

Force H3_Wi-Fi Portal

Introduction

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This document is for Pylontech products end-users to register on the Wi-Fi portal to monitor your battery system status and acquire battery information.

NOTE: Make sure the battery system is **Power ON** when you connect it to the online platform.

1. Operation on Personal Computer(PC)

1.1 Connection for your battery system to the online platform

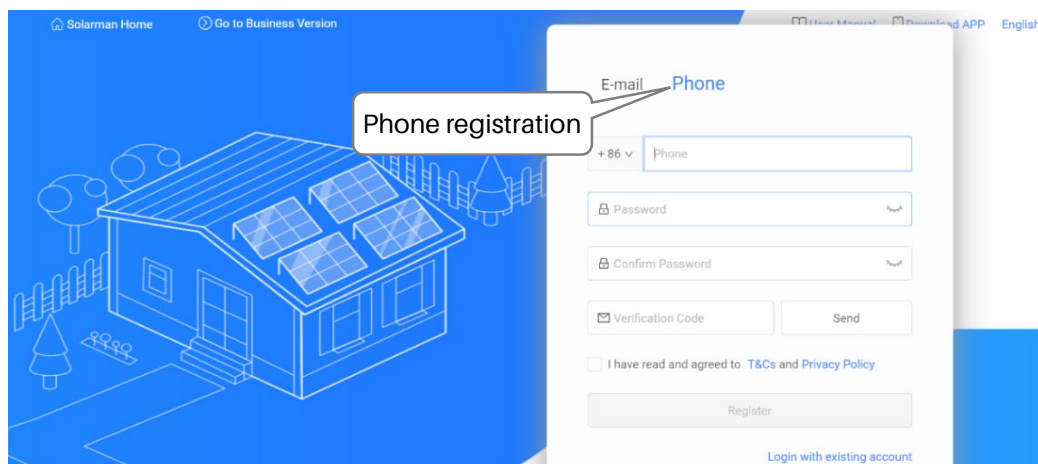
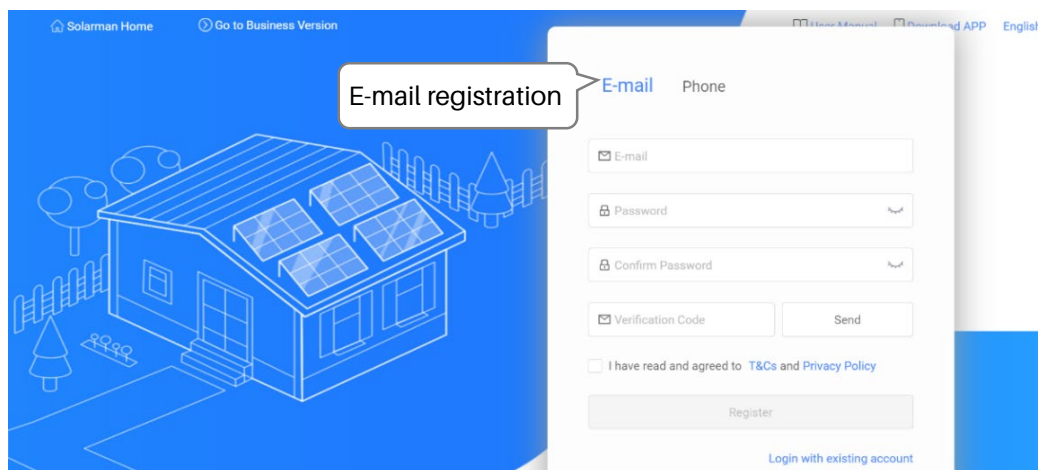
STEP 1: Registration and Login

(1) Go to the website <https://home.solarmanpv.com/login>.

(2) Choose either method below to register an account:

- **E-mail registration**
- **Phone number registration**

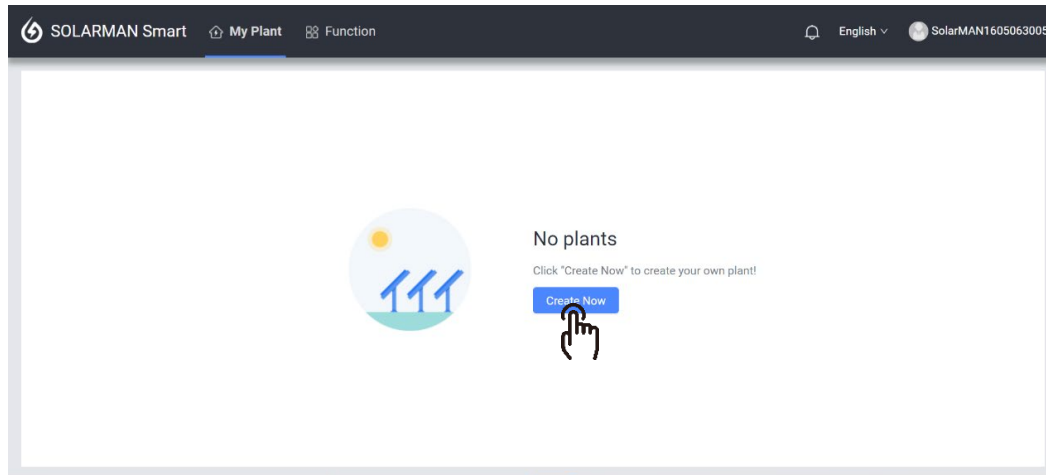
NOTE: The Phone registration is currently **only supported** in six countries: China, the Netherlands, the United States, Brazil, Nigeria and Saudi Arabia. It is recommended to choose **E-mail registration**.



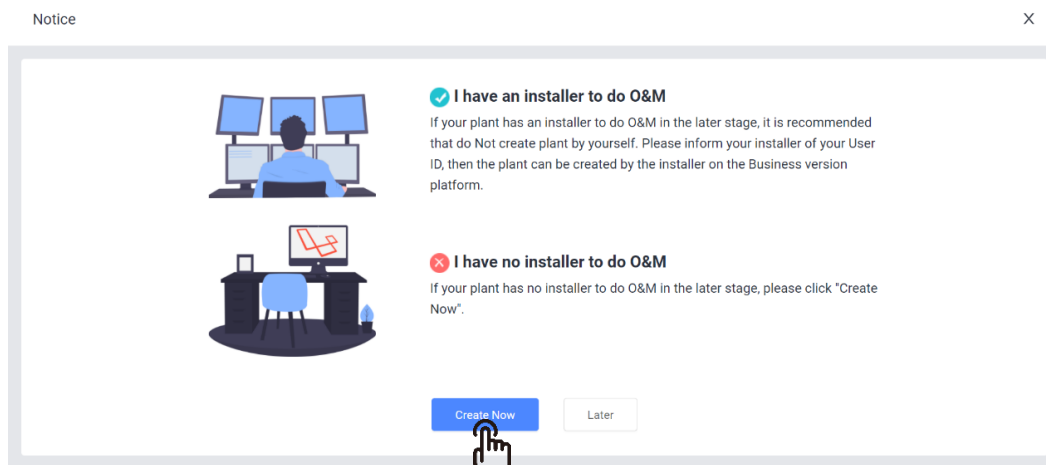
STEP 2: Create a new plant

After login, you will be prompted to create a new plant. Follow the steps below to proceed.

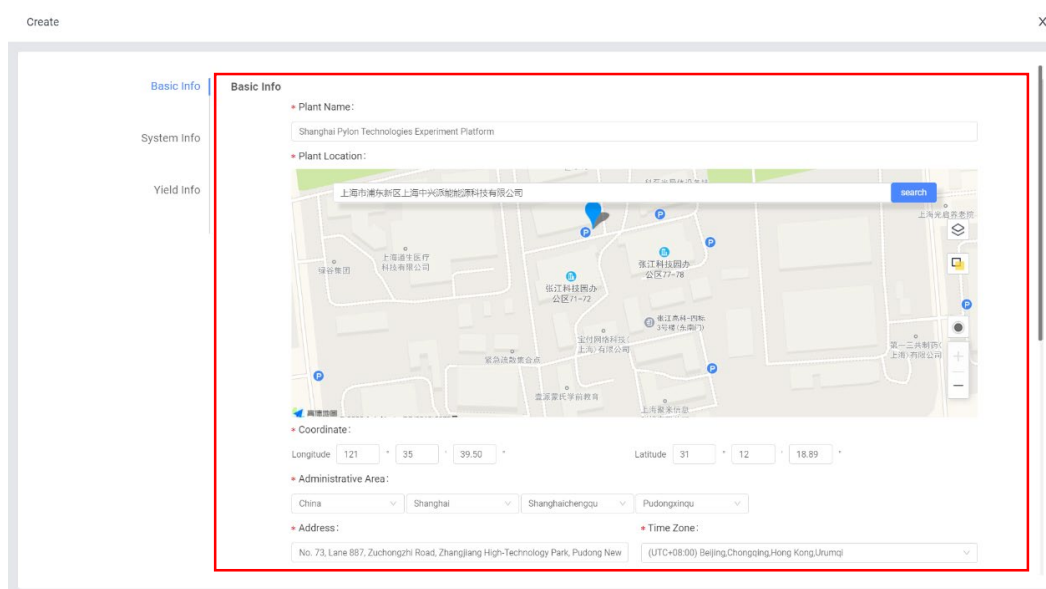
(1) Click "Create Now".



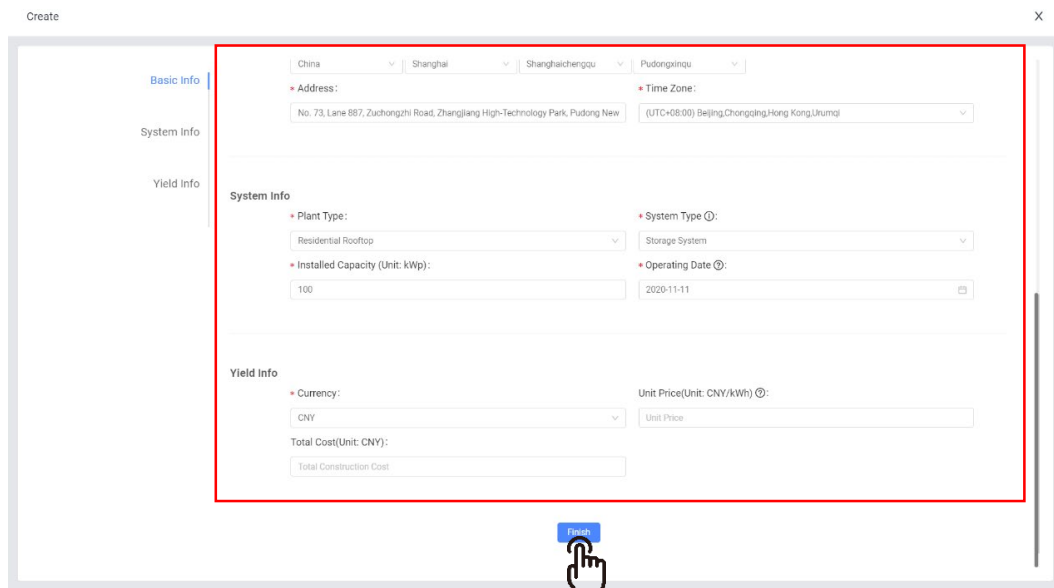
(2) Click "Create Now".



(3) Fill the **Basic Info** required.



(4) Fill the **System Info** and **Yield Info** required. And click "Finish".

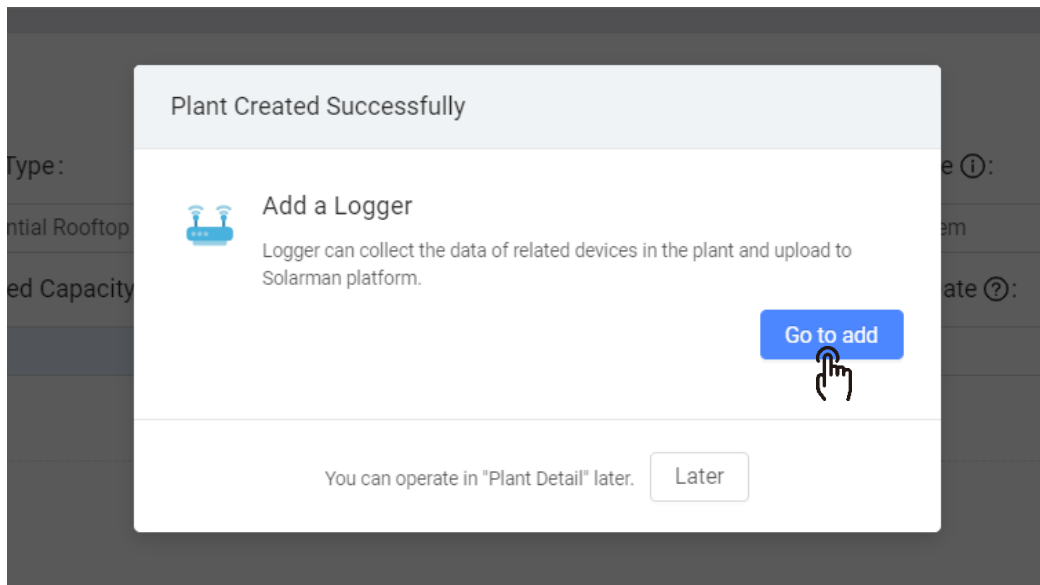


The screenshot shows a 'Create' form with a sidebar on the left containing 'Basic Info', 'System Info', and 'Yield Info'. The main form area is divided into three sections: 'Basic Info', 'System Info', and 'Yield Info'. The 'System Info' section includes fields for 'Plant Type' (Residential Rooftop), 'System Type' (Storage System), 'Installed Capacity (Unit: kWp)' (100), and 'Operating Date' (2020-11-11). The 'Yield Info' section includes fields for 'Currency' (CNY), 'Unit Price (Unit: CNY/kWh)' (Unit Price), and 'Total Cost (Unit: CNY)' (Total Construction Cost). A red box highlights the 'System Info' and 'Yield Info' sections. A blue 'Finish' button is located at the bottom center, with a hand cursor pointing to it.

STEP 3: Add a logger

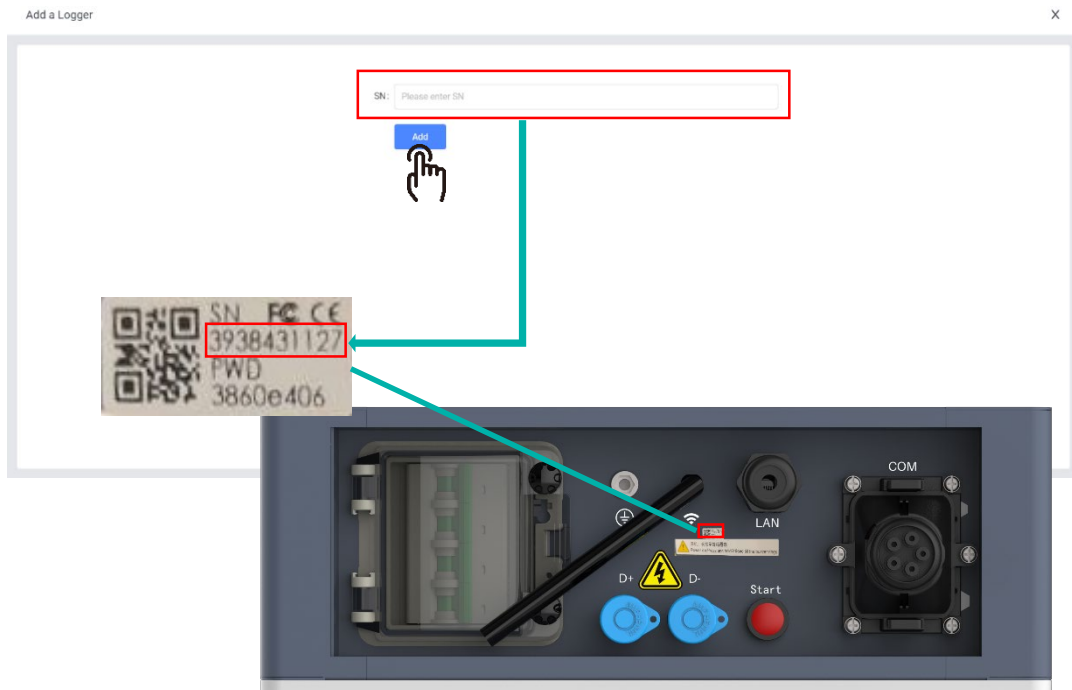
After the plant creation, the system will prompt to add a logger. Follow the steps as below:

(1) Click "Go to add".

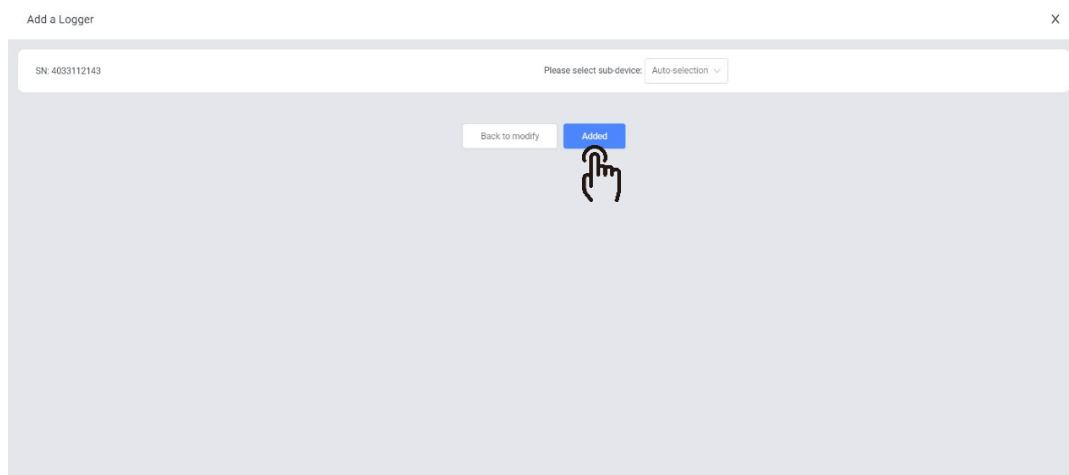


The screenshot shows a 'Plant Created Successfully' dialog box. The dialog has a title bar 'Plant Created Successfully' and a main content area. The main content area contains a blue icon of a logger, the text 'Add a Logger', and a paragraph: 'Logger can collect the data of related devices in the plant and upload to Solarman platform.' Below this text is a blue 'Go to add' button with a hand cursor pointing to it. At the bottom of the dialog, there is a line of text: 'You can operate in "Plant Detail" later.' followed by a 'Later' button.

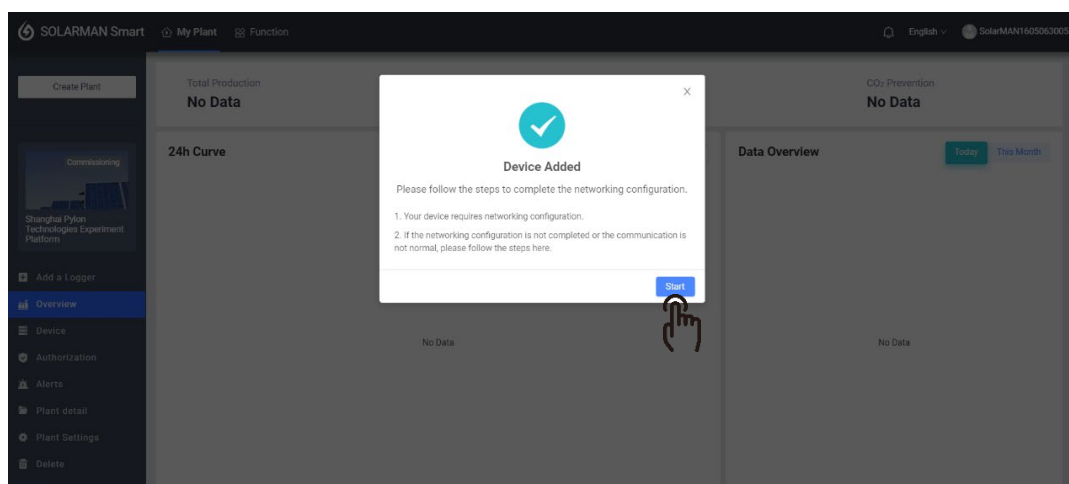
- (2) Find the SN NO.* in the label on the product body and fill in the blank. Then click "Add". (**NOTE:** The SN NO. differs based on your practical product.)



- (3) Click "Added".



- (4) Now the device is added. Click "Start" to continue.



STEP 4: Network Configuration (choose method A or B)

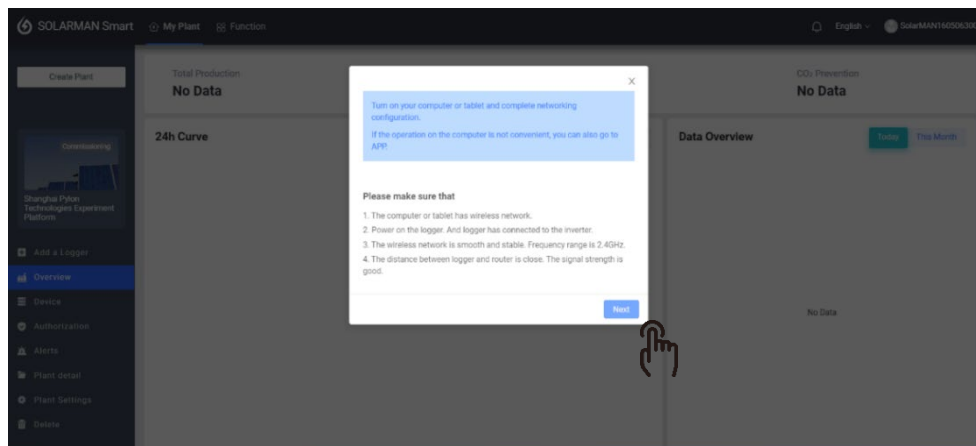
A. Use a network cable for connection (a network interface is required in this case).
Using a regular network cable, connect one terminal to the home router and the other to the BMS LAN port. Then the device will automatically connect to the network.

NOTE: This automatic connection takes about **10 minutes**, during which time you just need to wait and do nothing extra.

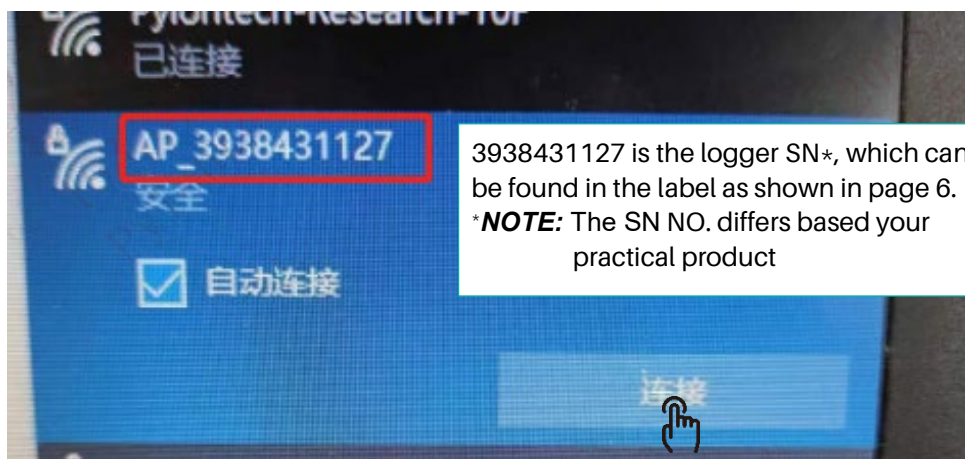


B. Connect through Wi-Fi on a PC (Wi-Fi is required in this case).
Follow the steps below for logger network configuration.

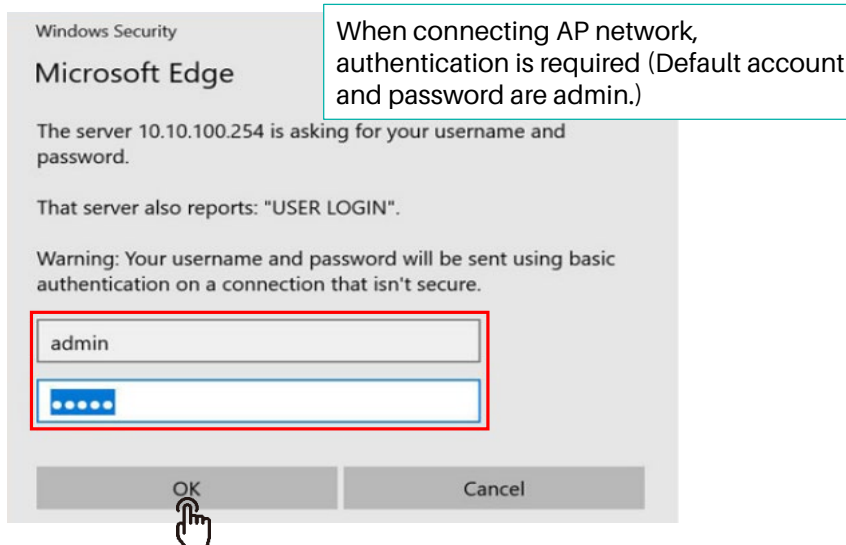
(1) Click "Next".



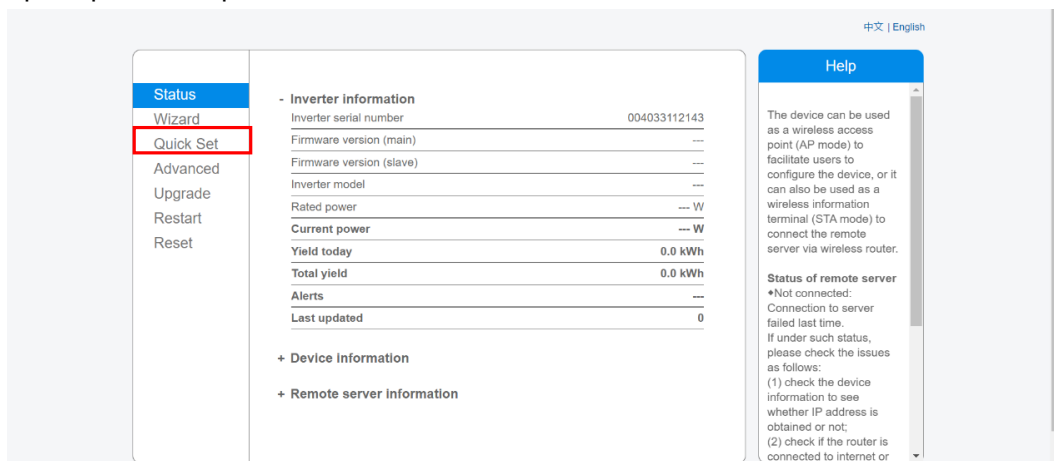
(2) Go to wireless network list and connect to "AP_3938431127".



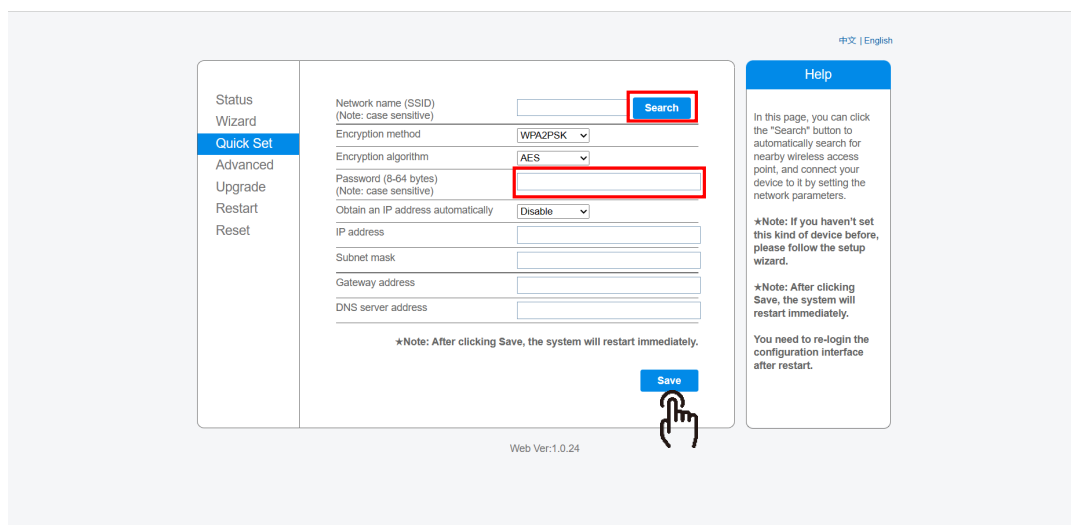
- (3) Open the browser and enter "10.10.100.254". Input the username and password. Then click "OK".



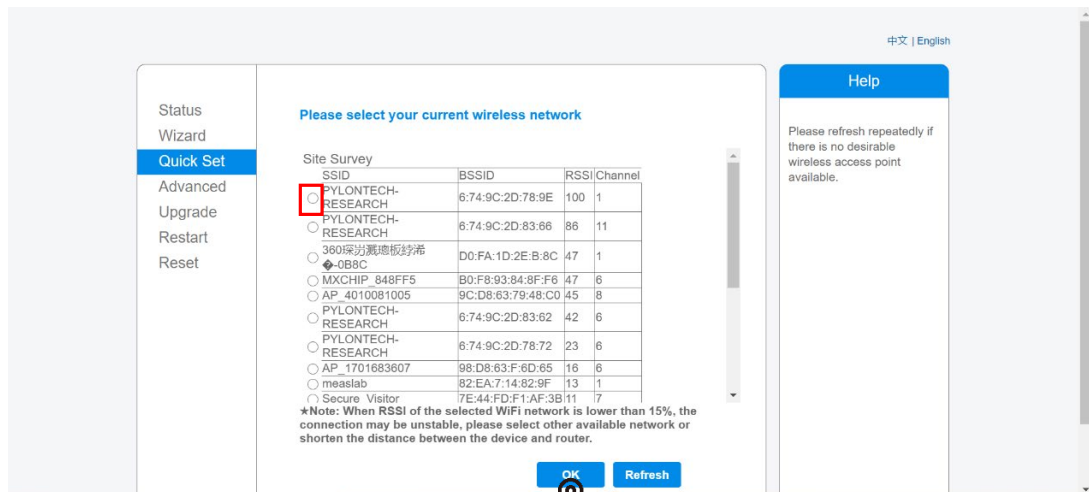
- (4) After entering Web configuration page, please go to **Quick Set** menu and follow the prompts to complete.



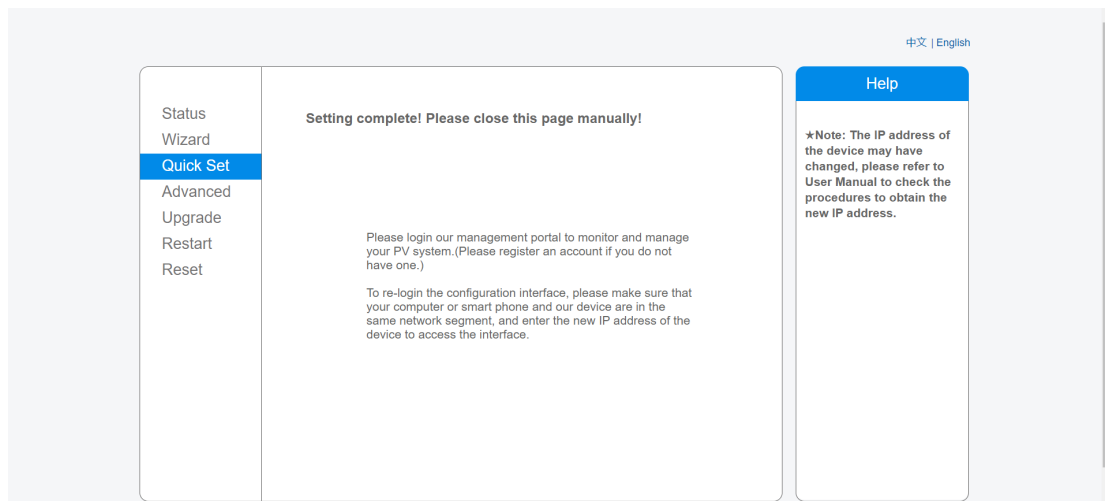
- (5) Click "Search", then you can find the existing wireless network servers around. Input the password for the selected local wireless network. Then click "Save".



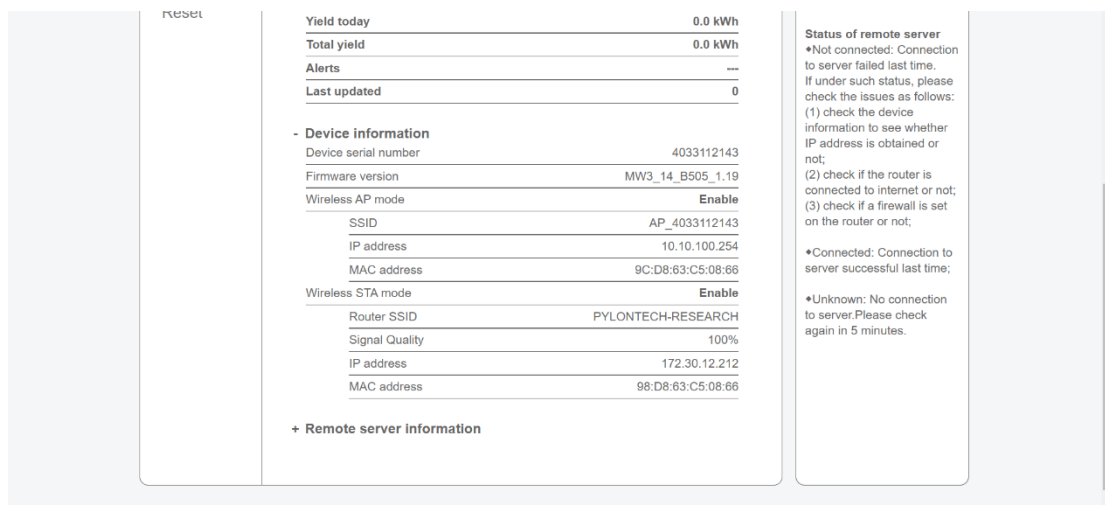
(6) Select the name of your local wireless network. Then click "OK".



(7) Now the setting is completed.

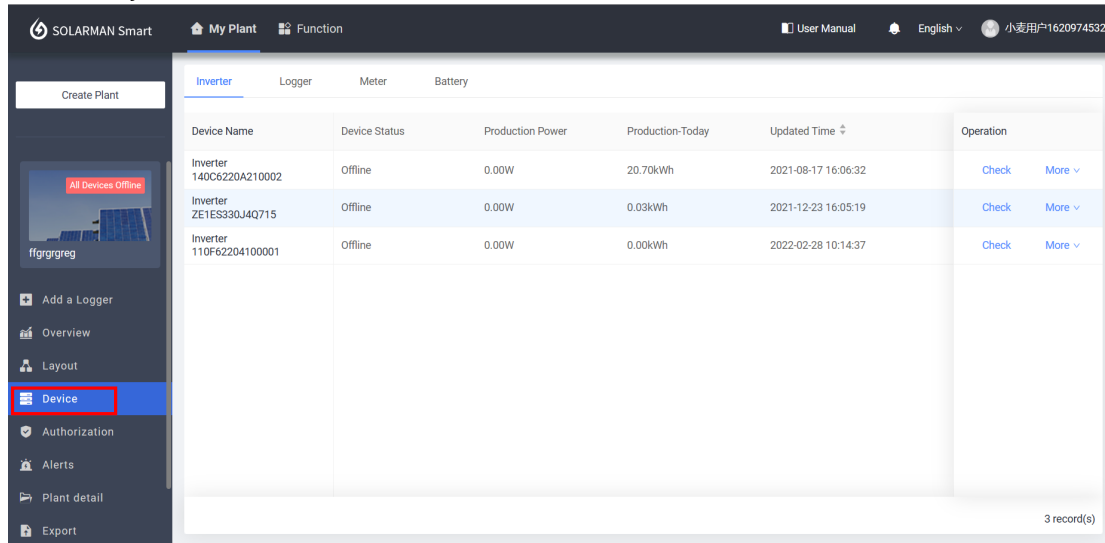


(8) In the status window, the device information can be viewed.



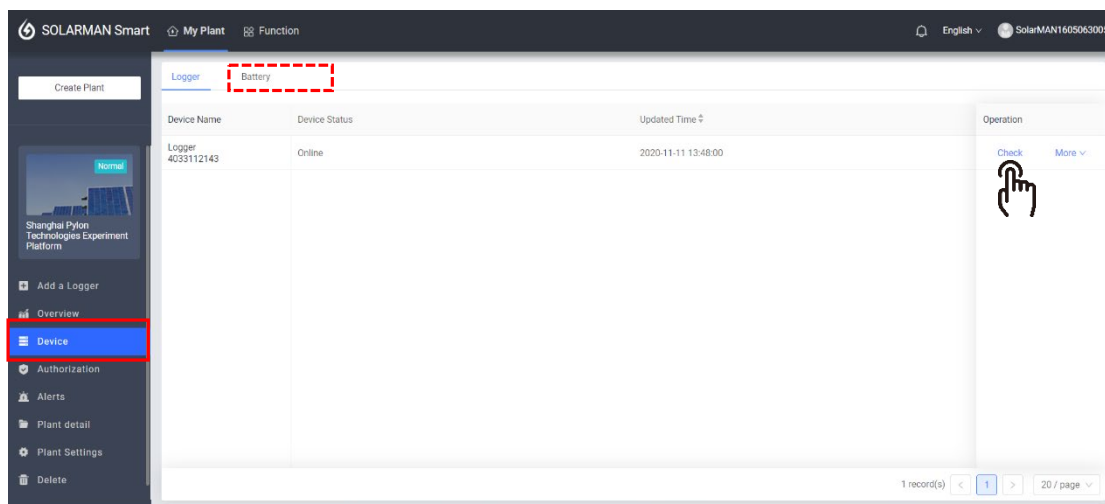
1.2 Battery information check

After the logger is connected to the Internet, return to the plant platform interface, and the battery status information can be viewed in the “Device” information bar.



(1) To view the device data, just click the "Check" button, select “Architecture” window, and select “Sub- device” . Or

You can also select the “Battery” tab and click the “Check” button to view the battery information.



Logger4010713599 ● Offline 2021-06-24 15:55:59

X

Device Data Architecture

Device attributes is defined as 2-class in Architecture: [Parent device](#) and [Sub-device](#).

System will divide device attributes according to data uploading method. If the device can upload data to the platform by itself, then it is defined as Parent Device. If the device data is collected by other device and then uploaded to the platform, this kind of device is defined as Sub-device.

Sub-device

Battery ● Offline

SN: 004010713599

Data updated on 2021-06-24 15:55:59

Battery4010913561 ● Online 2020-11-13 16:01:32

X

[Device Data](#) [Architecture](#)

Basic Information

Connected Device SN: 004010913561

Battery pack

No. of Battery Pack: 2

Battery Pack 1

| | | |
|--|-------------------------------------|----------------------------------|
| Battery Pack 1 Connected Device Sn: 1252656548545785 | Battery Pack 1 Device Name: Force_L | Battery Pack 1 Brand: Pylon----- |
| Voltage-1: 48.13V | Current-1: 0A | Battery Pack 1 SOC: 11% |
| Cell voltage 1-1 Warning: 0 | Cell voltage 1-2 Warning: 0 | Cell voltage 1-3 Warning: 0 |
| Cell voltage 1-4 Warning: 0 | Cell voltage 1-5 Warning: 0 | Cell voltage 1-6 Warning: 0 |
| Cell voltage 1-7 Warning: 0 | Cell voltage 1-8 Warning: 0 | Cell voltage 1-9 Warning: 0 |
| Cell voltage 1-10 Warning: 0 | Cell voltage 1-11 Warning: 0 | Cell voltage 1-12 Warning: 0 |
| Cell voltage 1-13 Warning: 0 | Cell voltage 1-14 Warning: 0 | Cell voltage 1-15 Warning: 0 |

Battery4010913561 ● Online 2020-11-13 16:01:32

X

[Device Data](#) [Architecture](#)

Battery Pack 1

| | | |
|--|---|---|
| Battery Pack 1 Connected Device Sn: 1252656548545785 | Battery Pack 1 Device Name: Force_L | Battery Pack 1 Brand: Pylon----- |
| Voltage-1: 48.13V | Current-1: 0A | Battery Pack 1 SOC: 11% |
| Cell voltage 1-1 Warning: 0 | Cell voltage 1-2 Warning: 0 | Cell voltage 1-3 Warning: 0 |
| Cell voltage 1-4 Warning: 0 | Cell voltage 1-5 Warning: 0 | Cell voltage 1-6 Warning: 0 |
| Cell voltage 1-7 Warning: 0 | Cell voltage 1-8 Warning: 0 | Cell voltage 1-9 Warning: 0 |
| Cell voltage 1-10 Warning: 0 | Cell voltage 1-11 Warning: 0 | Cell voltage 1-12 Warning: 0 |
| Cell voltage 1-13 Warning: 0 | Cell voltage 1-14 Warning: 0 | Cell voltage 1-15 Warning: 0 |
| BMS Temperature Warning-Battery Pack 1: 0 | Temperature Point 1 Warning-Battery Pack 1: 0 | Temperature Point 2 Warning-Battery Pack 1: 0 |
| Temperature Point 3 Warning-Battery Pack 1: 0 | Temperature Point 4 Warning-Battery Pack 1: 0 | Temperature Point 4 Warning-Battery Pack 1: 0 |
| Battery Pack 1 Charge current Warning: 0 | Battery Pack 1 Module voltage Warning: 0 | Battery Pack 1 Discharge current Warning: 0 |
| Battery Pack 1 Remain Capacity: 8.14AH | Battery Pack 1 Module Total Capacity: 74AH | |

Battery4010913561 ● Online 2020-11-13 16:01:32

X

[Device Data](#) [Architecture](#)

Battery Pack 2

| | | |
|---|--|--|
| Battery Pack 2 Connected Device Sn: 12121212111111 | Battery Pack 2 Device Name: Force_L | Battery Pack 2 Brand: Pylon----- |
| Voltage-2: 48.13V | Current-2: -0.1A | Battery Pack 2 SOC: 11% |
| Cell voltage 2-1 Warning: 0 | Cell voltage 2-2 Warning: 0 | Cell voltage 2-3 Warning: 0 |
| Cell voltage 2-4 Warning: 0 | Cell voltage 2-5 Warning: 0 | Cell voltage 2-6 Warning: 0 |
| Cell voltage 2-7 Warning: 0 | Cell voltage 2-8 Warning: 0 | Cell voltage 2-9 Warning: 0 |
| Cell voltage 2-10 Warning: 0 | Cell voltage 2-11 Warning: 0 | Cell voltage 2-12 Warning: 0 |
| Cell voltage 2-13 Warning: 0 | Cell voltage 2-14 Warning: 0 | Cell voltage 2-15 Warning: 0 |
| BMS Temperature Warning Battery Pack 2: 0 | Temperature Point 1 Warning Battery Pack 2: 0 | Temperature Point 2 Warning Battery Pack 2: 0 |
| Temperature Point 3 Warning Battery Pack 2: 0 | Temperature Point 4 Warning Battery Pack 2: 0 | Temperature Point 4 Warning Battery Pack 2: 0 |
| Battery Pack 2 Charge current Warning: 0 | Battery Pack 2 Module voltage Warning: 0 | Battery Pack 2 Discharge current Warning: 0 |
| Battery Pack 2 Remain Capacity: 8.14AH | Battery Pack 2 Module Total Capacity: 74AH | |

(2) In the historical data window, you can view the basic data of the battery at different intervals (Day/Month/Year/Total).

Battery4010913561 ● Online 2020-11-13 16:01:32

X



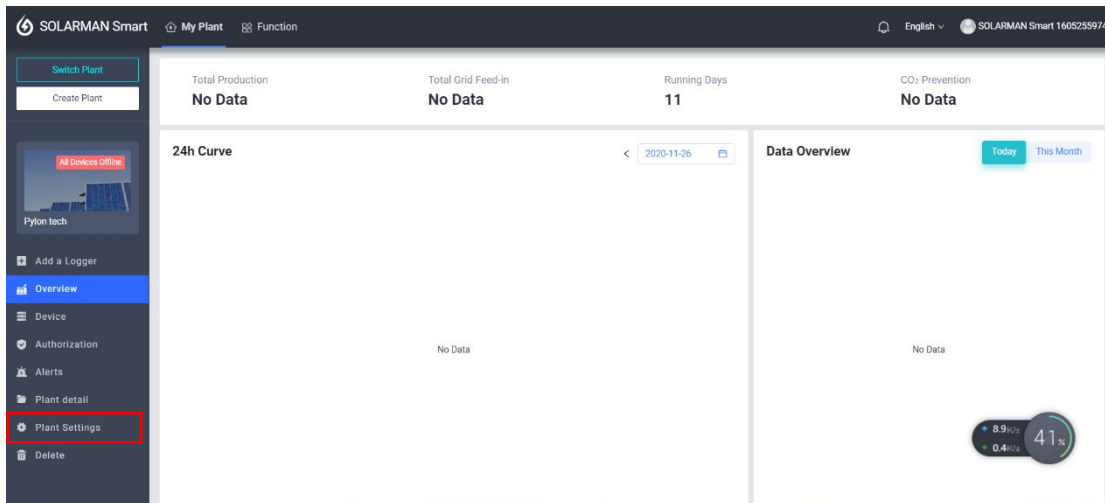
1.3 Authorization

Authorization is a function of specifying access rights/privileges to resources, which is related to information security or computer security and to access control in particular. After authorization, the business unit can obtain the information provided by the producer and the user can customize the information available for sharing at the same time.

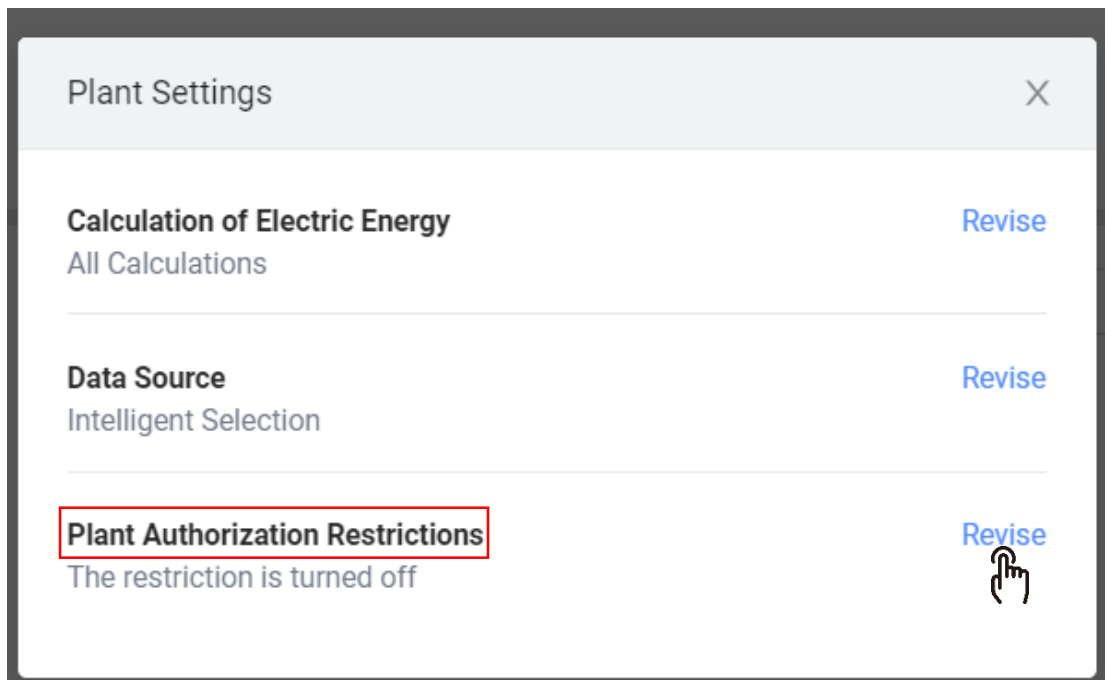
NOTE: Authorization can **ONLY** be operated on a personal computer(PC).

a. Before authorization

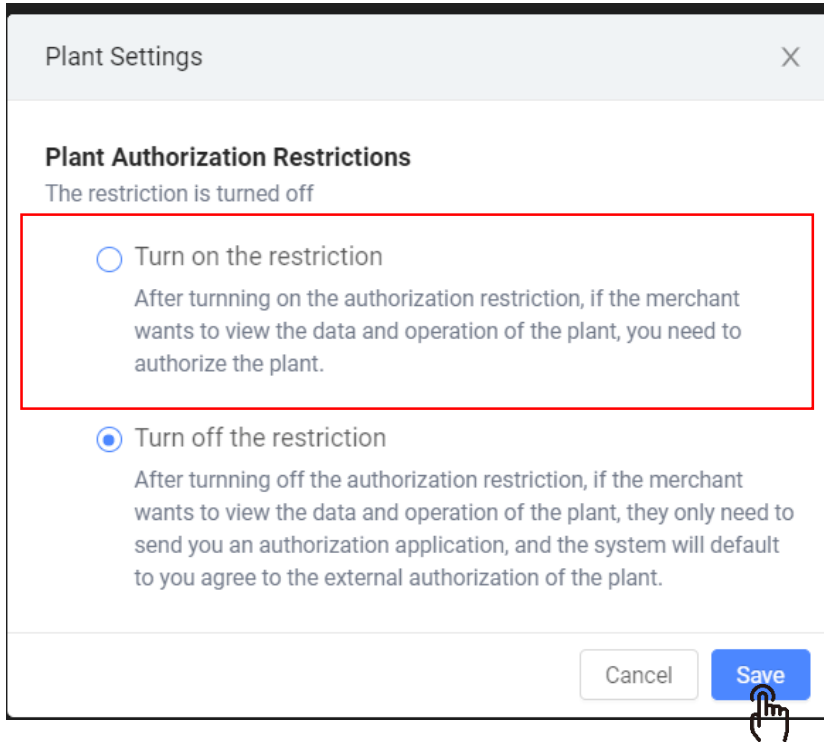
- (1) Before starting the authorization operation, users should check the authorization settings through "plant settings" button.



- (2) Then check "Plant Authorization Restrictions", if the restriction is turned off, click "Revise" to change it.



(3) Choose “Turn on the restriction”, and click “Save”. Now, the authorization function is available.



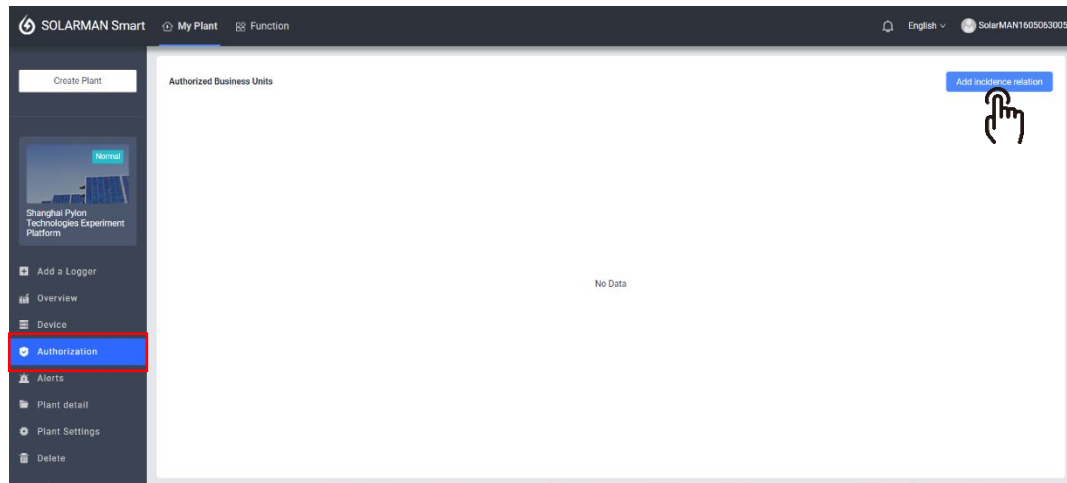
b. Definitions

| | |
|---------------------------|---|
| View subsystem/sub-device | Check the subsystems or sub-devices (usually batteries and loggers) working under the system. |
| View power plant alarm | Check the alarm records issued by the power station. |
| View about power plant | View basic information about the power plant, including photos displayed by the business units. |
| View system layout | Users can check the physical layout and electrical layout of the system. |

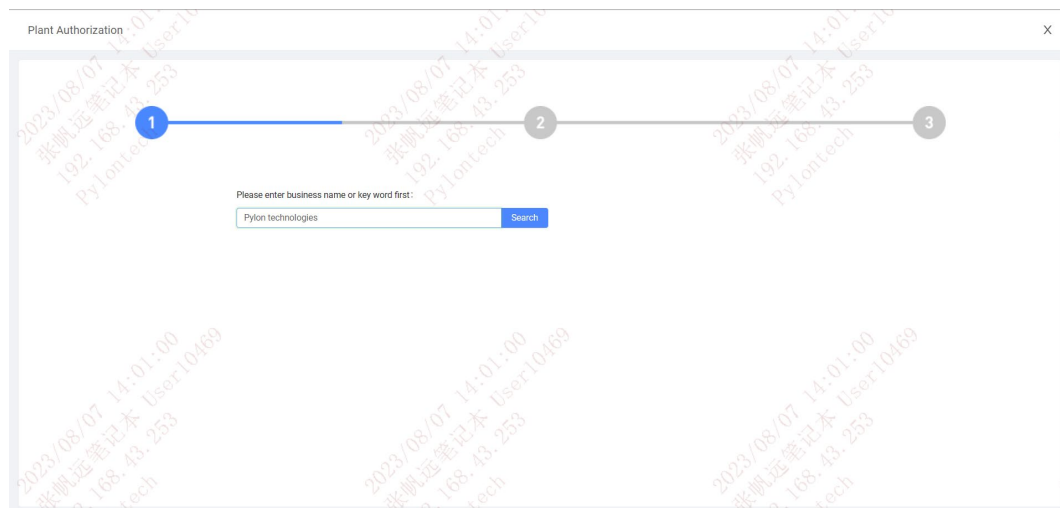
c. Authorization procedures

To authorize your plant to the business unit, follow the steps below.

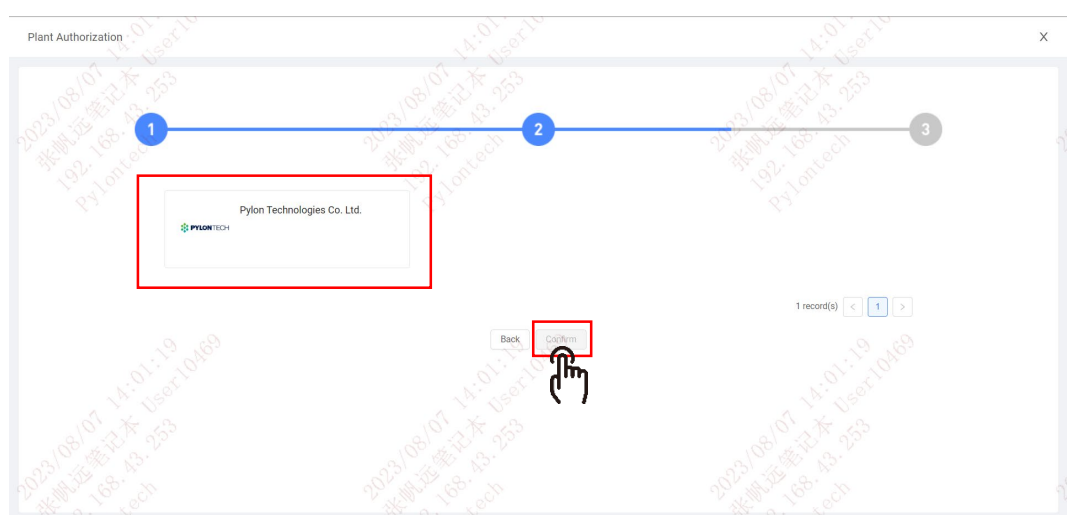
- (1) Select "Authorization" in the menu bar of the page and click "Add incidence relation".



- (2) Enter business unit name or keyword and click "Search".

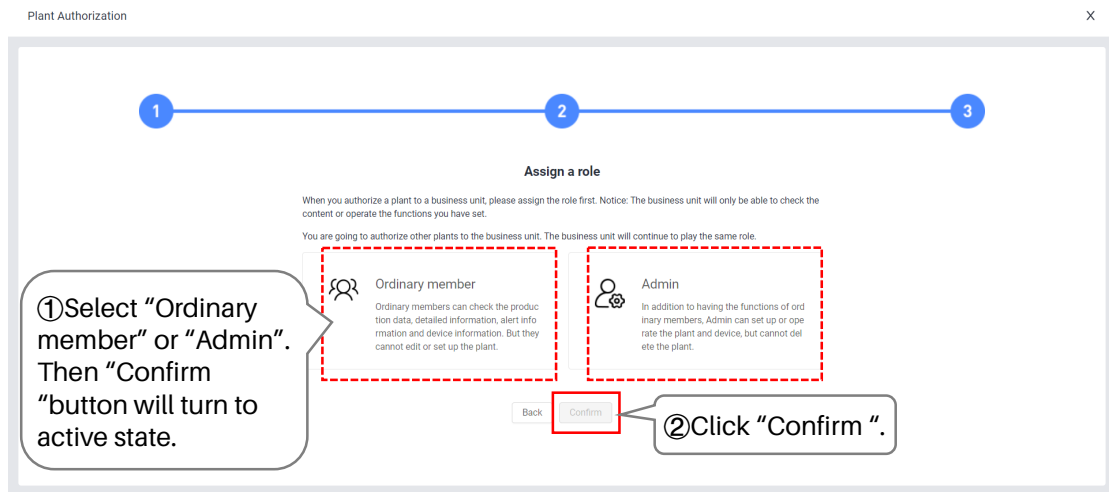


- (3) Click the authorized user and "Confirm" button will turn to active state. Then click it. **NOTE:** Be sure to select "Pylon Technologies Co., Ltd." instead of other business units to ensure an effective authorization.

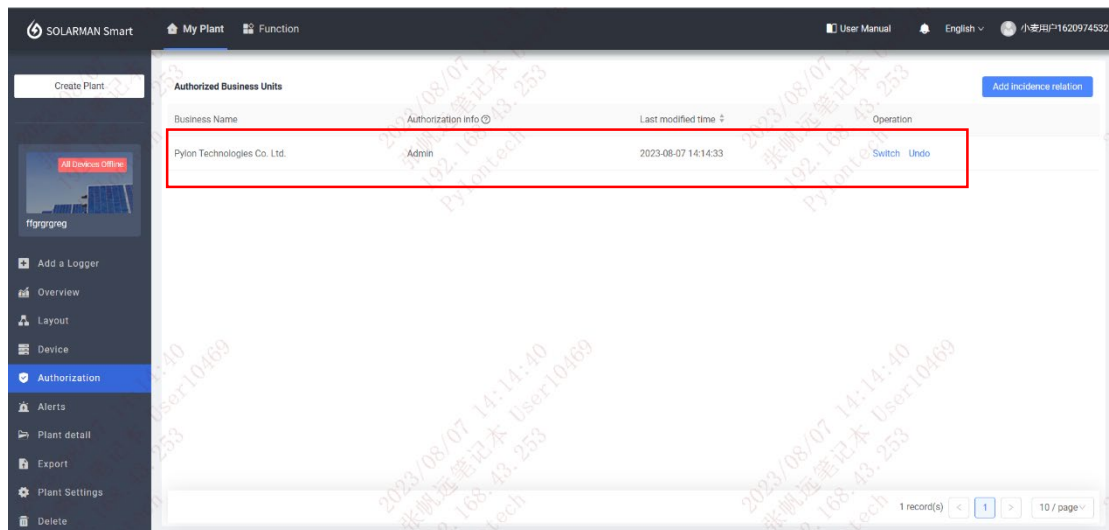


(4) Before final authorization, you need to assign a role to the business unit as “Ordinary member” or “Admin”, shown as below.

NOTE: These two roles have different authority levels to your device.



(5) Now you can view the authorized business unit information in the window.



After the authorization is successful:

- the business unit can see the user registration information;
- the user can also cancel the authorization, and multiple businesses can be authorized.

2. Operation on Mobile Device

You can also monitor your batteries on **Mobile Device** (Suitable for Android and IOS). Follow the steps below to proceed:

STEP 1: Registration and Login

(1) Download 'SOLARMAN Smart' APP from App Store (IOS installation as an example).



Download APP

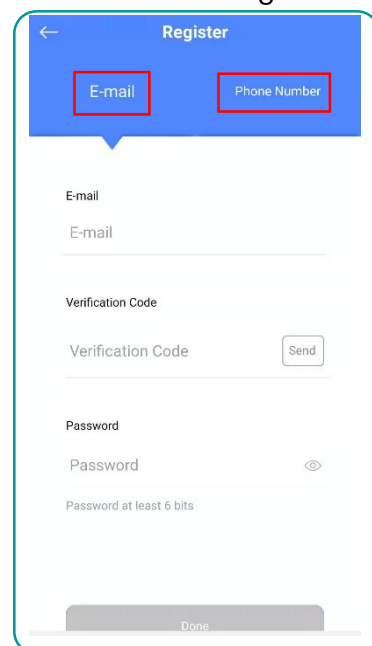


SOLARMAN Smart

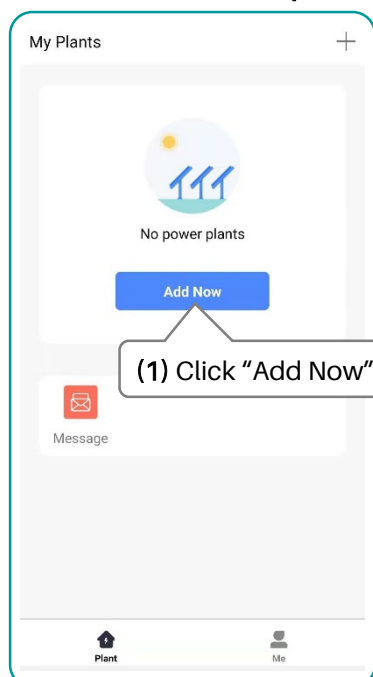
(2) Open the application and finish the registration. Choose either method to register an account:

- E-mail registration
- Phone number registration

NOTE: The Phone registration is currently only supported in six countries: China, the Netherlands, the United States, Brazil, Nigeria and Saudi Arabia. It is recommended to choose **E-mail registration**.



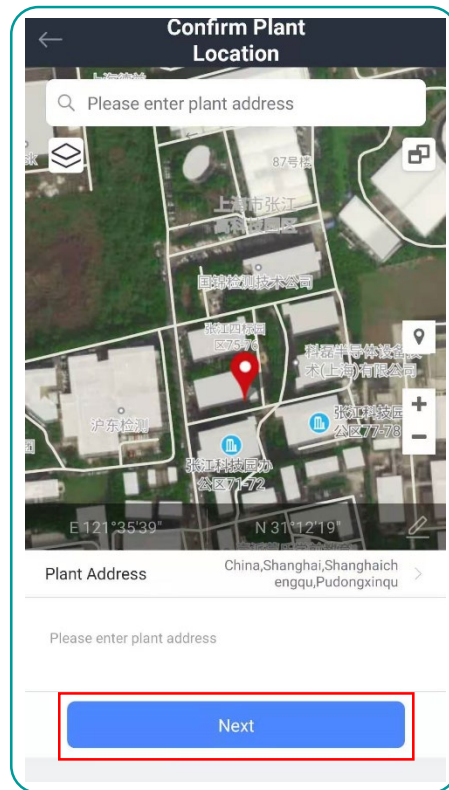
STEP 2: Create a new plant.



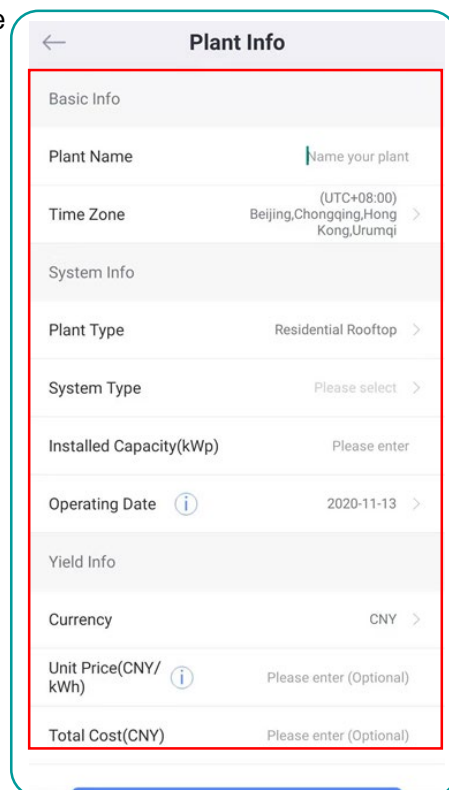
(2) Click "No" and "Create Now" respectively.



(3) Select or type in the power plant address, then click “Next”.



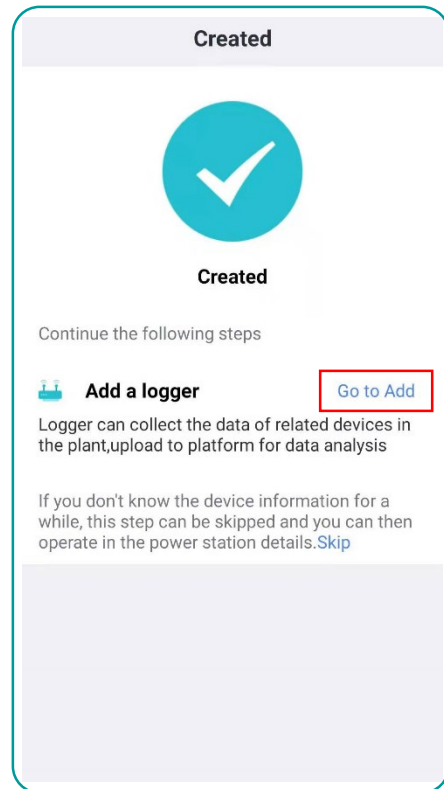
(4) Type in the plant information to complete the plant creation.



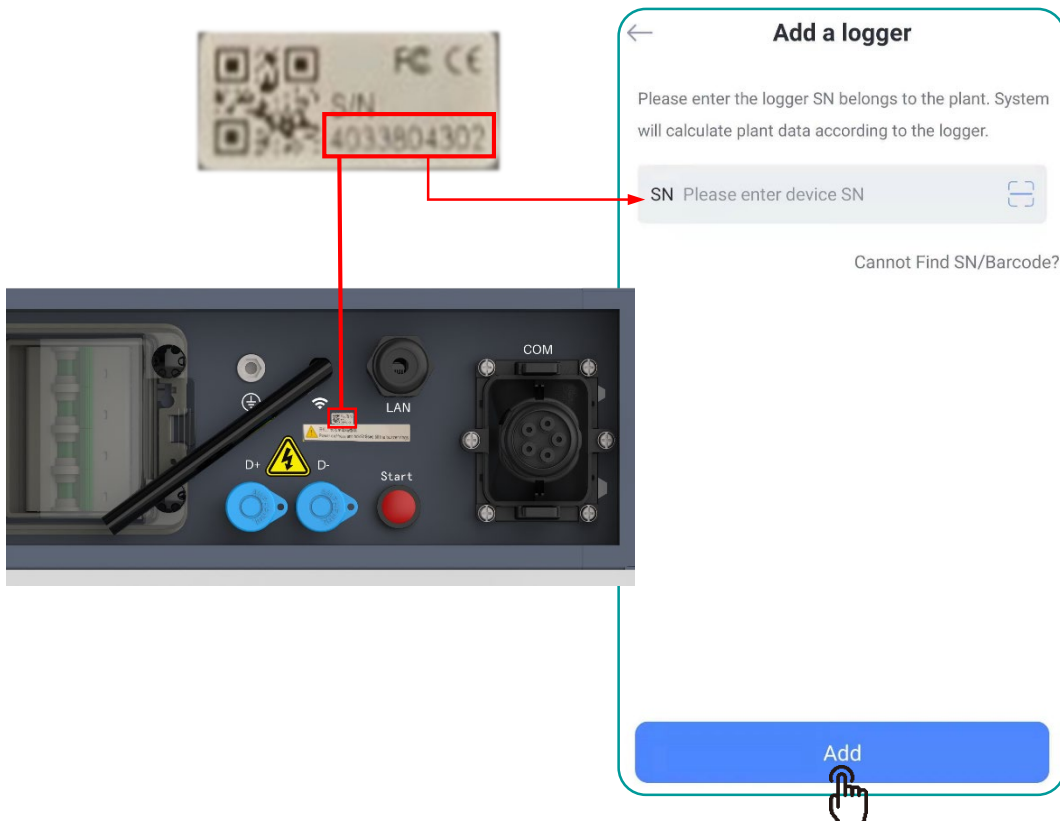
STEP 3: Add a logger.

After the plant is created, continue to add a logger for the plant as follows:

(1) Click "Go to Add".



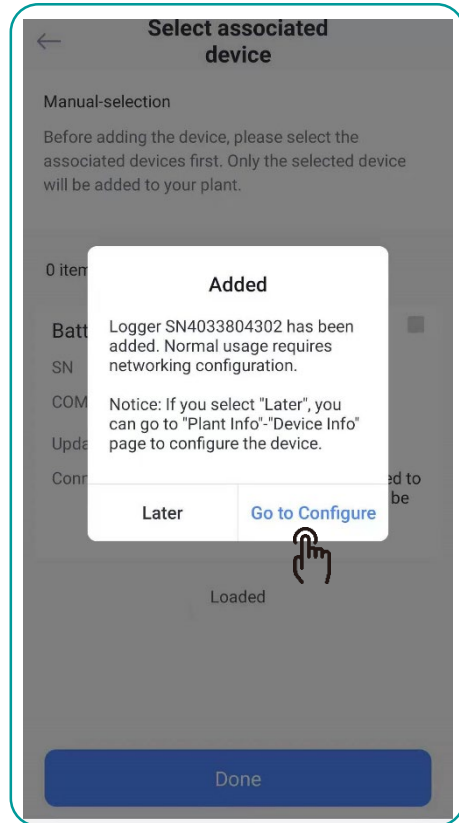
(2) Type in the SN number or scan the barcode which can be found on the product body as shown. Then click "Add".



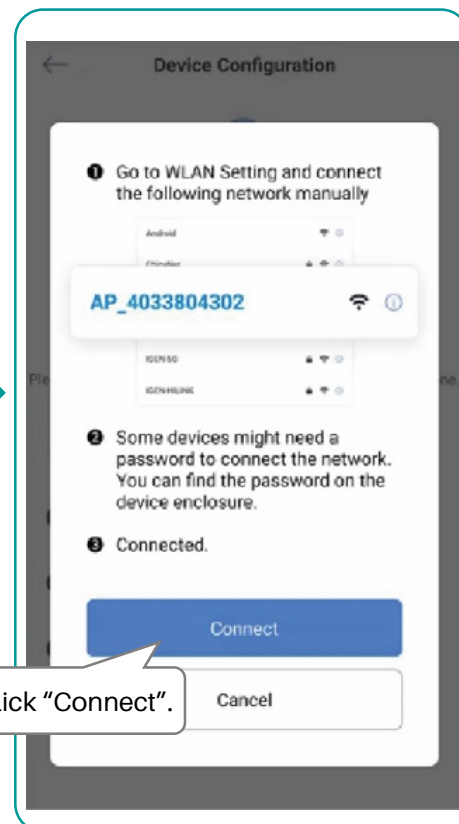
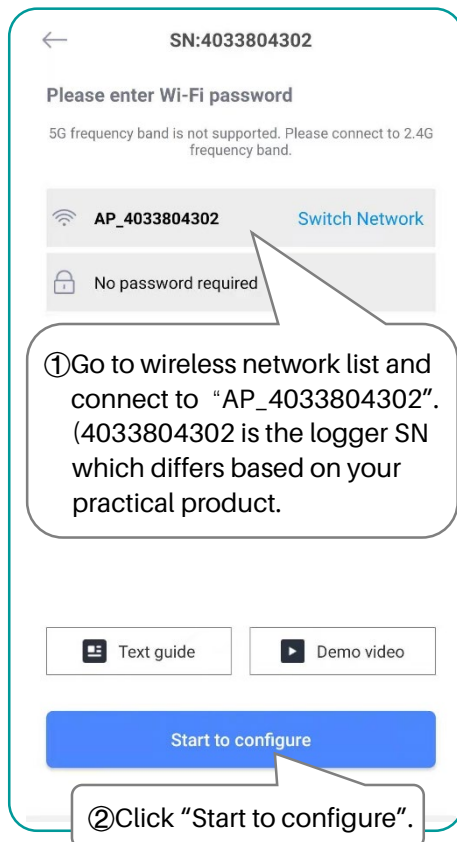
STEP 4: Network Configuration

After the logger is added, you'll be prompted to configure the network.

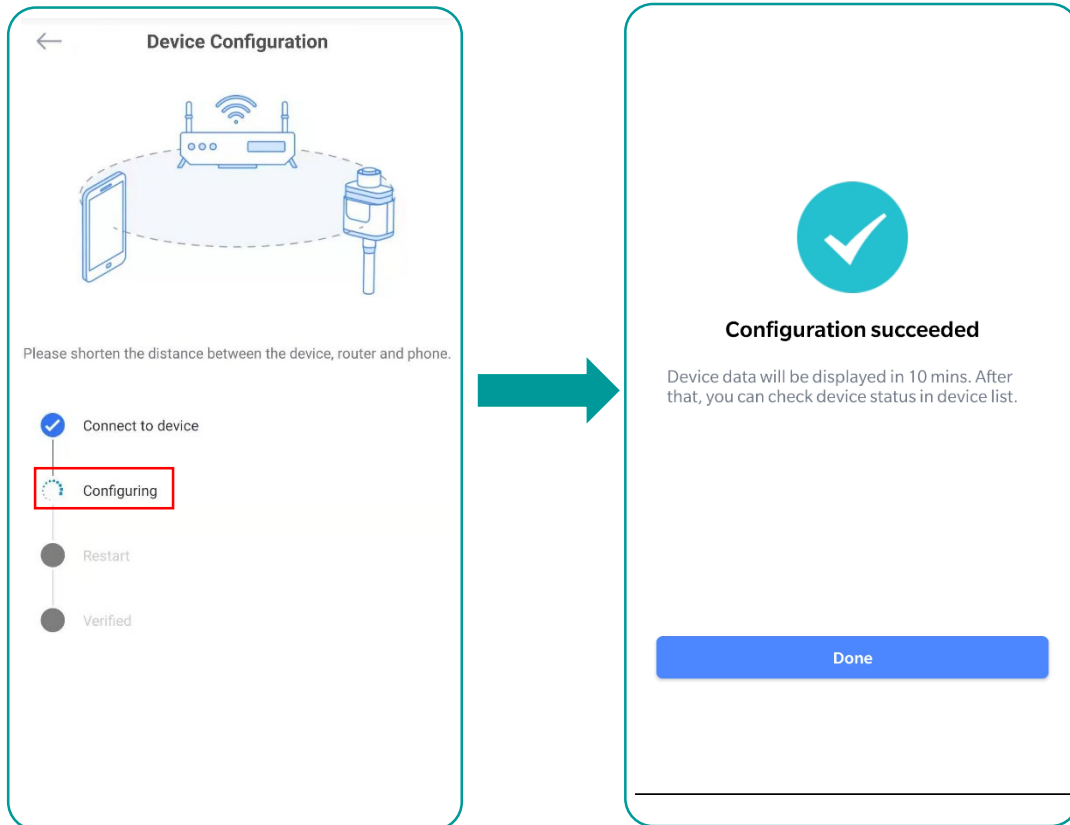
(1) Click "Go to Configure" to start the setting.



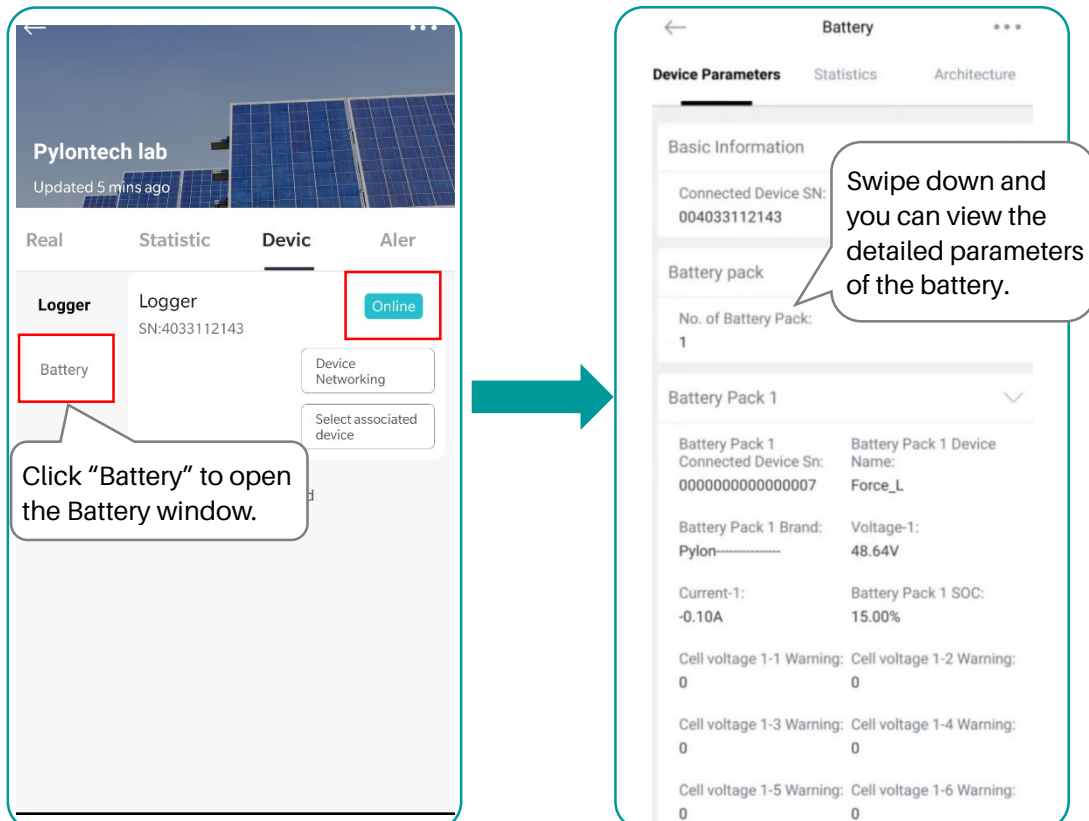
(2) Connect to the Wi-Fi network.



(3) Now the device is in configuring status. After device configuration is completed, it will jump to the "Configuration succeeded" page.



(4) Wait for 3-10 minutes, the logger could be online. And you can view the Battery information.

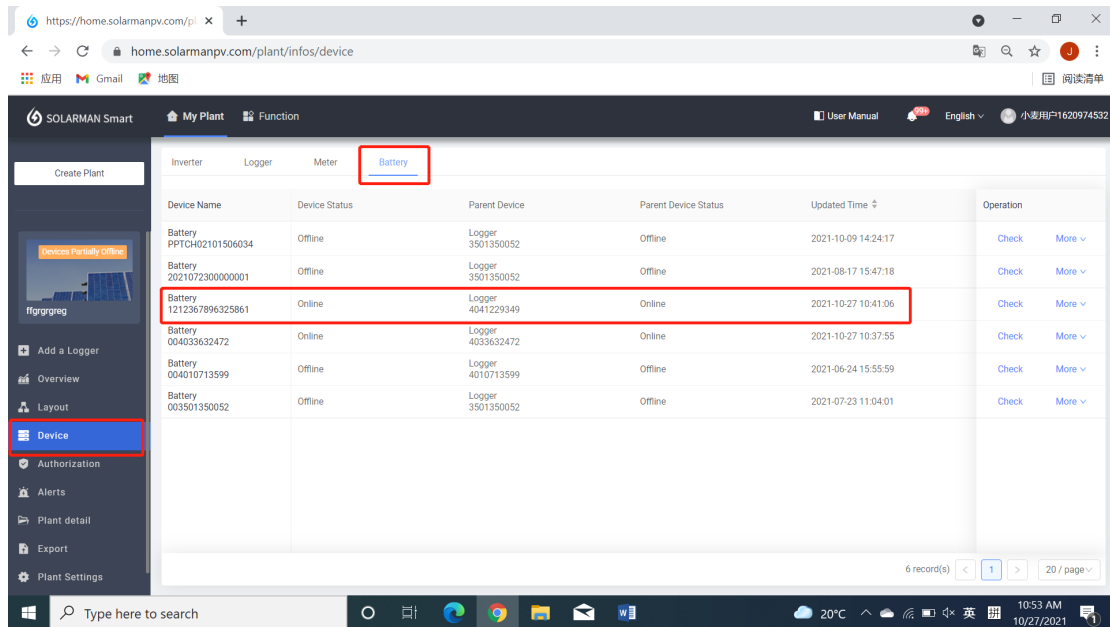


3. Maintenance

3.1 Battery logs download (ONLY applicable on PC)

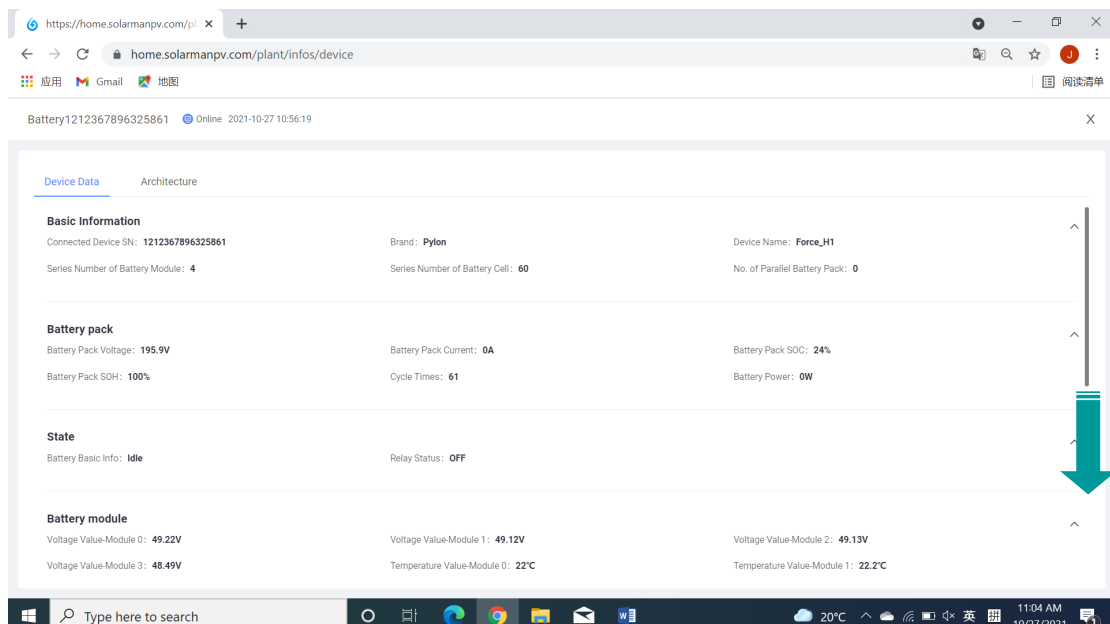
3.1.1 Method A

1. Go to the main window of the portal, click "Device" on the left, then choose "Battery" to select the specific battery you want to view.



| Device Name | Device Status | Parent Device | Parent Device Status | Updated Time | Operation |
|--------------------------|---------------|-------------------|----------------------|---------------------|--------------|
| Battery PPTCH02101506034 | Offline | Logger 3501350052 | Offline | 2021-10-09 14:24:17 | Check More v |
| Battery 2021072300000001 | Offline | Logger 3501350052 | Offline | 2021-08-17 15:47:18 | Check More v |
| Battery 1212367896325861 | Online | Logger 4041229349 | Online | 2021-10-27 10:41:06 | Check More v |
| Battery 004033632472 | Online | Logger 4033632472 | Online | 2021-10-27 10:37:55 | Check More v |
| Battery 004010713599 | Offline | Logger 4010713599 | Offline | 2021-06-24 15:55:59 | Check More v |
| Battery 003501350052 | Offline | Logger 3501350052 | Offline | 2021-07-23 11:04:01 | Check More v |

2. Drag the scroll wheel to the bottom of the page.



Battery1212367896325861 Online 2021-10-27 10:56:19

Device Data Architecture

Basic Information

Connected Device SN: 1212367896325861 Brand: Pylon Device Name: Force_H1

Series Number of Battery Module: 4 Series Number of Battery Cell: 60 No. of Parallel Battery Pack: 0

Battery pack

Battery Pack Voltage: 195.9V Battery Pack Current: 0A Battery Pack SOC: 24%

Battery Pack SOH: 100% Cycle Times: 61 Battery Power: 0W

State

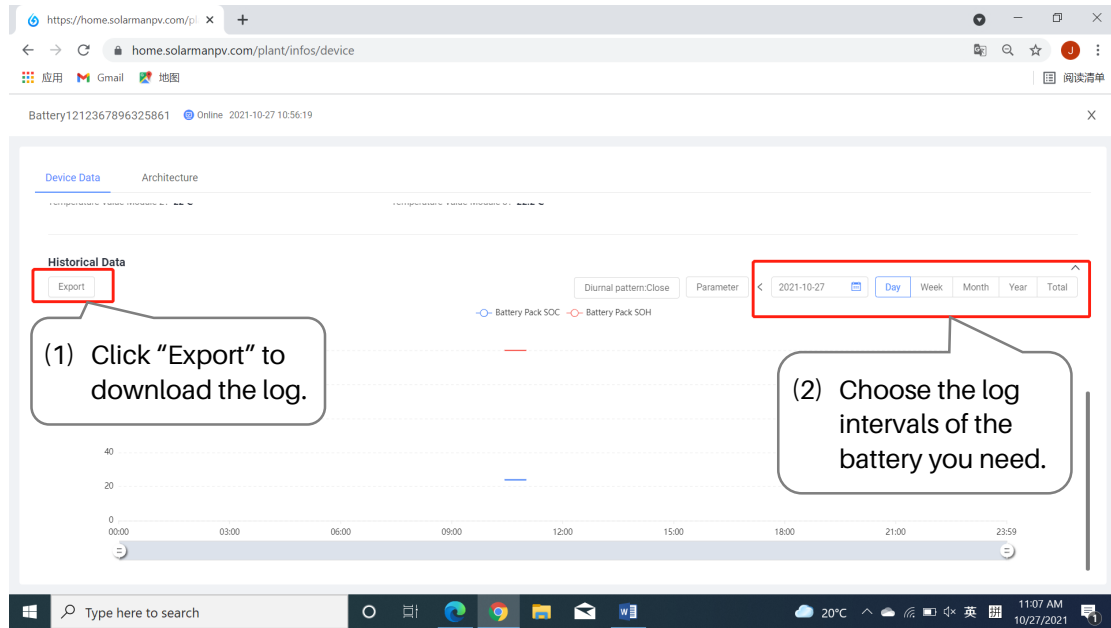
Battery Basic Info: Idle Relay Status: OFF

Battery module

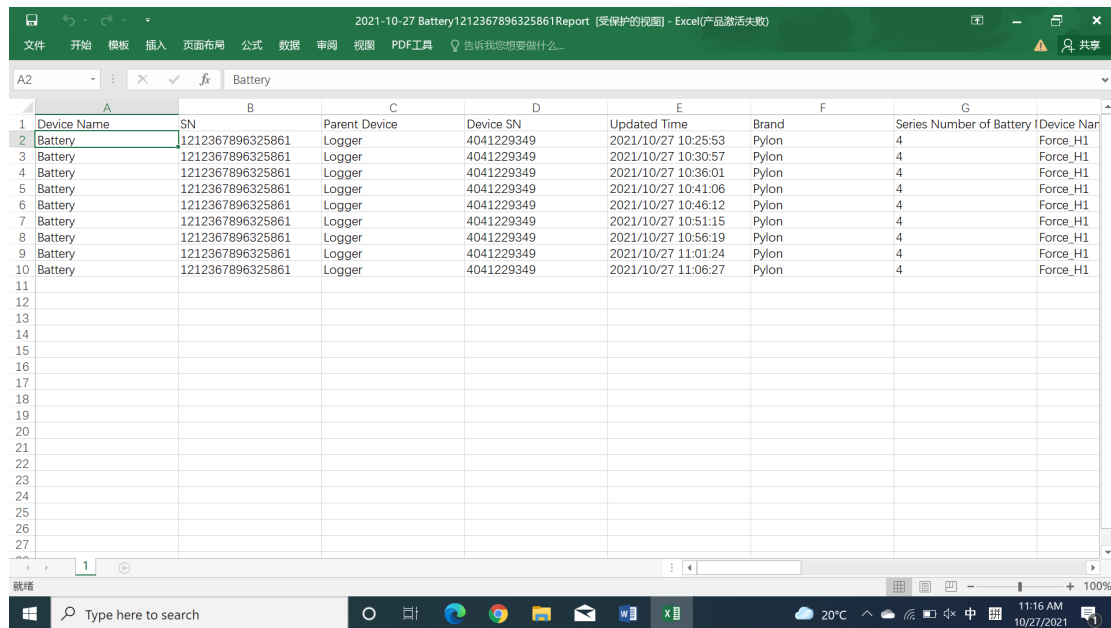
Voltage Value-Module 0: 49.22V Voltage Value-Module 1: 49.12V Voltage Value-Module 2: 49.13V

Voltage Value-Module 3: 48.49V Temperature Value-Module 0: 22°C Temperature Value-Module 1: 22.2°C

3. You can download the logs of the battery at different intervals (Day/Month/Year/Total) separately.



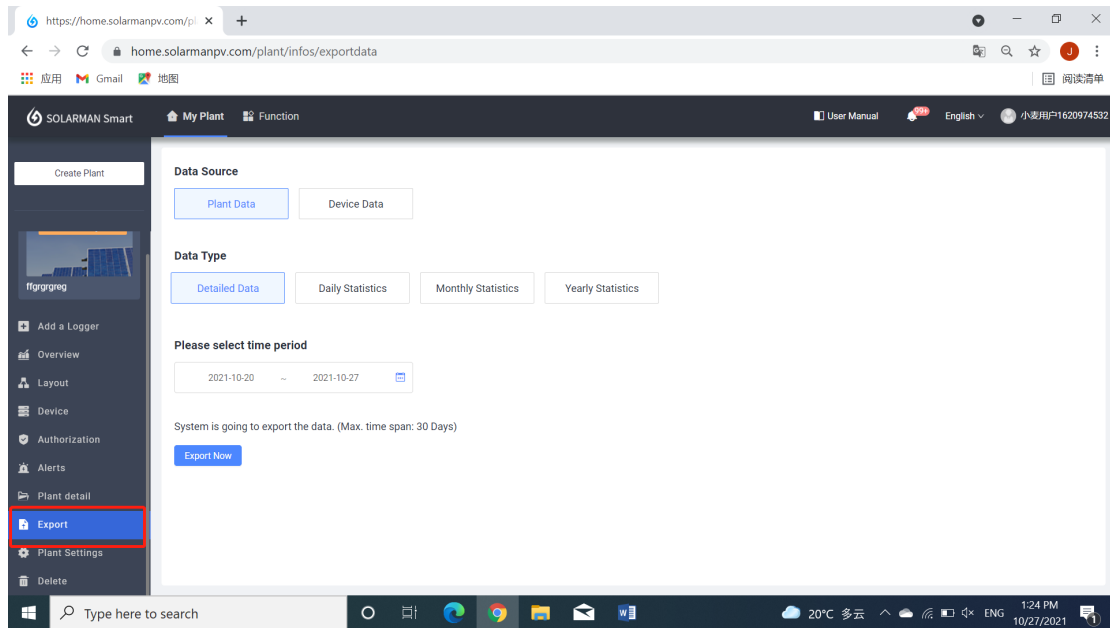
The history data will be like this:



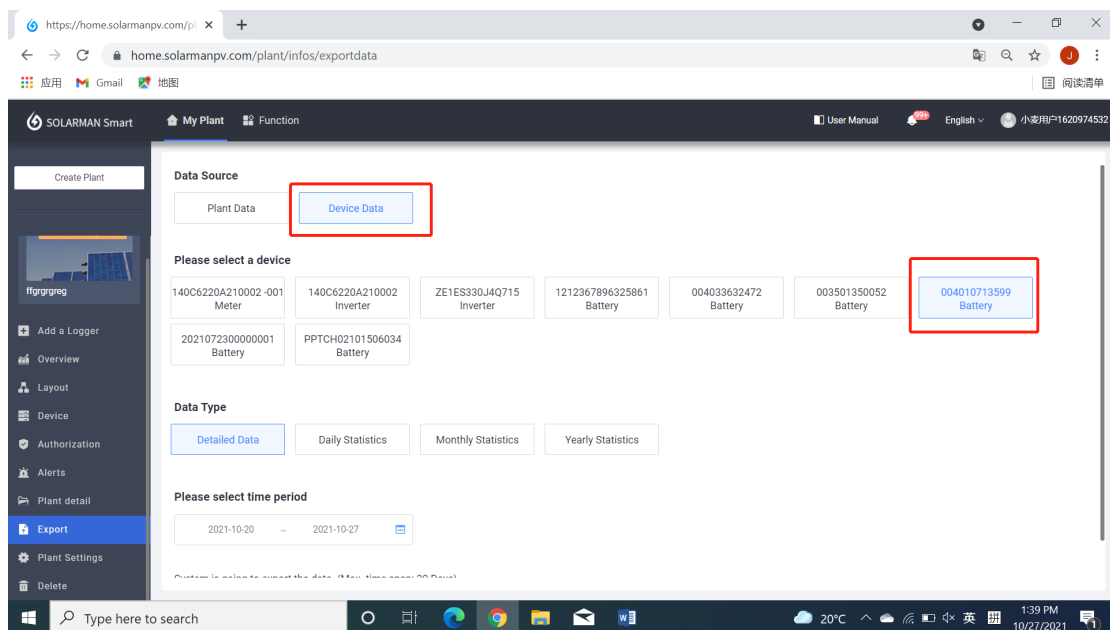
| Device Name | SN | Parent Device | Device SN | Updated Time | Brand | Series Number of Battery | Device Name |
|-------------|------------------|---------------|------------|---------------------|-------|--------------------------|-------------|
| Battery | 1212367896325861 | Logger | 4041229349 | 2021/10/27 10:25:53 | Pylon | 4 | Force_H1 |
| Battery | 1212367896325861 | Logger | 4041229349 | 2021/10/27 10:30:57 | Pylon | 4 | Force_H1 |
| Battery | 1212367896325861 | Logger | 4041229349 | 2021/10/27 10:36:01 | Pylon | 4 | Force_H1 |
| Battery | 1212367896325861 | Logger | 4041229349 | 2021/10/27 10:41:06 | Pylon | 4 | Force_H1 |
| Battery | 1212367896325861 | Logger | 4041229349 | 2021/10/27 10:46:12 | Pylon | 4 | Force_H1 |
| Battery | 1212367896325861 | Logger | 4041229349 | 2021/10/27 10:51:15 | Pylon | 4 | Force_H1 |
| Battery | 1212367896325861 | Logger | 4041229349 | 2021/10/27 10:56:19 | Pylon | 4 | Force_H1 |
| Battery | 1212367896325861 | Logger | 4041229349 | 2021/10/27 11:01:24 | Pylon | 4 | Force_H1 |
| Battery | 1212367896325861 | Logger | 4041229349 | 2021/10/27 11:06:27 | Pylon | 4 | Force_H1 |

3.1.2 Method B

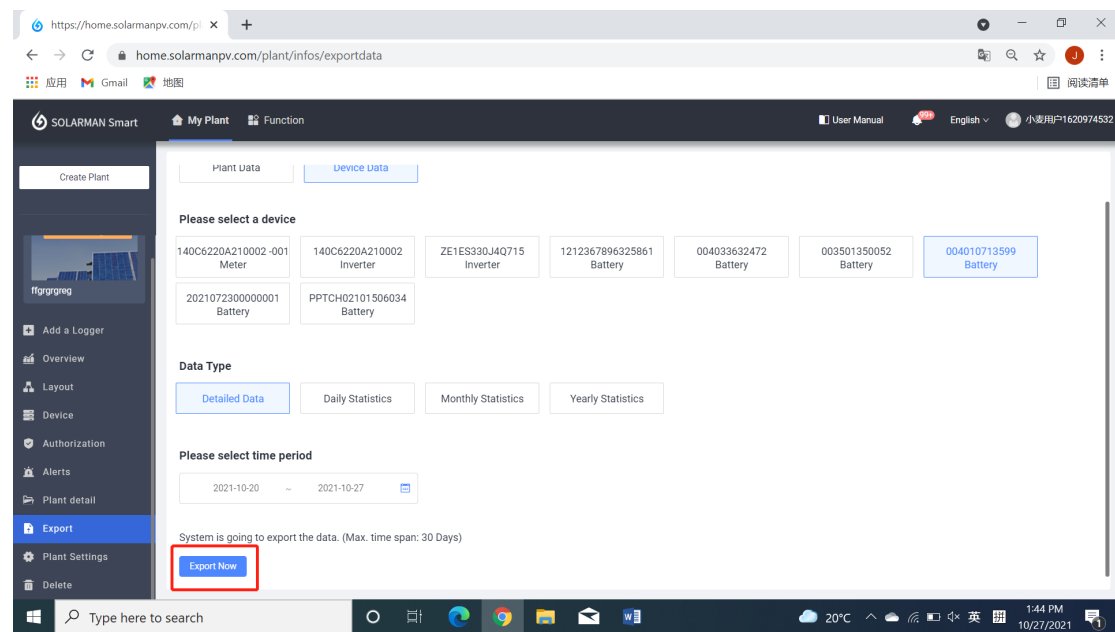
1. Click "Export" on the left of the main window.



2. Select "Device Data" and choose the specific battery you need to download its logs. Then, select the "Data Type" type you want and "Time period" you required.



3. Click "Export Now" to download the logs.



3.2 Battery firmware upgrade

If you meet any problem regarding to firmware upgrade, please contact service@pylontech.com.cn and provide the serial number of your Wi-Fi logger. Pylontech will help you do an online firmware upgrade.



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