



# APP & Web User Guide

LSHE Residential ESS (RPI Series)

Version: V1.0



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# APP Version User Guide

## Explanation of nouns

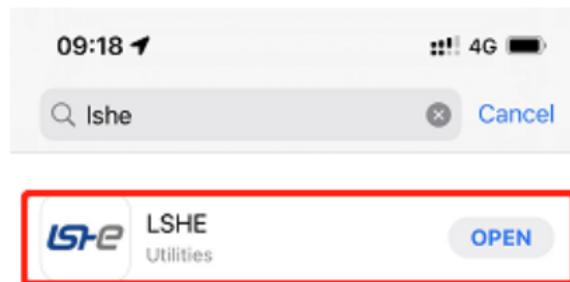
Noun	Explanation
Device	The object monitored by the APP, that is your inverter/energy storage machine.
Date logger	It refers to the data logger connected to the device, which can transmit the device data to the cloud for display through the data logger.

## 1 、 Quick start

### 1.1 Install the LSHE software APP

**IOS:** Apple App store search “LSHE”

**Android:** Google app store search “LSHE”



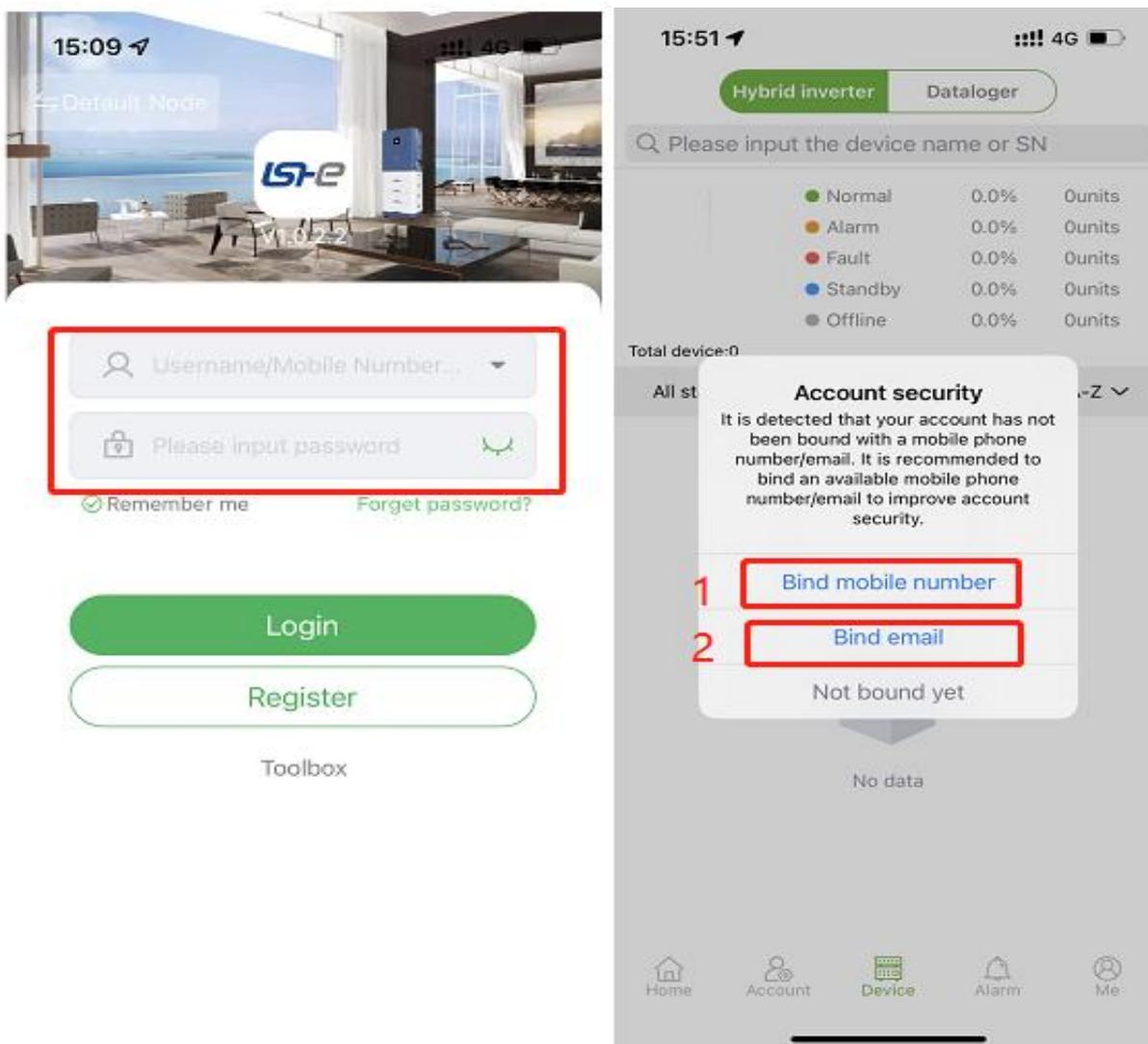
**QR code ( Only Android ) :**

Scan QR code with mobile browser to download APP



## 1.2 Login

Access the login page (as shown in the following figure), enter the account and password as required, you can bind a mobile phone or email.



## 1.3 Add device

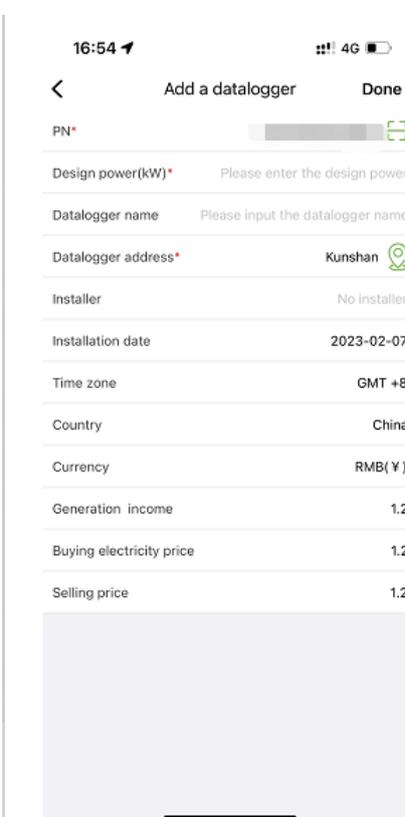
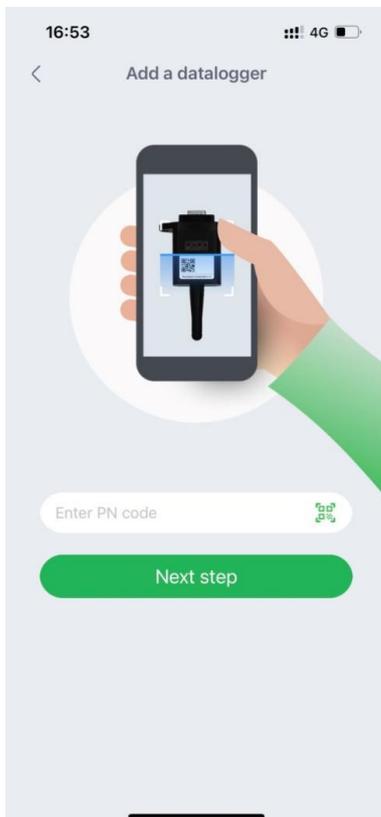
### Step 1: Entry

Go to the data logger management interface and click Add + icon in the upper right corner.



## Step 2: Add a device

Enter the PN number on the device or scan the QR code to complete the device information.



### Step 3: Add successfully

After adding a device, make sure that the device data can be migrated to the cloud.  
If the data logger does not have a network, data cannot be migrated to the cloud.



## 2 、 Device Monitor

### 2.1 Device Management

#### Device List

The device list displays all the devices under the current account. You can view the device status and basic parameters.



- **Green** indicates device is normal ;
- **Gray** indicates device is offline;
- **Red** indicates device failure;
- **Yellow** indicates device warning;

#### Device Details

## 1) Energy flow diagram

You can view the working status and real-time power of the device. The important parameters of the equipment are displayed below. Click the equipment icon to view the relevant parameters of the equipment, photovoltaic panel, power grid, battery and load.



## 2) Data charts

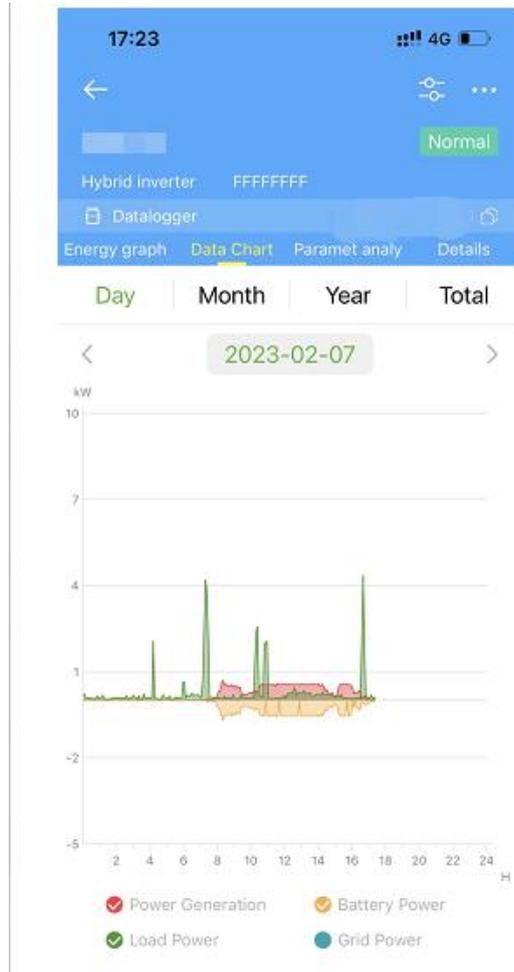
**You can view the total data chart of the device.**

**Day:** The 24-hour real-time power area chart of the current day. (Update data in 5 minutes)

**Month:** The column chart of the daily power consumption of the current month.

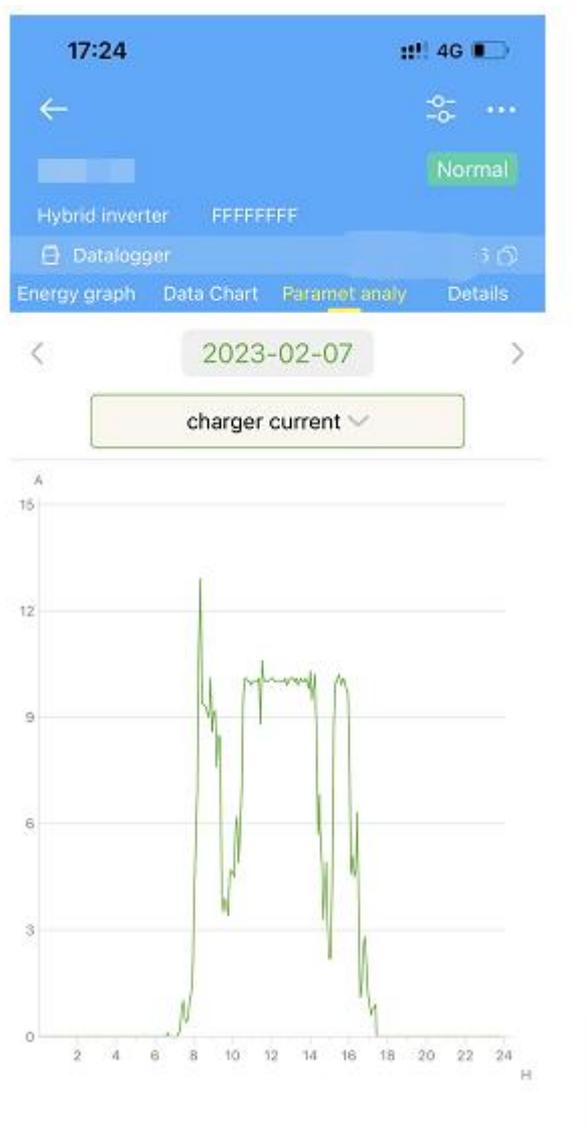
**Year:** The column chart of the monthly electricity consumption of the current year.

**Total:** the column chart of the power consumption during the entire lifetime of the equipment.



### 3) Parameter Analysis

You can select a device parameter or multiple parameters of the same dimension to view the line chart for data analysis and comparison.



## 4) Data details

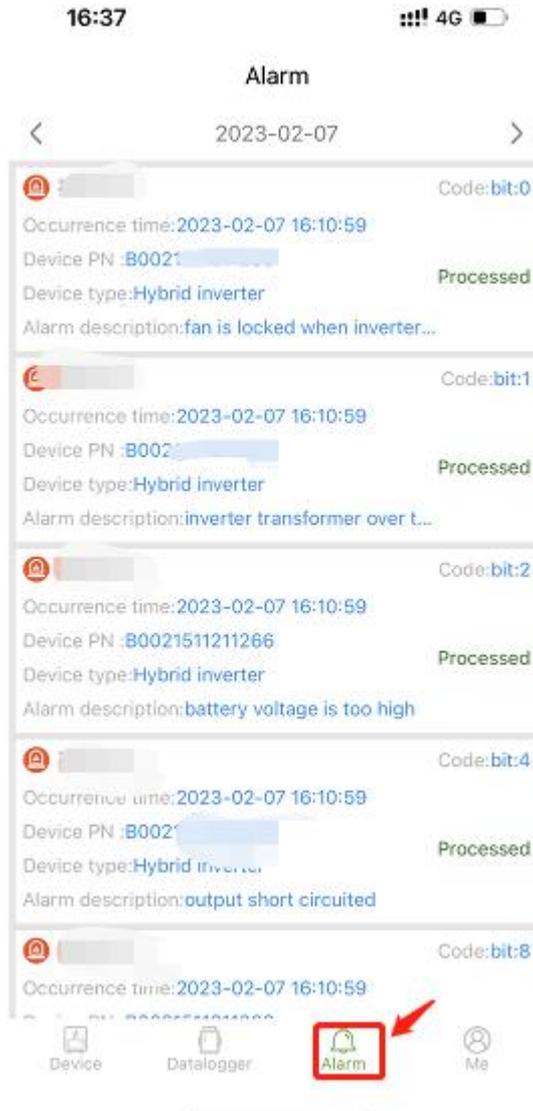
You can view the data details recorded by the device every five minutes.

The screenshot shows the 'Details' view in the LSHE app. At the top, the time is 17:24, and the status bar shows 4G and battery level. Below the status bar, there are navigation icons and a 'Normal' status indicator. The main content area displays a table of data for the timestamp 2023-02-07 17:22:55. The 'Details' menu item is highlighted with a red box.

Timestamp	2023-02-07 17:22:55
battery voltage	53.8V
inverter voltage	228.1V
grid voltage	228.0V
inverter current	0.0A
grid current	0.5A
load current	0.5A
PGrid	-73W
PLoad	71W
accumulated buy power	1027kWh
accumulated sell power	84kWh
accumulated load power	2797kWh

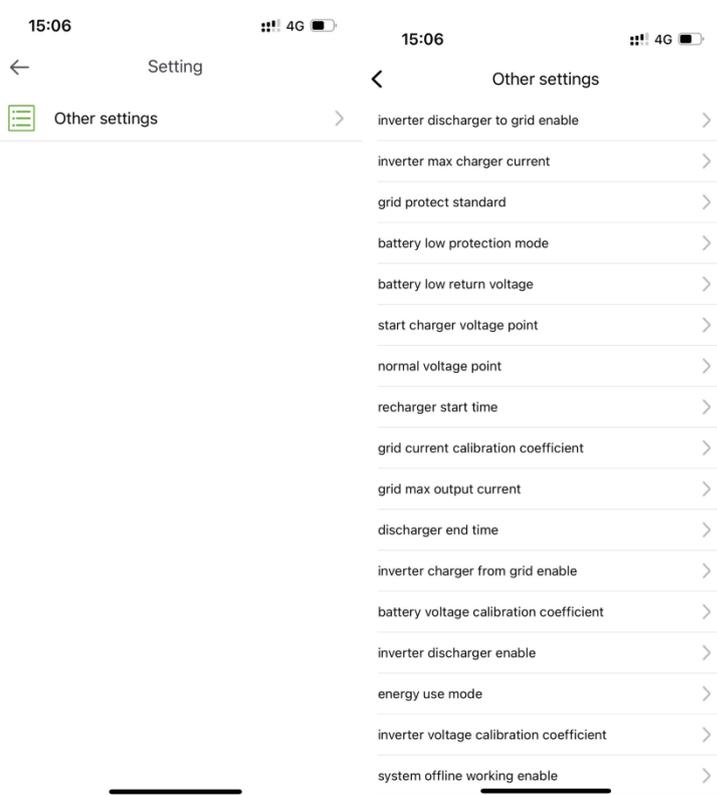
## 5) Equipment alarm

You can view all alarms and alarm statuses generated by the current device.



## 6) Equipment Control

Click the control icon in the upper right corner to issue commands to the device and read the current parameters.



## 7) View the number of collectors

Click the data logger PN to view the information of the data logger connected to the device.

The screenshot shows the app interface. On the left, a '储能机' (Energy Storage Unit) screen displays '所属数采器' (Associated Data Collector) with a red box around 'X211812C'. A red arrow points from this box to the right-hand screen. The right-hand screen shows the 'Basic info' for the data logger, including design power, installer, install date, and address.

**Basic info**

Design power (kW)	5.5 >
Installer	>
Install date	2021-10-15 >
Country	>
Province	>
City	>
County	>
Town	>
Village	>
Time zone	GMT +8 >
Address	湖南省长沙市开福区月湖街道匍园路月湖小区二期 >
Currency	€ >
Generation income	0.0 >
Buying electricity price	0.0 >

## 8) Edit the device name

Click in the upper right corner , click edit name to customize the device name.



## 9) Delete the device

Click in the upper right corner , click “delete device” to delete the device.

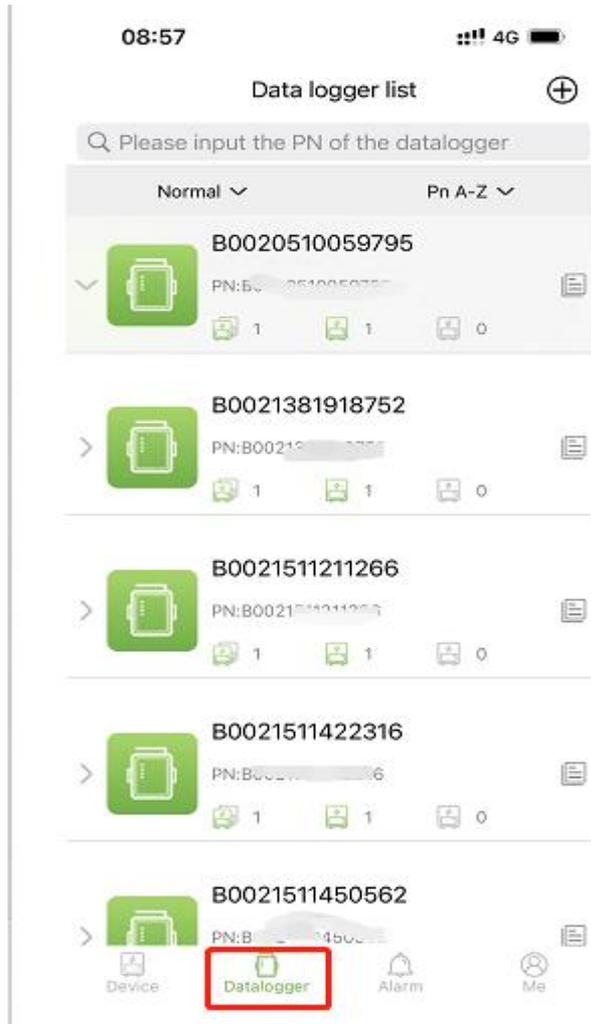
After the device is deleted, if the device has not been replaced, then when the current account adds the device again, you can still see the previous data on the cloud.



## 2.2 Data logger management

### Data logger list

Display all data loggers under your account. You can view the status, basic parameters, and connected devices of the data loggers.



- Green indicates the data logger is normal
- Gray indicates the data logger is offline;

## Data logger details

### 1) data logger information

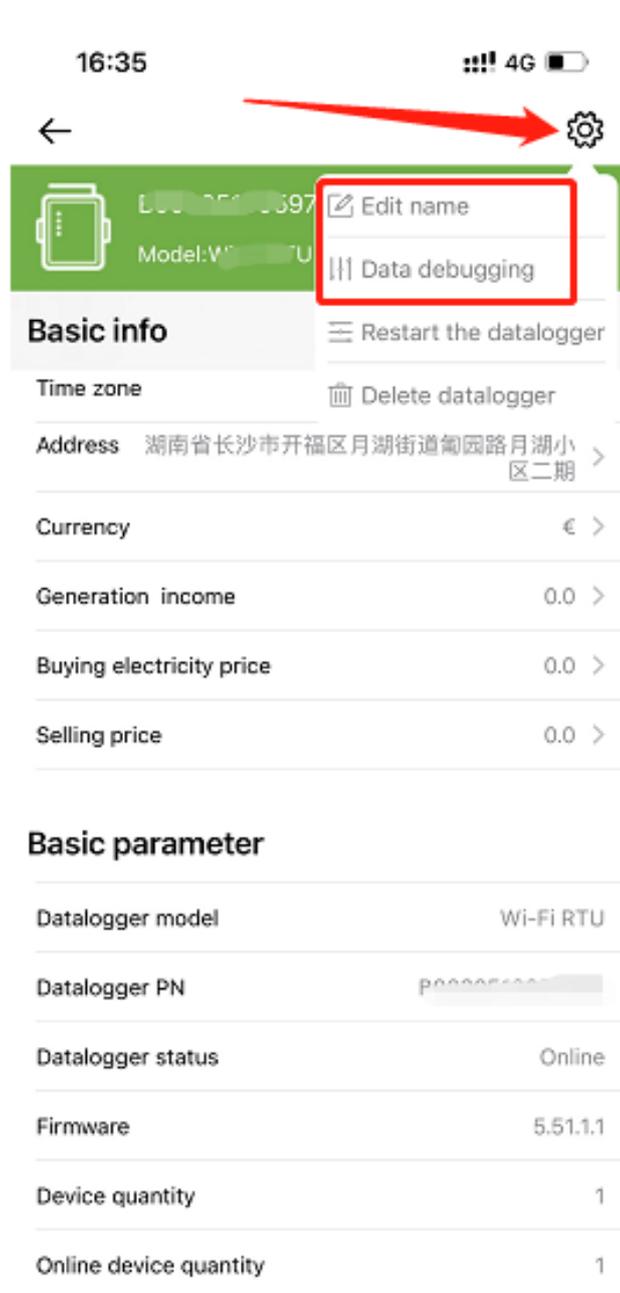
Click  Icon to view the data logger information.



Design power (kW)	5.5	>
Installer		>
Install date	2021-10-15	>
Country		>
Province		>
City		>
County		>
Town		>
Village		>
Time zone	GMT +8	>
Address	湖南省长沙市开福区月湖街道匍园路月湖小区二期	>
Currency	€	>
Generation income	0.0	>
Buying electricity price	0.0	>

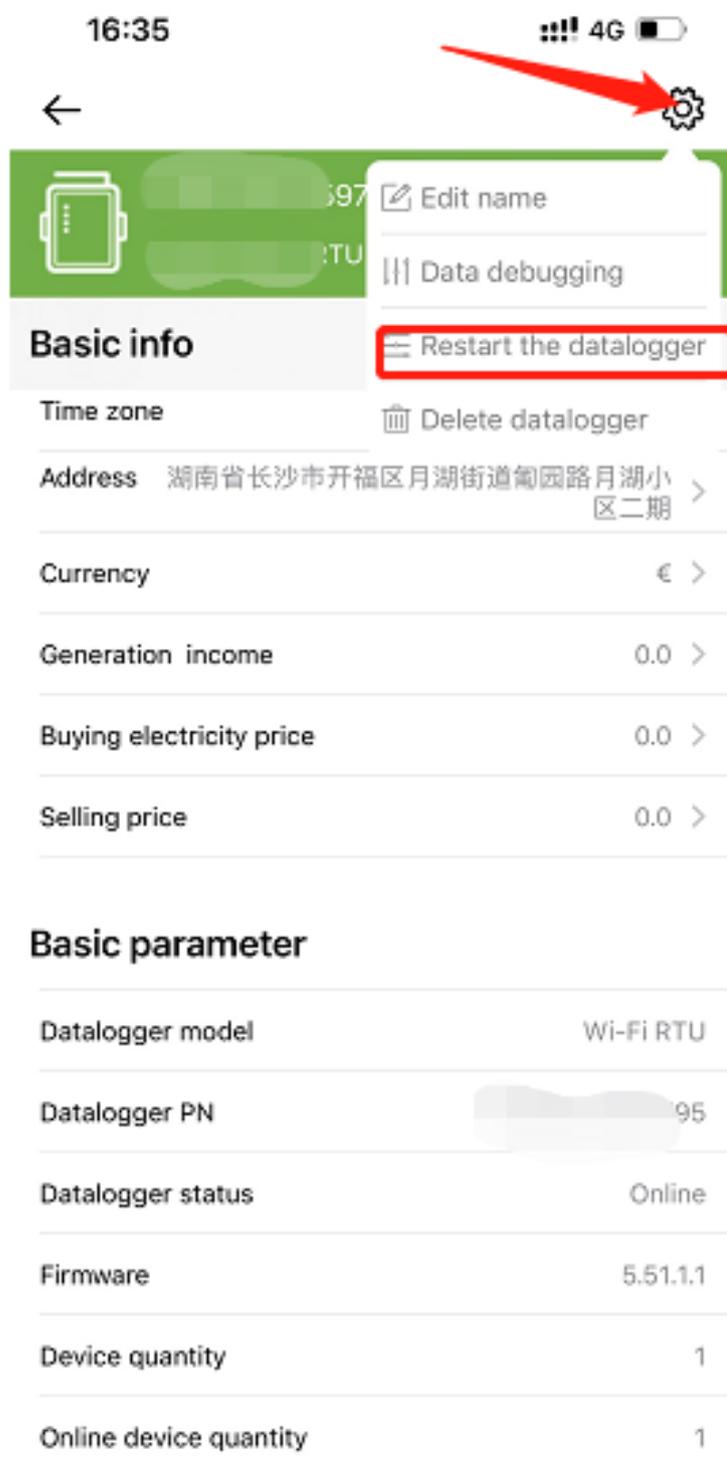
## 2) Debugging of Data Logger

By issuing hexadecimal debugging instructions to a device address, you can obtain device information for remote debugging.



### 3) Restart the data logger

This feature allows you to remotely restart the data logger.



## 4) Delete the data logger

You must delete device data before deleting your device account.

After the device and data logger are deleted, the next time you use the current account to add the device again, you can still see the data that was previously deployed to the cloud.



# Web Version User Guide

## Explanation of nouns

Noun	Explanation
Device	The object monitored by the APP, that is your inverter/energy storage machine.
Date logger	It refers to the data logger connected to the device, which can transmit the device data to the cloud for display through the data logger.

## Login

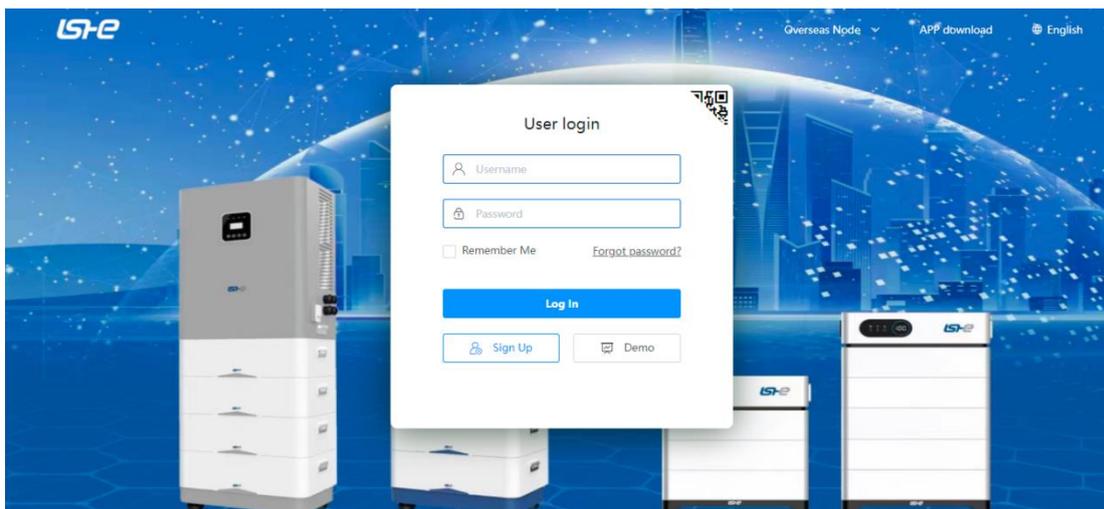
### 1、Website

Website : <https://lshe.dessmonitor.com>



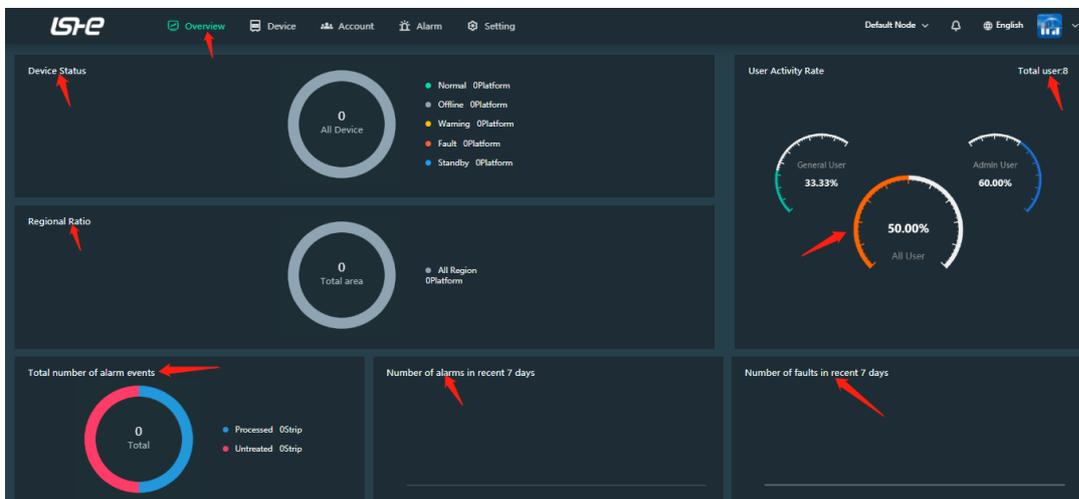
### 2、Login page

Go to the login page (as shown in the following figure), enter the use name and password as required.



### 3、 Overview after login

#### Login page 1-Overview



#### Login page 2-Device

The Device management page shows a table with the following columns:

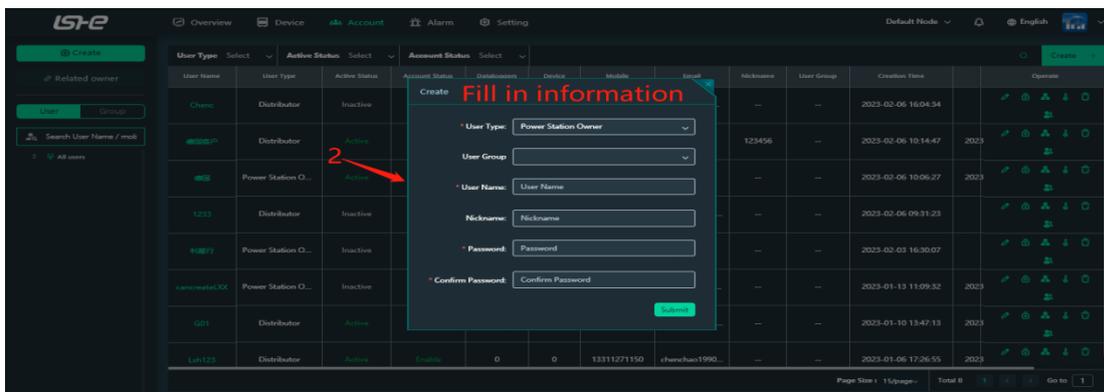
Device Name	Device SN	Device Status	Protocol	Datalogger PN	Device Address	Datalogger Alias	User	Device Model	Operation
No Data									

#### Login page 3-Account

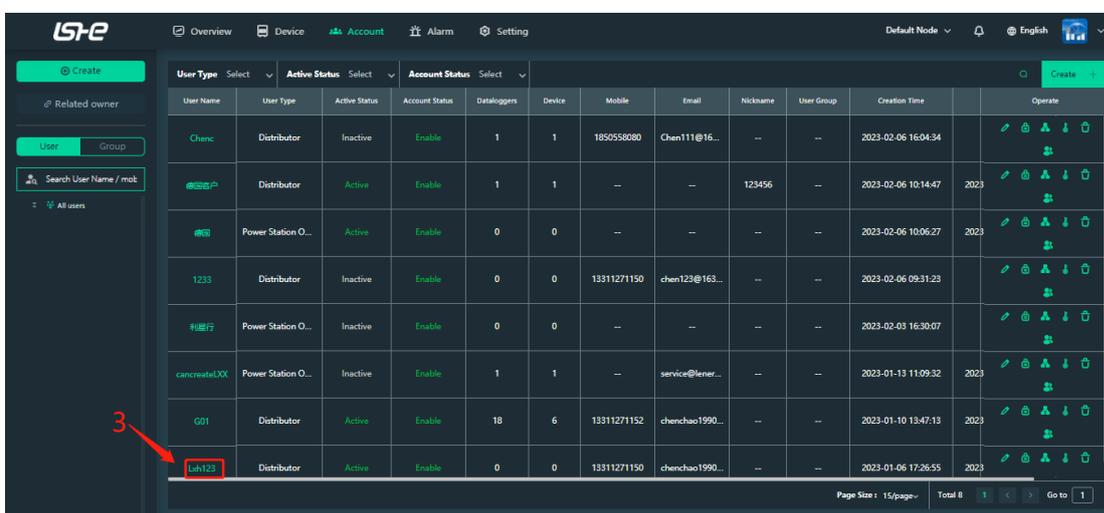
The Account management page shows a table with the following columns:

User Name	User Type	Active Status	Account Status	Dataloggers	Device	Mobile	Email	Nickname	User Group	Creation Time	Operate
Chenc	Distributor	Inactive	Enable	1	1	189558080	Chen111@16...	--	--	2023-02-06 16:04:34	Operate
陈超	Distributor	Active	Enable	1	1	--	--	123456	--	2023-02-06 10:14:47	2023
陈	Power Station O...	Active	Enable	0	0	--	--	--	--	2023-02-06 10:06:27	2023
1233	Distributor	Inactive	Enable	0	0	13311271150	chen123@163...	--	--	2023-02-06 09:31:23	Operate
陈超	Power Station O...	Inactive	Enable	0	0	--	--	--	--	2023-02-03 16:30:07	Operate
cancreateXXX	Power Station O...	Inactive	Enable	1	1	--	service@lsher...	--	--	2023-01-13 11:09:32	2023
G01	Distributor	Active	Enable	18	6	13311271152	chenchao1990...	--	--	2023-01-10 13:47:13	2023
Luh123	Distributor	Active	Enable	0	0	13311271150	chenchao1990...	--	--	2023-01-06 17:26:55	2023

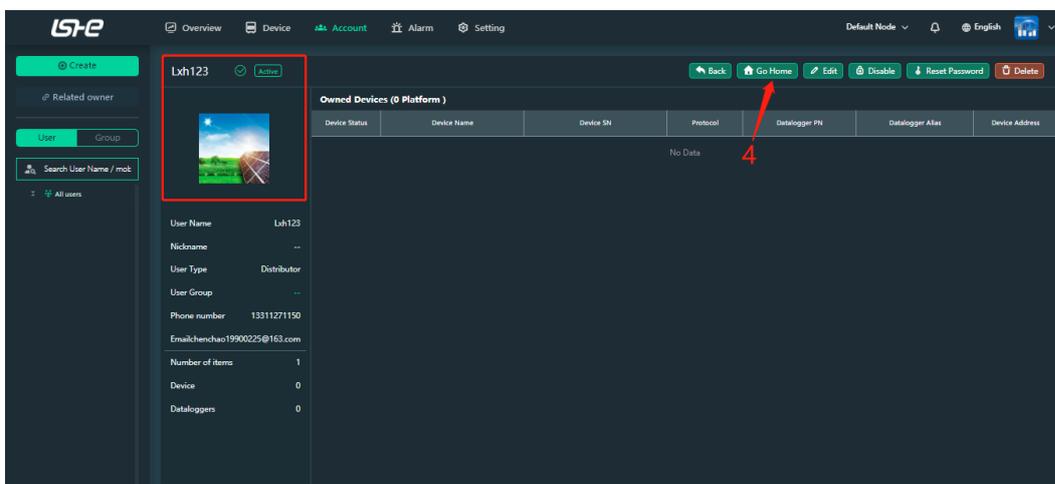
When creating an account, enter the user type, user name and password.  
(\* is mandatory)



#### 4、 Click the user name after setting up the account

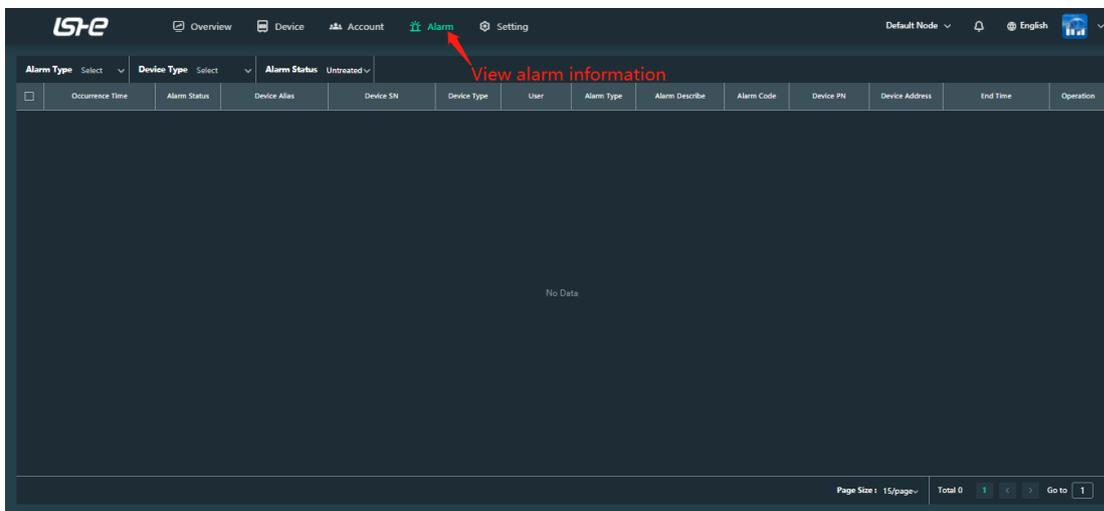


#### 5、 Click the “Go home”, after entering the page:



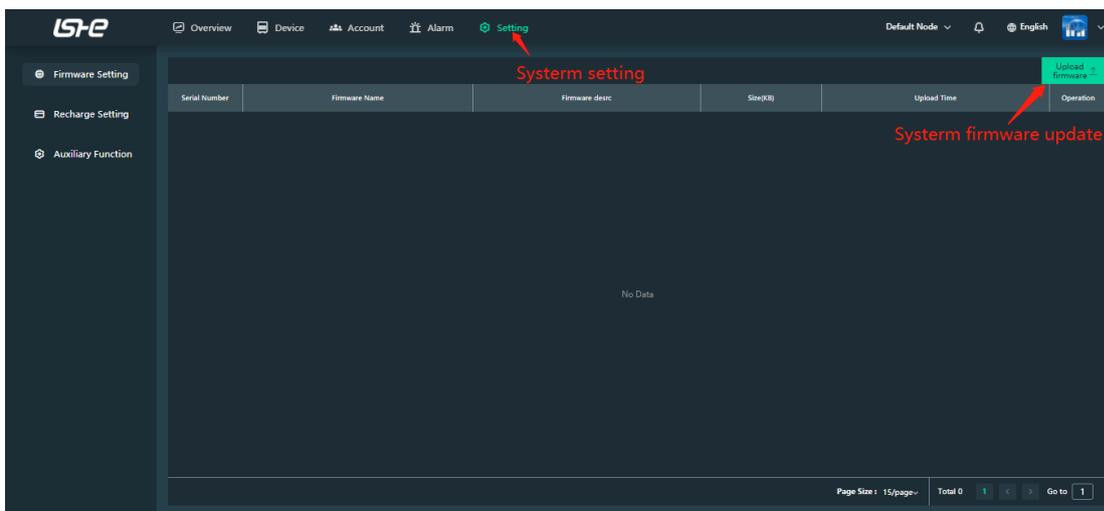
## 6、Viewing alarm information

If the energy storage station has alarm information, it will be displayed on this page.



## 7、System setting

System firmware update online

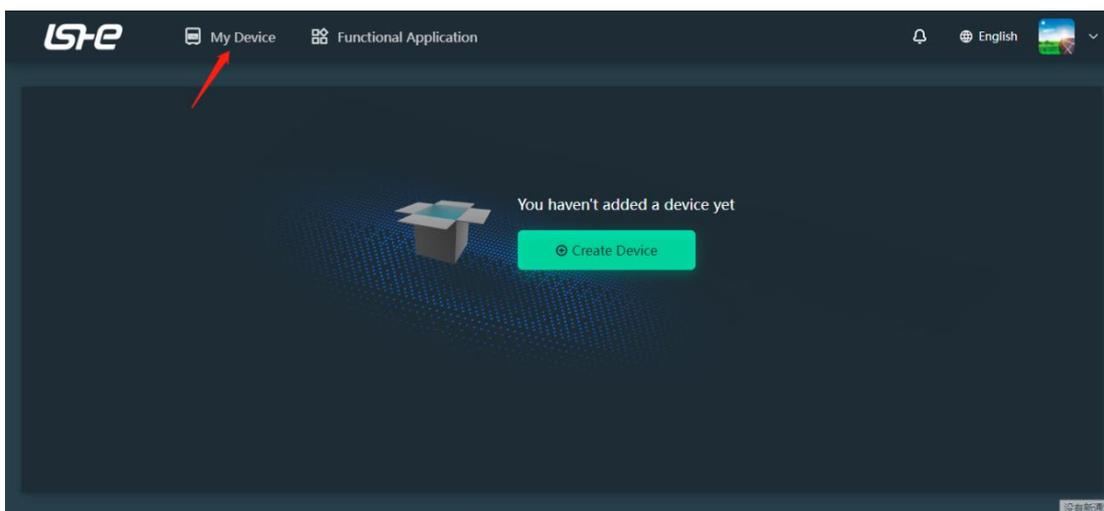


## QuickStart

Add device on the end user page.

### Step 1 : Entrance

"My Devices" page -- click "Create Device"



## Step 2 : Add Device

Input the PN number on the device or scan the QR code to improve the device information, then add successfully.

## Step 3 : Add successfully

After the device is added, you can view the device data on “my devices” page.



**If your Data logger is a Wi-Fi module, please know the following information.**

- 1、 The data logger of the Wi-Fi module does not have communication capability itself, so it cannot transmit data directly after adding.

- 2、 If you want your data logger to have communication capability and view device data, you need to configure the network through the APP-based network distribution tool.
- 3、 For the specific network allocation process of APP, please check the network configuration of mobile APP.

## My Device

### Device management

“My Devices”page allows owners to more quickly monitor the health of individual devices.

### My Device

The left side of my device page shows the device list of all devices under the current account (if there is only one default item), and the right side shows the device (a maximum of 5 entries can be displayed) details of the selected device.



- Green indicates that the device is working properly  ;
- Gray indicates that the device is offline  ;
- Red indicates device failure  ;
- Yellow indicates device warning  ;
- Blue indicates device standby  ;

## Device details

### 1. Energy flow diagram

The flow diagram shows the working status and real-time power of the device.

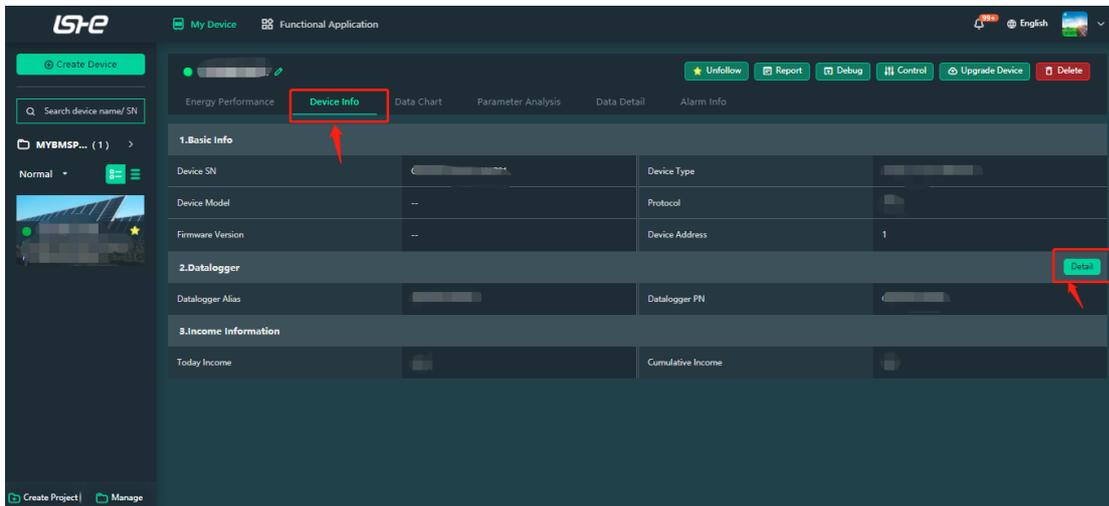
On the right side, you can select the real-time parameters of the device that you want to follow. You can click the device icon to view the parameters of the device, photovoltaic panel, power grid, battery and load.



### 2. Device information

You can view the information about the device.

You can click "Details" in the data logger module to view data logger information.



### 3. Date chart

**You can view the device data chart (the date can be arbitrarily chosen).**

**Real-time power:** real-time power area map for 24 hours on that day. (Update data every 5 minutes)

**Current month electricity:** bar chart of daily electricity quantity in the current month.

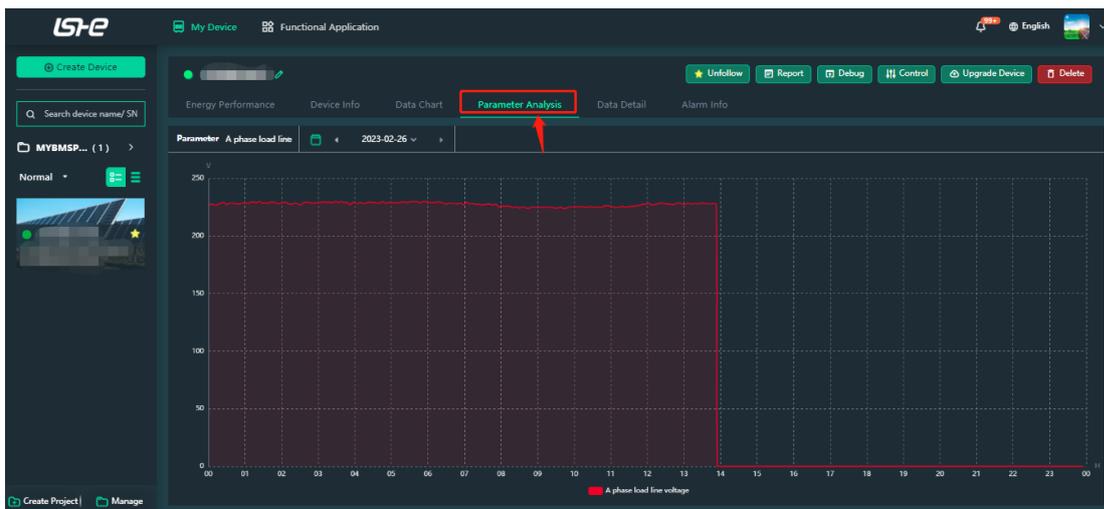
**Current year electricity:** bar chart of monthly electricity quantity in the current year

**Total electricity:** a bar chart of the power of the device during its entire life.



## 4. Parameter analysis

You can select a parameter of the device to view the change of the device in one day for data analysis.



## 5. Data detail

You can view the data details recorded by the device every five minutes.  
Click Export Report button to export all data details of the current day.

Timestamp	A phase line voltage...	A phase line current...	A phase power(W)	B phase line voltage...	B phase line current...	B phase power(W)	C phase line voltage...	C phase line current...
2023-02-26 14:17:21	228.4	3.5	-41	227.2	1.8	-40	228.8	2.3
2023-02-26 14:12:32	228.2	2.6	-110	227.0	1.8	-51	228.7	2.1
2023-02-26 14:07:43	227.8	2.6	-66	227.1	2.0	-51	228.7	2.1
2023-02-26 14:02:53	227.4	3.5	-52	227.3	1.9	-49	228.4	2.0
2023-02-26 13:58:04	227.6	2.9	-52	227.6	1.9	-52	228.3	2.2
2023-02-26 13:53:15	227.5	1.9	-36	227.6	1.6	-64	228.3	2.1
2023-02-26 13:48:26	227.9	3.0	-47	228.0	1.6	-69	228.4	2.3
2023-02-26 13:43:37	228.6	3.1	-54	227.7	1.5	-49	228.4	2.4
2023-02-26 13:38:47	228.7	3.1	-40	227.1	1.8	-137	228.2	2.5
2023-02-26 13:33:58	229.0	2.0	-52	226.9	1.7	-29	228.9	2.2
2023-02-26 13:29:09	228.5	3.0	-55	226.9	1.7	-37	228.4	2.2
2023-02-26 13:24:20	228.4	3.0	-50	226.9	1.5	-56	228.6	2.3
2023-02-26 13:19:30	228.6	1.9	-54	227.4	1.7	-39	228.2	2.3

## 6. Alarm information

You can view all alarms and alarm status generated by the current device.

Occurrence Time	Alarm Status	Device Alias	Device SN	Device Type	Alarm Type	Alarm Describe	Alarm Code	Device PN	Device Address	End Time	Operation
No Data											

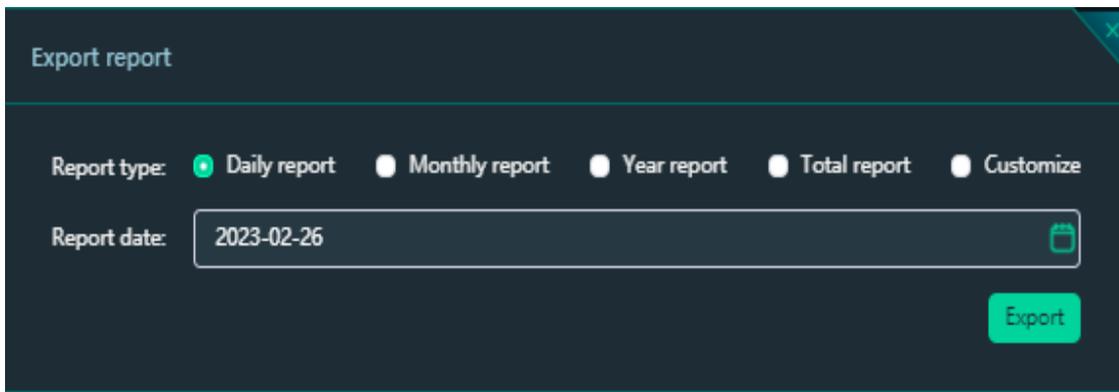
## 7. Device operation

### Follow/Unfollow

After following a device, it will be placed at the top of the device list.

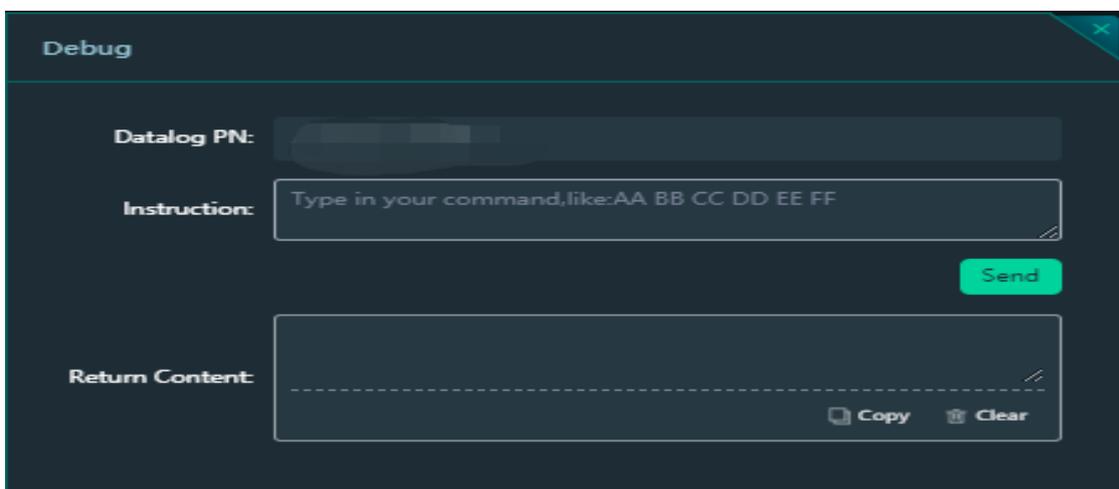
## Report

You can export the daily, monthly, year and total electricity reports of the device.



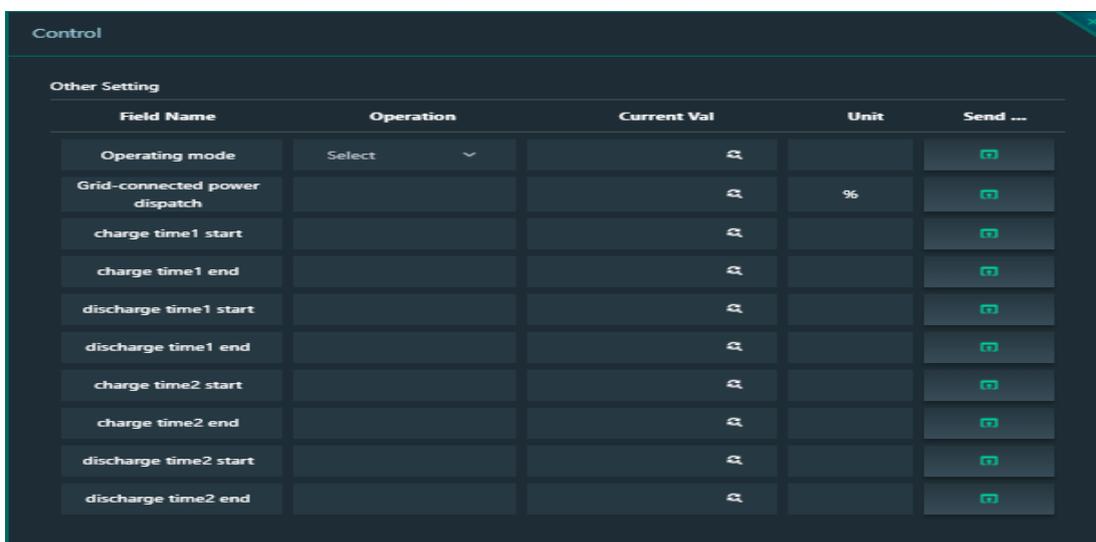
## Debug

By sending data debugging commands to devices, you can obtain device information.

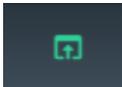


## Control

This function allows you to deliver commands and read the current parameters on the device.



Read the current data: In the "Current Value" column, click  to get the current data.

Deliver instruction: In the "Operation" column, enter the content to be set, and then click  to set.

## Upgrade Device

This function can be used to upgrade the device remotely (see Device Upgrade for details).

## Delete

After a device is deleted, its data is no longer stored in the cloud. If the same device is added to the current account after the device is deleted, the previous cloud data can still be seen.

# Project management

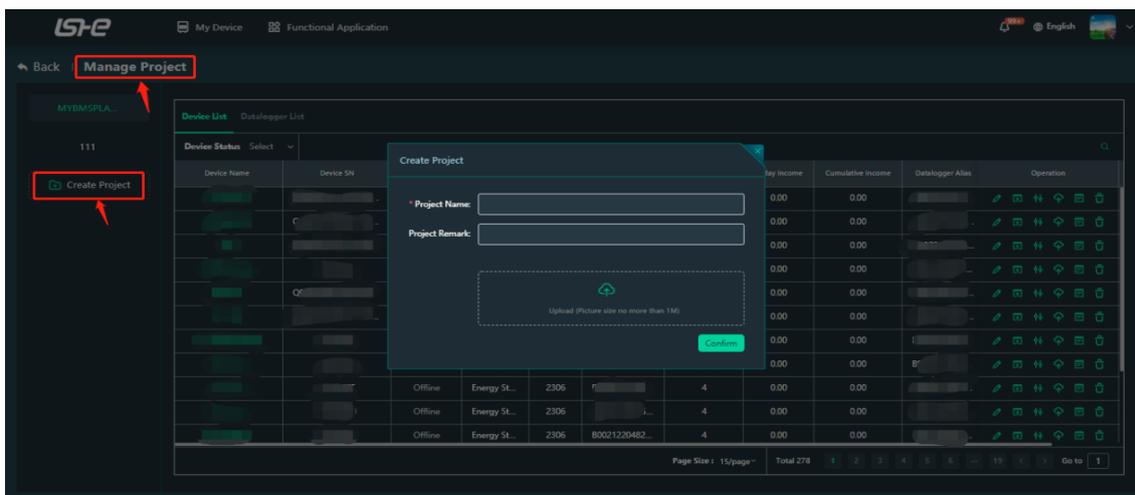
The project management function is mainly for the convenience of users to manage with a large number of devices. This function is not recommended if there are fewer storage devices in the home.

## New project

Entry 1: "My Device Page" -- "New Project"



Entry 2: "My Device Page" -- "Manage Project" -- "Create Project"



## Project management

On the right side of project management, you can see the list of devices and date loggers under this item.

## How do I switch items in my device page?

Each account will have a default project. If multiple projects are created, you can click on the project name to switch projects.



## Function application

## Data logger management

## List of Data logger

Display all data loggers under the account.

Datalogger Name	Datalogger PN	Status	Datalogger Type	Communicati...	Load	Firmware Version	Signal	Operation
		Offline	GPRS RTU	0	1	3.37.7		
		Offline	GPRS RTU	0	1	3.37.7		
		Offline	GPRS RTU	0	1	3.37.7		
		Offline	GPRS RTU	0	8	5.06.3		
		Normal	Wi-Fi RTU	0	1	5.51.1.1		
		Offline	Wi-Fi RTU	0	1	5.06.1		
		Offline	Wi-Fi RTU	0	1	5.06.3		
		Offline	Wi-Fi RTU	0	1	5.06.1		
		Offline	Wi-Fi RTU	0	1	5.06.1		
		Offline	Wi-Fi RTU	0	1	5.06.1		
		Offline	Wi-Fi RTU	0	1	5.06.1		
		Offline	Wi-Fi RTU	0	1	5.06.3		
		Offline	Wi-Fi RTU	0	1	5.51.1.1		

- Green indicates the data logger is working properly  ;
- Gray indicates the date logger is offline  ;

## Data logger details

### 1. Data logger information

Click on the Data logger PN to view the information of the devices connected to the Data logger.

Device Name	Device SN	Device Status	Device Type	Device Model	User	Administrator	Device Address	Protocol
No device can be found								

### 2. Data logger debugging

You can send hexadecimal debugging commands to a device address to obtain device information for remote debugging.

#### Debug

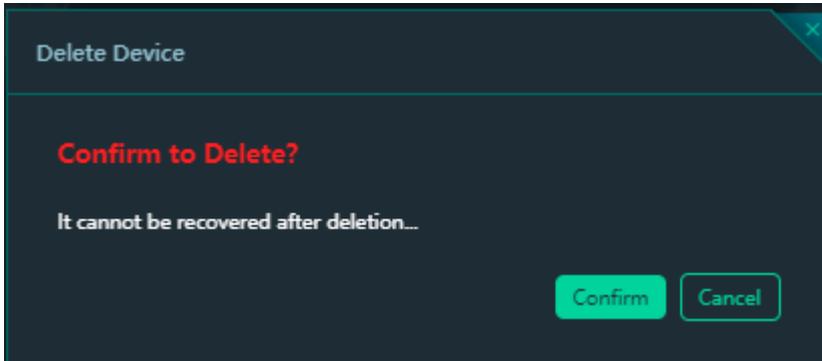
Datalog PN:

Instruction:

Return Content:

### 3. Delete the Data logger

Delete the device before deleting the Data logger.

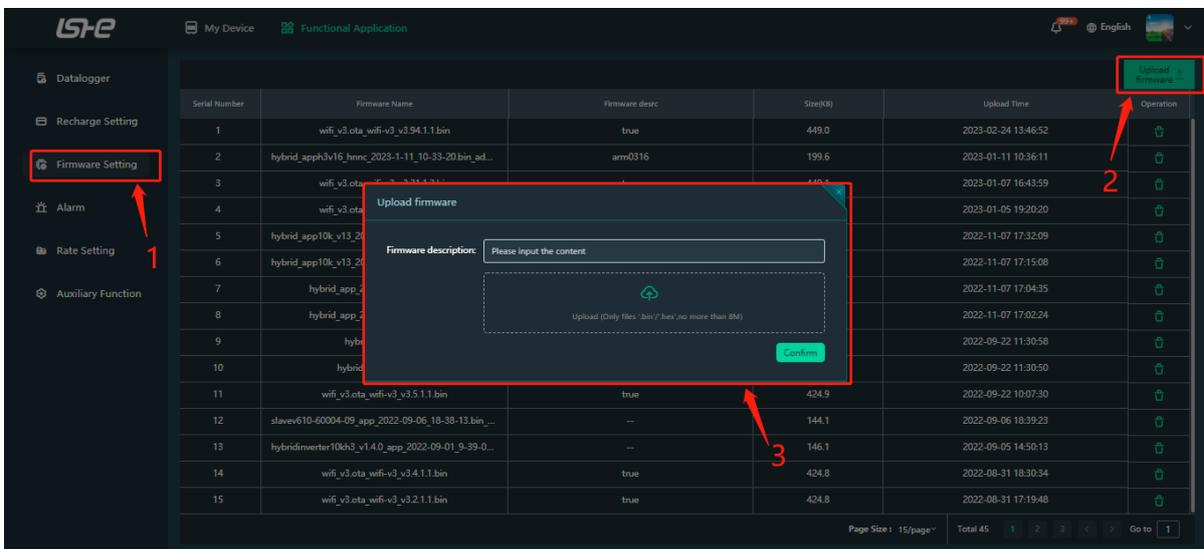


## Remote firmware upgrade

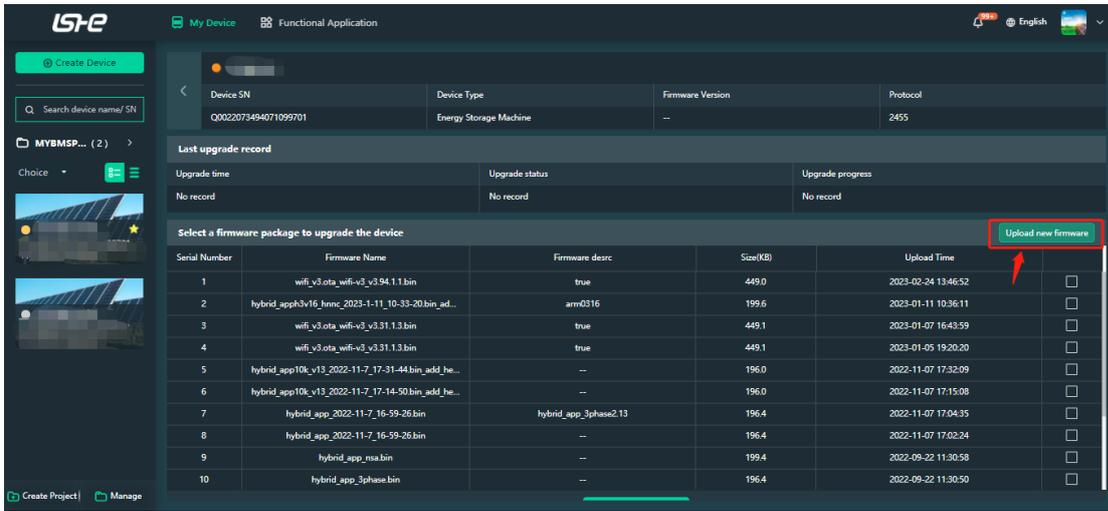
### Firmware management

#### Upload firmware

Entry 1: Click "Functional Application" -- "Firmware Setting" -- "Upload Firmware" to upload firmware.



Entry 2: Click on "My Device" -- Find the device to upgrade -- click on "Device Upgrade" -- click on "Upload Firmware".

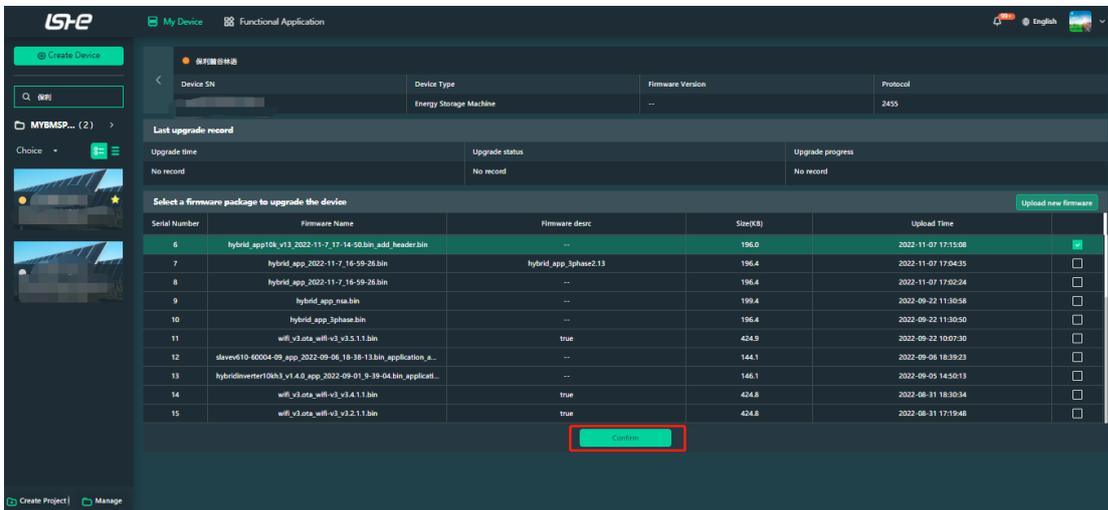


## Management Setting

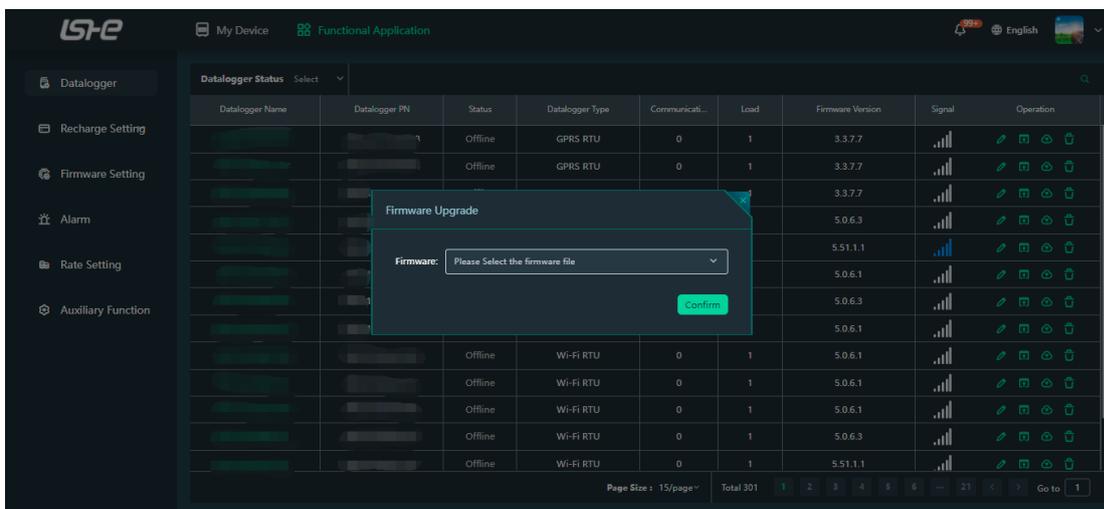
You can manage all uploaded firmware by clicking "Feature Application" - "Firmware Setting".

## Remote upgrade

Click on "My Device" - Find the device you want to upgrade - click on "Device Upgrade" - select the firmware package - click on "confirm".



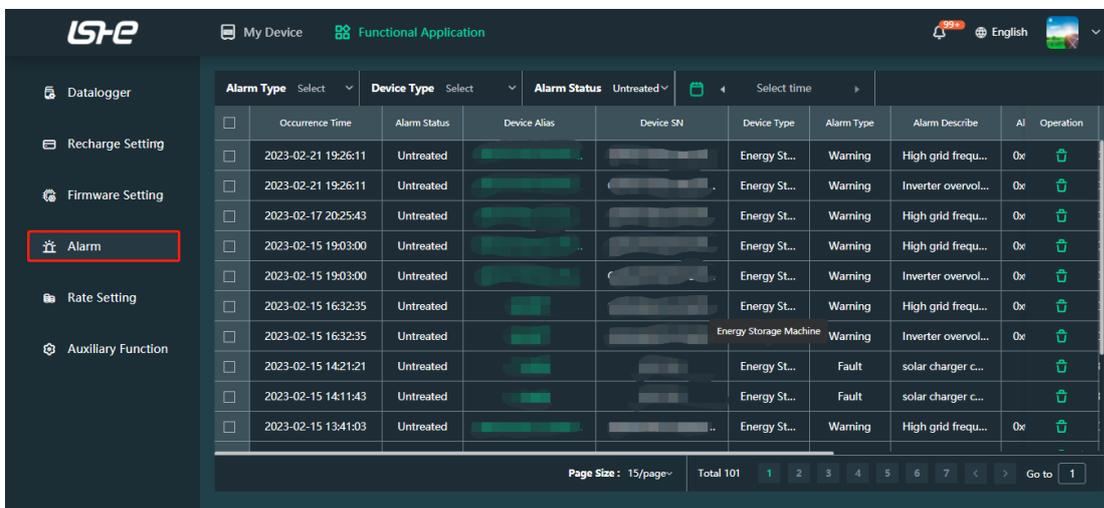
Finally, you need to select the firmware type and baud rate of the device, and click “confirm” to upgrade the device.



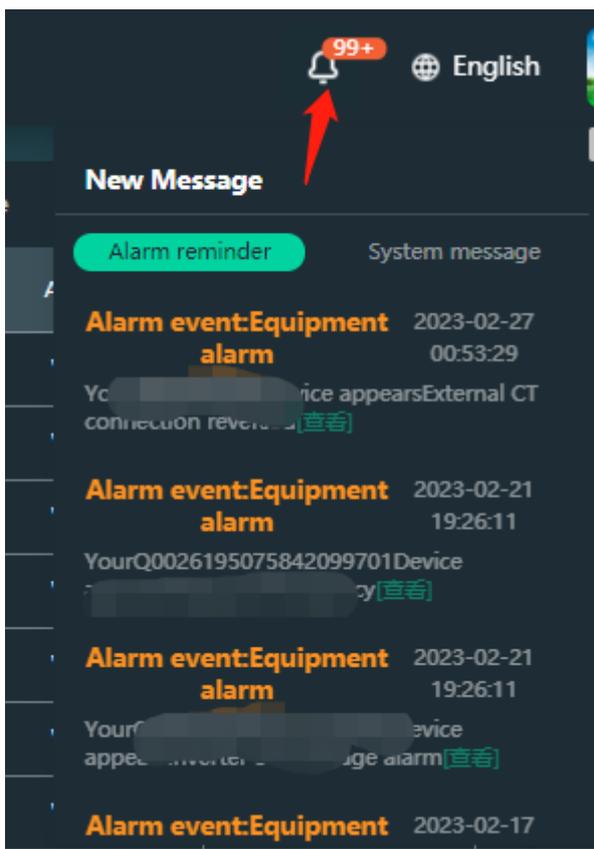
## Alarm management

### Alarm list

The alarms of all devices under this account can be monitored and filtered by time.



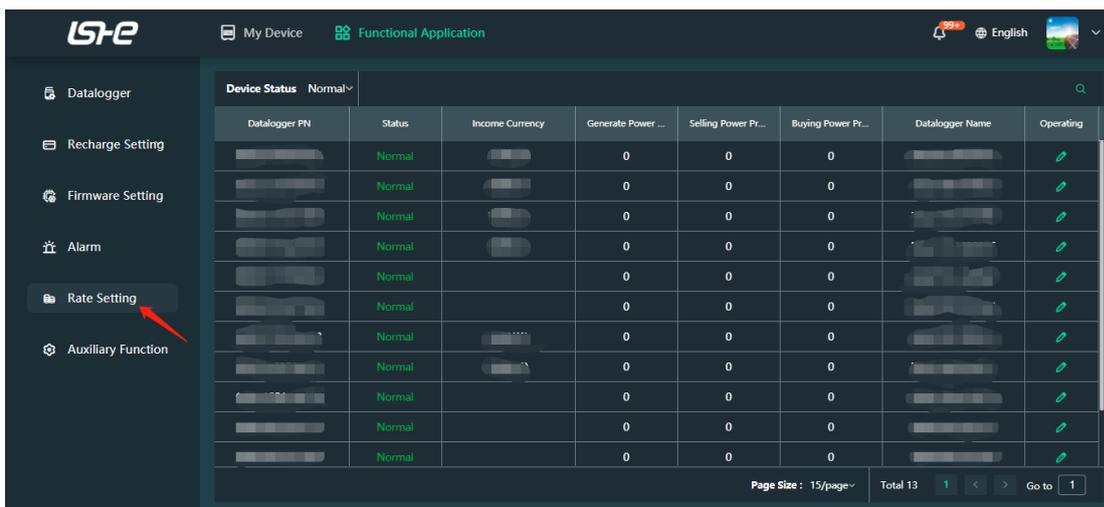
You can also view all unhandled alarms in the message icon  on the top right.



## Rate setting

Rates can be set for device.

Revenue = generate power price x generation power



## Account correlation

## Account security

To ensure that your account cannot be recovered due to loss, you are advised to bind at least one email or mobile phone number to your account.

Click "Account Name" -- "Personal Information". You can bind your mobile phone/email address to improve the security of the account, or change the password.



## Forget your password

If you forget your password during login, you can click the "Forget password" button on the login page. The energy storage system supports two ways to retrieve your password through your mobile phone number and email address.

## Contact information

When you encounter problems such as failure to upload data on the data logger, please refer to the above solution first. If the problem is still unresolved, please contact our after-sales.



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