders support the maintenance report view or deletion.
- ⑤ **Active End:** If the user or device administrator clicks the "Close Ticket" icon in the "Control Panel" column, the work order status will be updated to "Active End."

2) **Submission Time:** The time to add the work order.

3) **Delete:** Only work orders whose status is "Active End" or "Settled Doc" can be deleted. Click the "Delete" icon in the "Control Panel" column to pop a prompt box. Click the "Confirm" button to delete the work order.

4) **View the maintenance report:** The maintenance report can be viewed when the work order status shows "Settled Doc." The maintenance report displays the processing method, processing procedures, and results.

11.2 Order management

1. Click "Maintenance > Order management" in the left navigation window to manage the work order.

Work Order No.	Group	Device Name	Description	Status	Submission Time	Control Panel
WTFM90w	aaa	HP	Safety fail	Pending Doc.	2023-01-15 10:14:45	Overview Dispatch ticket
WU0D97Ns	aaa	HP	Web323	Resolved Doc.	2023-01-14 14:23:02	Overview
CU04B5P	aaa	HP	Web111	Active End	2023-01-14 14:16:06	Overview
WU0D97Ns	aaa	HP	Web	Settled Doc.	2023-01-04 17:32:14	Overview Report
WU0D97NS	aaa	HP	Web	Active End	2023-01-04 17:35:45	Overview

2. **Search work order:** Search the specified work order by group, work order status, time, device name, or work order No.
3. **View work order:** Click the "Overview" icon in the "Control Panel" column to view the processing progress and basic work order information.
4. **Dispatch ticket:** Click the "Dispatch ticket" icon in the "Control Panel" column to pop up the dispatch ticket page.

Dispatch ticket

Work Order No: WTFM90w

* Repair Applicant:

* Notification Method: Mail Sms

* Repair Description:

Job information

Device SN: 202210211023496786042 Submission Time: 2023-01-15 10:14:45


Device Name: HP Repairer: EPEVER

Mail: WU0D97NS Email: --

Description: Safety fail

5. Select the repairer and notification method, input the repair description, and click the

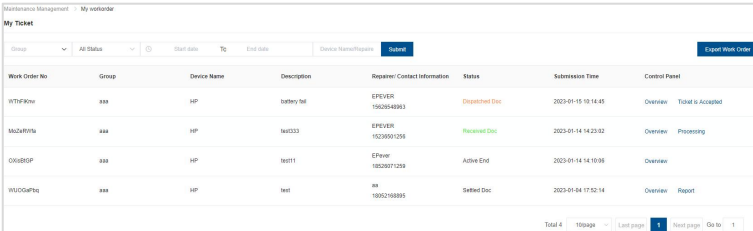
"Dispatch ticket" button to assign the work order to a specified repairer.

 **The repairer can be the work order originator or subordinate users (with the same menu permissions). After dispatching the work order, the repairer will receive an email or SMS notification.**

- View the maintenance report:** After the repairer processes the work order and submits the repair, you can click the "Report" icon in the "Control Panel" column to view the maintenance report, including the processing method, processing procedures, and results.
- Export work order:** Click the "Export Work Order" button in the upper-right corner to export the current work order list as an excel file.

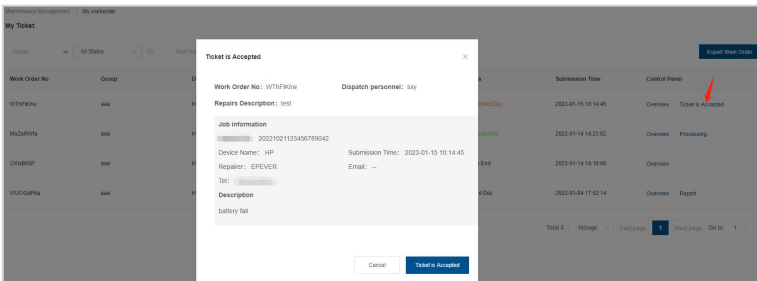
11.3 My work order

- Click "Maintenance > My work order" in the left navigation window to manage my work order.

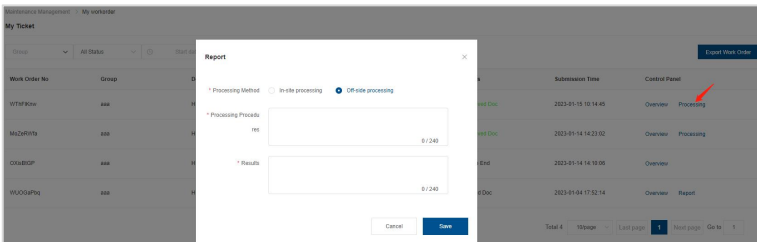


Work Order No.	Group	Device Name	Description	Repairer Contact Information	Status	Submission Time	Control Panel
WTF0100	AAA	HP	Battery fail	EPFVER 1902048983	Dispatched Doc	2023-01-15 10:14:45	Overview Total: 0 Accepted
W020100	AAA	HP	W02033	EPFVER 1823001235	Received Doc	2023-01-14 14:23:02	Overview Processing
0100B0P	AAA	HP	W0211	EPFVER 1823001235	Active Doc	2023-01-14 14:10:05	Overview
W020100	AAA	HP	W02	AA 1895216885	Selfed Doc	2023-01-04 17:52:14	Overview Report

- Search work order:** Search the specified work order by group, work order status, time, or device name/repairer/work order No.
- View work order:** Click the "Overview" icon in the "Control Panel" column to view the basic information of the dispatch personnel and work order.
- Accept ticket:** Select a work order of "Dispatched Doc," and click the "Ticket is Accepted" icon in the "Control Panel" column to pop up the ticket accepting page.



- Click the "Ticket is Accepted" button on the ticket accepting page. The original "Ticket is Accepted" icon in the "Control Panel" column is updated to the "Processing" icon. Click the "Processing" icon in the "Control Panel" column to open the report inputting page.



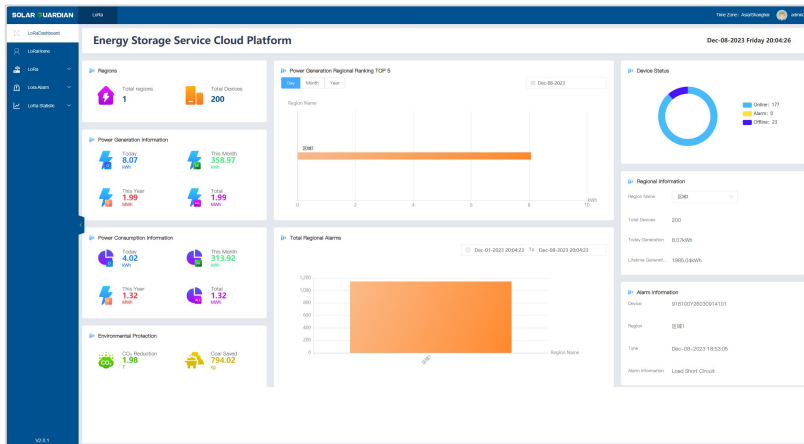
- Select the processing method, input the procedures and results, and click the "Save" button. Users can view the report after the work order is processed and the report is filled in.

Work Order No.	Group	Device Name	Description	Repairer Contact Information	Status	Submission Time	Control Panel
WTMFlow	888	HP	battery fail	EPEVER 1922464883	Battery Doc	2023-01-15 10:14:45	Overview Report
WU2W576	888	HP	test333	EPEVER 1922464883	Received Doc	2023-01-14 14:23:02	Overview Processing
CR888DP	888	HP	test11	EPEVER 1922464883	Active End	2023-01-14 14:16:06	Overview
WU05676	888	HP	test	HP 1922168885	Battery Doc	2023-01-04 17:52:14	Overview Report

- Export work order:** Click the "Export Work Order" button in the upper-right corner to export the current work order list as an excel file.

12 Lora

Monitoring system for the Lora project. The use and operation of the system are similar to the energy storage service cloud platform. The Lora project is an engineering application project. If you need to know more details, please contact the Huining technical support team.



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