

Wi-Fi Portal Introduction

For end-user

Contents

1. For Laptop Operation	3
2. Authorization	12
3. For Mobile Operation	16
4. Maintenance	26
a) Download battery logs	26
Method 1:	26
Method 2:	27
b) Battery firmware upgrade.....	29

This document is for Pylontech product end-user to register on the Wi-Fi portal to monitor battery status and acquire battery information.

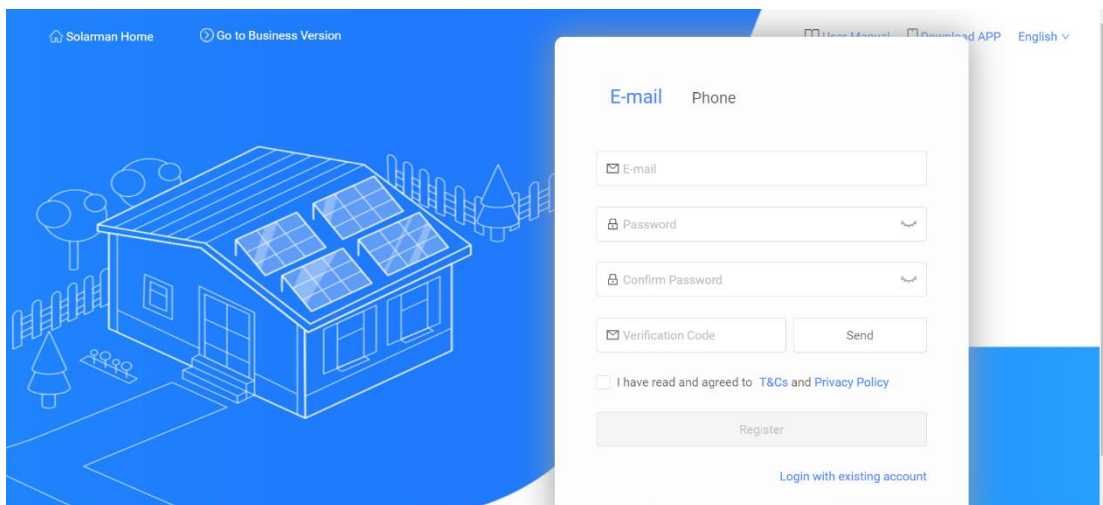
The WIFI logger is currently available on FORCE H and Force L series of products. Further development on other product series is in the processing.

1. For Laptop Operation

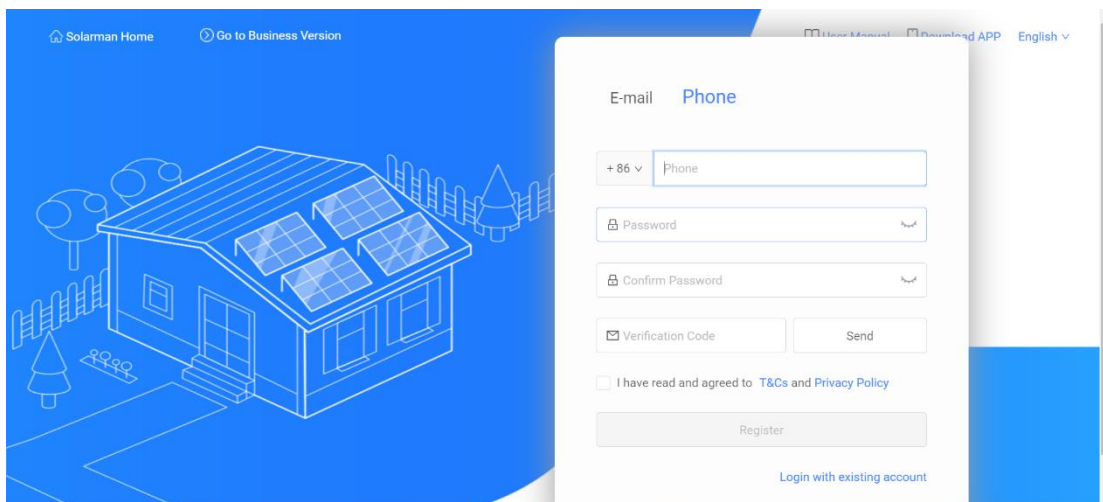
a. Login to the website <https://home.solarmanpv.com/login>.

There are two methods to register an account: email or mobile number registration

E-mail registration:

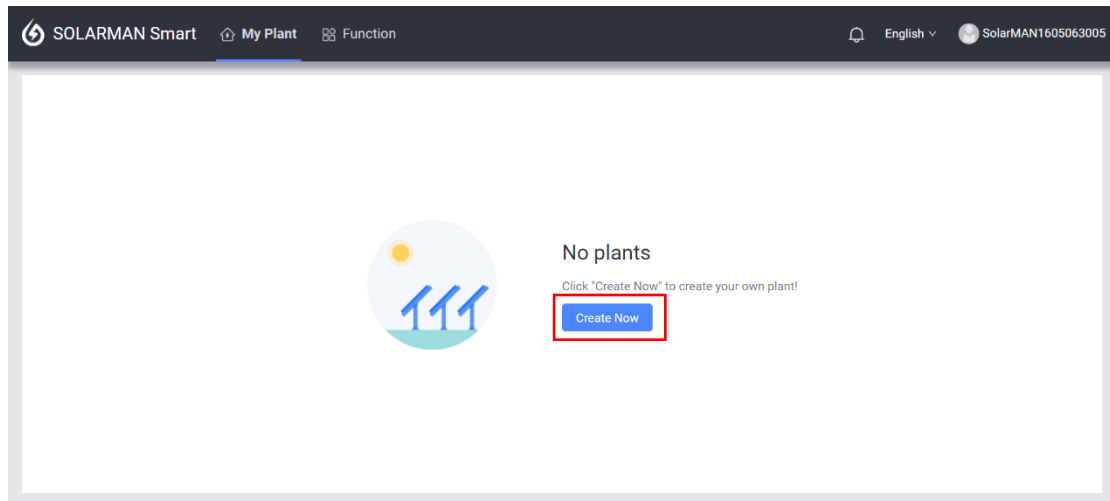
The screenshot shows the Solarman Home website interface. On the left, there is a blue header with 'Solarman Home' and 'Go to Business Version' links. Below the header is a large illustration of a house with solar panels on the roof. On the right, a white registration form is displayed. The form has two tabs: 'E-mail' (selected) and 'Phone'. The 'E-mail' tab contains fields for 'E-mail', 'Password', 'Confirm Password', and 'Verification Code'. There is a 'Send' button next to the 'Verification Code' field. Below these fields is a checkbox for 'I have read and agreed to T&Cs and Privacy Policy'. At the bottom of the form is a 'Register' button and a link for 'Login with existing account'.

Mobile phone registration:

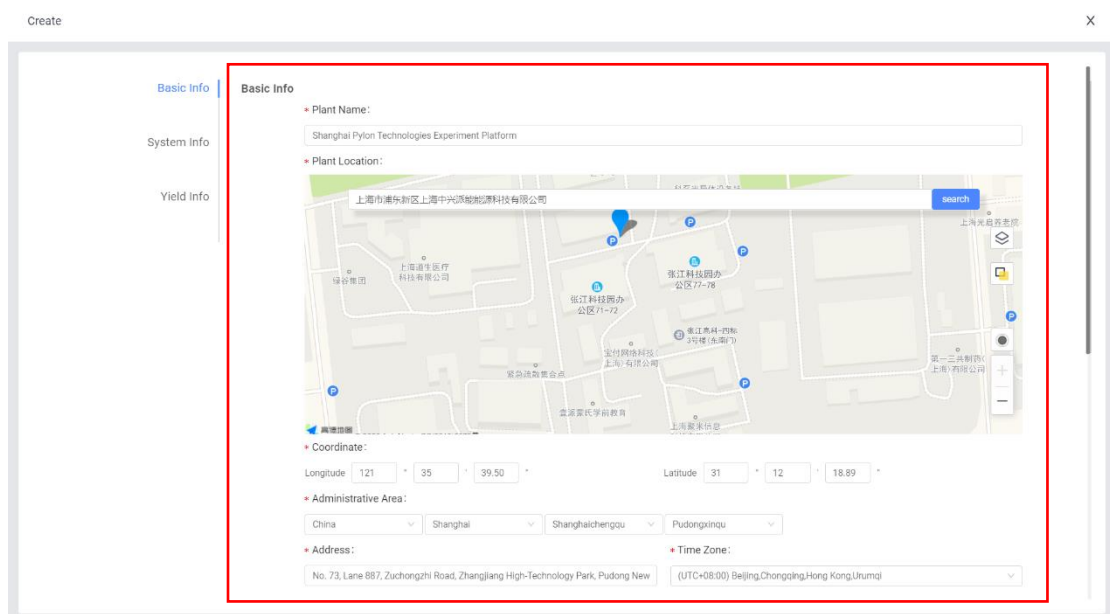
The screenshot shows the Solarman Home website interface, similar to the previous one. The 'Phone' tab is selected in the registration form. The 'Phone' field has a dropdown menu showing '+86' and a text input field for the phone number. The 'Password' and 'Confirm Password' fields are present. There is a 'Send' button next to the 'Verification Code' field. Below these fields is a checkbox for 'I have read and agreed to T&Cs and Privacy Policy'. At the bottom of the form is a 'Register' button and a link for 'Login with existing account'.

b. Build a new plant.

After the registration is completed, users will be prompted to build a new plant. A power station can be built according to the guidance.



On the page of creating power plant, basic information, system information and yield information can be provided to finish the creation.



Create
X

Basic Info

System Info

Yield Info

China
Shanghai
Shanghai Chenggu
Pudong Xinqiu

Address:

No. 73, Lane 887, Zuchongzhi Road, Zhangjiang High-Technology Park, Pudong New

Time Zone:

(UTC+08:00) Beijing, Chongqing, Hong Kong, Urumqi

System Info

Plant Type:

Residential Rooftop

System Type:

Storage System

Installed Capacity (Unit: kWp):

100

Operating Date:

2020-11-11

Yield Info

Currency:

CNY

Unit Price (Unit: CNY/kWh):

Unit Price

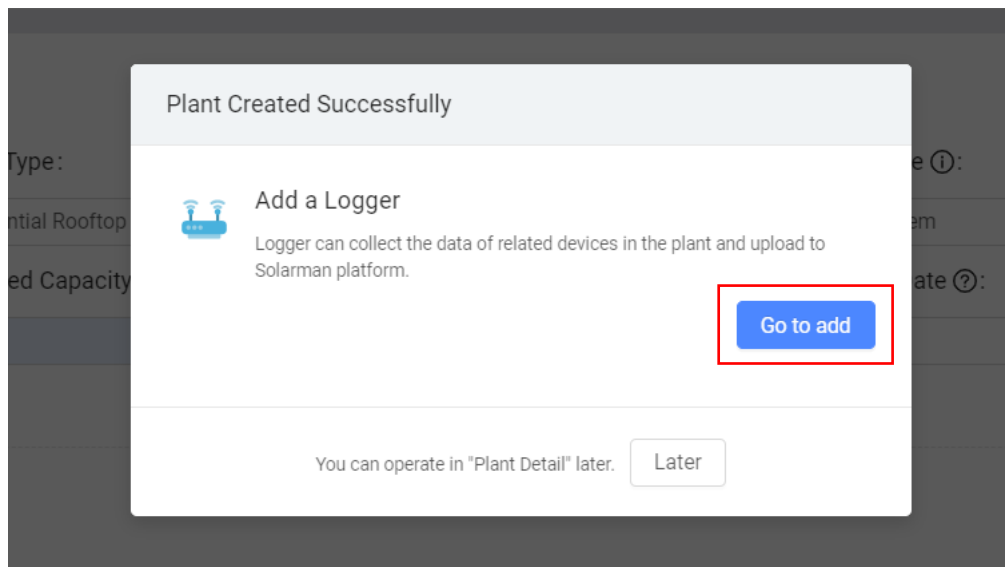
Total Cost (Unit: CNY):

Total Construction Cost

Finish

c. Add a new logger.

When finishing the creation of plant, the system will prompt to add a logger (the serial number can be viewed by the code posted on the device or hotspot name), enter the logger SN number to add it, and choose to automatically select the associated device when adding the logger.



Add a Logger

X

SN:

Add



Serial number position

Add a Logger

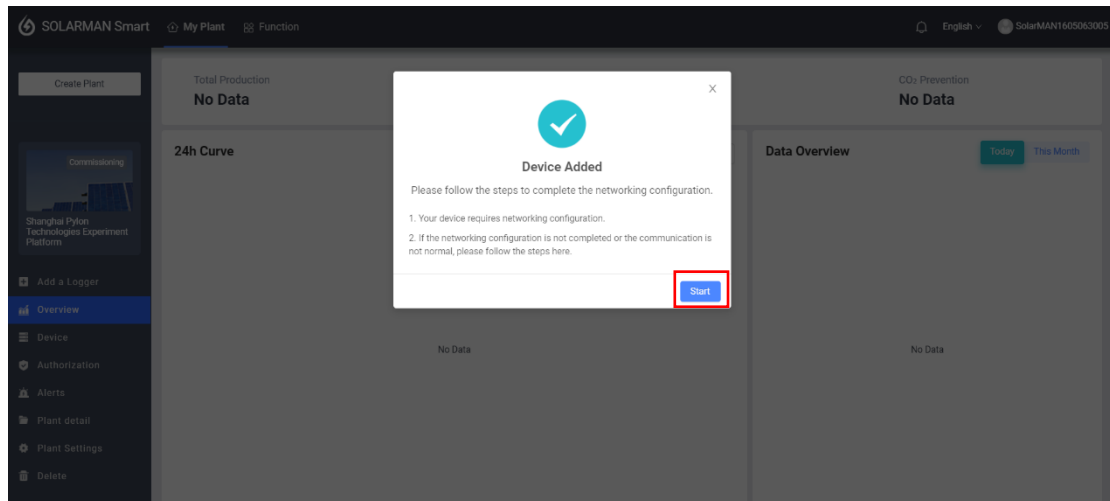
X

SN: 4033112143

Please select sub-device:

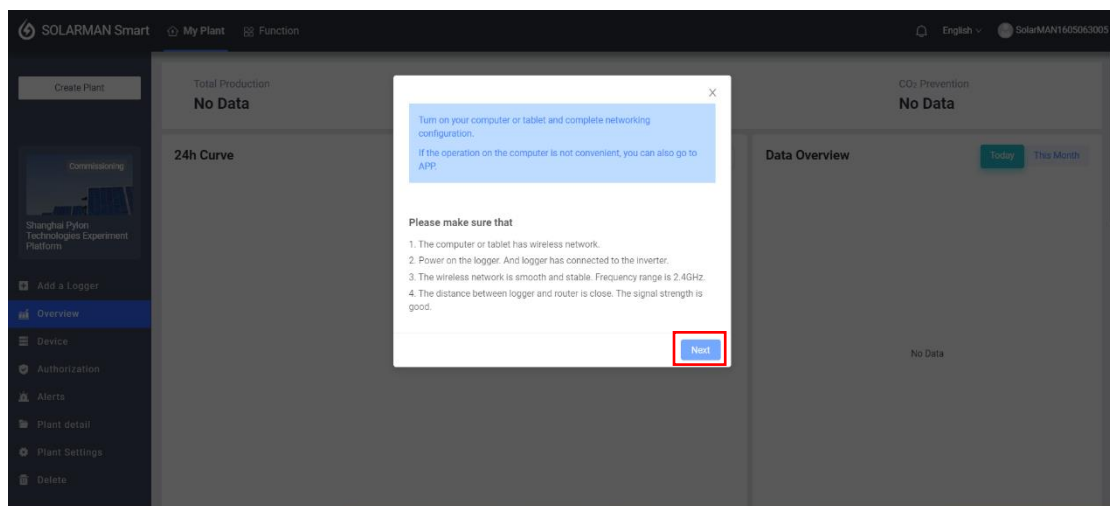
Back to modify

Added

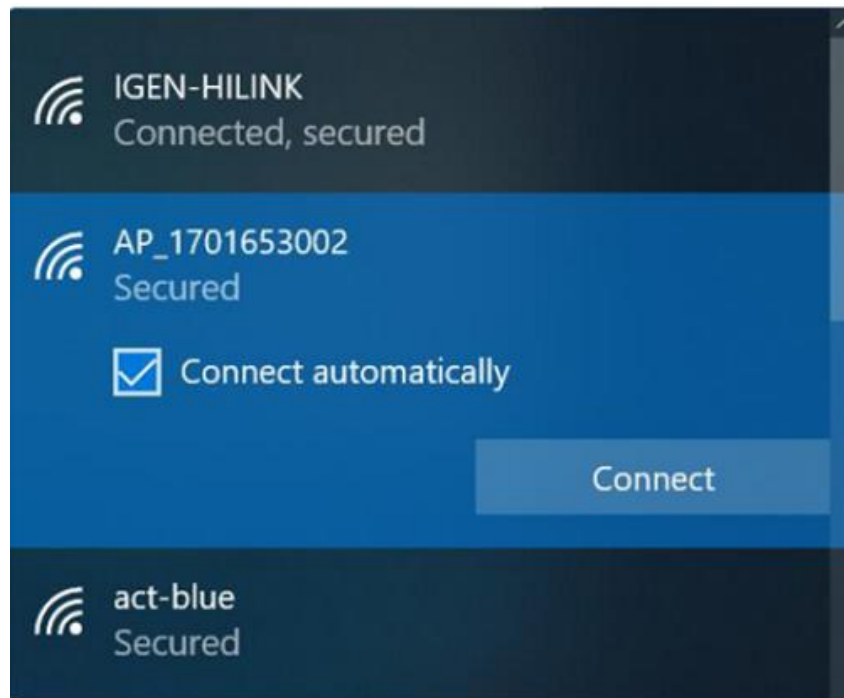


d. Network configuration.

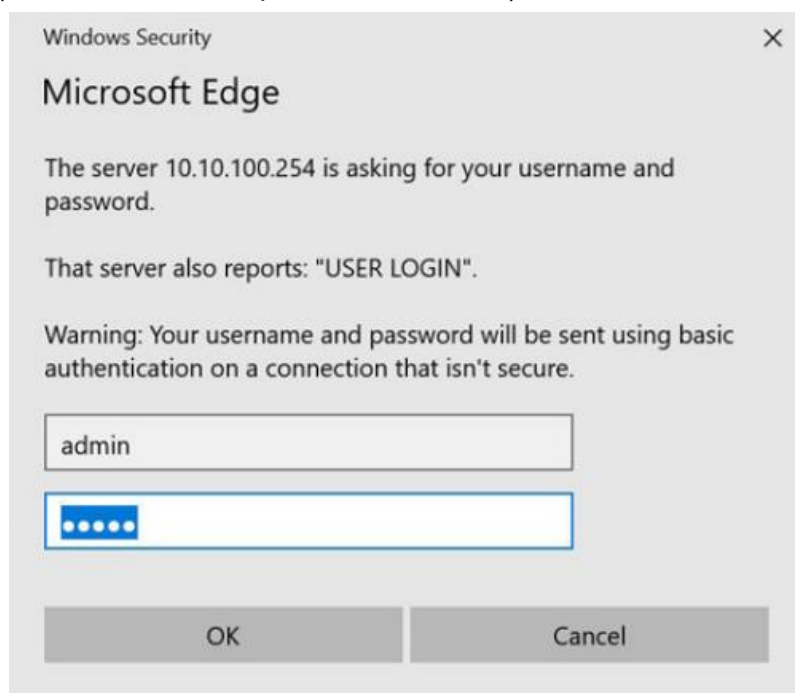
The network configuration steps of the logger are as follows:



Go to wireless network list and connect to "AP_123456"(123456 is logger SN). The connection do not require password.



Open the browser and enter "10.10.100.254". When connecting AP network, authentication is required (Default account and password are admin).



After entering Web configuration page, please go to quick configuration/networking menu and follow the prompts to complete networking configuration.

Status

Wizard

Quick Set

Advanced

Upgrade

Restart

Reset

- Inverter information

Inverter serial number: 0040334424-03

Firmware version (main): ---

Firmware version (slave): ---

Inverter model: ---

Rated power: --- W

Current power: --- W

Yield today: 0.0 kWh

Total yield: 0.0 kWh

Alerts: ---

Last updated: 0

+ Device Information

+ Remote server Information

Help

The device can be used as a wireless access point (AP mode) to facilitate users to configure the device, or it can also be used as a wireless information terminal (STA mode) to connect the remote server via wireless router.

Status of remote server

★Not connected: Connection to server failed last time. If under such status, please check the issues as follows:

(1) check the device information to see whether IP address is obtained or not;

(2) check if the router is connected to internet or

Status

Wizard

Quick Set

Advanced

Upgrade

Restart

Reset

Network name (SSID) (Note: case sensitive): PYLONTECH-RESE/ Search

Encryption method: WPA2PSK

Encryption algorithm: AES

Password (8-64 bytes) (Note: case sensitive):

Obtain an IP address automatically: Enable

IP address: 0.0.0.0

Subnet mask: 0.0.0.0

Gateway address: 0.0.0.0

DNS server address: 10.10.100.254

★Note: After clicking Save, the system will restart immediately.

Save

Help

In this page, you can click the "Search" button to automatically search for nearby wireless access point, and connect your device to it by setting the network parameters.

★Note: If you haven't set this kind of device before, please follow the setup wizard.

★Note: After clicking Save, the system will restart immediately.

You need to re-login the configuration interface after restart.

Click "Search" button on the page, users can find existed wireless network servers around their locations.

Status

Wizard

Quick Set

Advanced

Upgrade

Restart

Reset

Please select your current wireless network

Site Survey

SSID	BSSID	RSSI	Channel
<input checked="" type="radio"/> PYLONTECH-RESEARCH	6:74:9C:2D:78:9E	100	1
<input type="radio"/> PYLONTECH-RESEARCH	6:74:9C:2D:83:66	86	11
<input type="radio"/> 360深测/藏德板封港	D0:FA:1D:2E:B:8C	47	1
<input type="radio"/> MXCHIP_848FF5	B0:F8:93:84:8F:F6	47	6
<input type="radio"/> AP_4010081005	9C:D8:63:79:48:C0	45	8
<input type="radio"/> PYLONTECH-RESEARCH	6:74:9C:2D:83:62	42	6
<input type="radio"/> PYLONTECH-RESEARCH	6:74:9C:2D:78:72	23	6
<input type="radio"/> AP_1701683607	98:D8:63:F6D:65	16	6
<input type="radio"/> measlab	82:EA:7:14:82:9F	13	1
<input type="radio"/> Secure_Visitor	7E:44:FD:F1:AF:3B	11	7

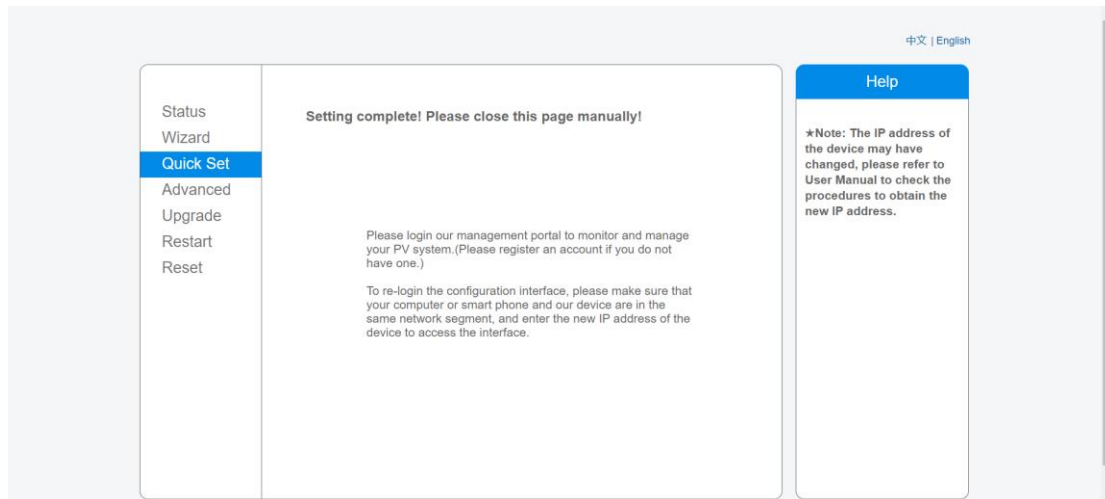
★Note: When RSSI of the selected WiFi network is lower than 15%, the connection may be unstable, please select other available network or shorten the distance between the device and router.

OK Refresh

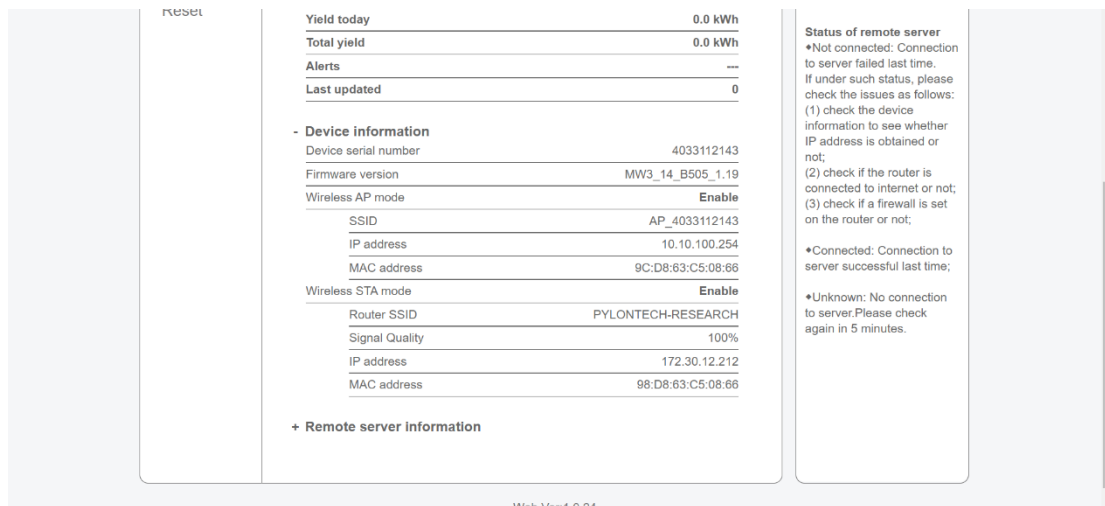
Help

Please refresh repeatedly if there is no desirable wireless access point available.

Select one site, and click "OK" to finish the setting.

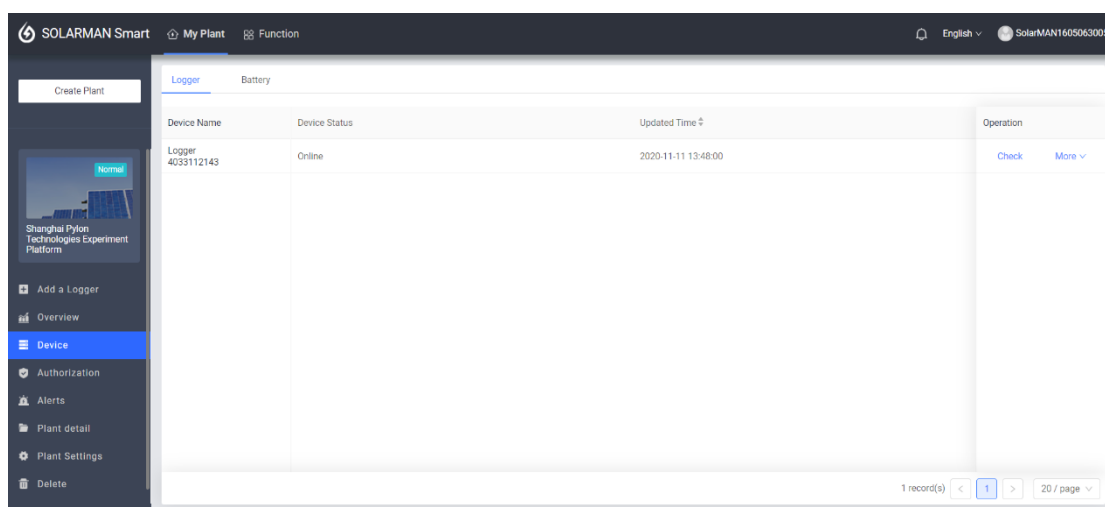


In the status window, the device information can now be viewed.



e. View the battery information.

After the logger is connected to the Internet, return to the Wi-Fi platform interface, and the battery status information can be viewed in the device battery information bar.



To check device data, just click the "Check" button, select "Architecture" window, click

“Parent device” part.

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: Pylot-----
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: Pylot-----
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: 121212121211111	Battery Pack 2 Device Name: Force_L	Battery Pack 2 Brand: Pylot-----
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	

In the historical data window, a line chart of some basic data of the battery at any date should be represented.



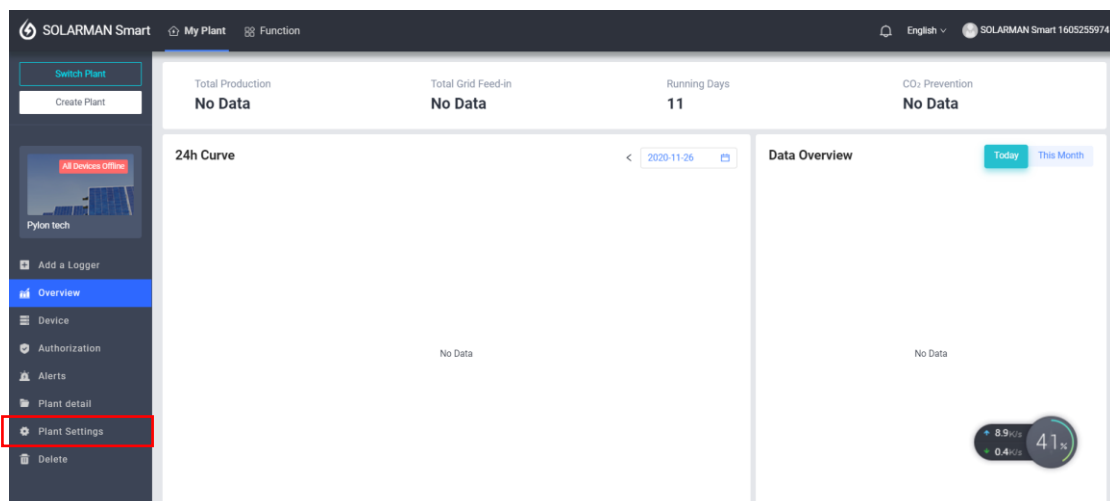
2. Authorization

Authorization is a function of specifying access rights/privileges to resources, which is related to information security or computer security in general 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.

Authorization can only be managed on laptop.

a. Before start

Before starting the authorization operation, users should check the authorization settings through “plant settings” button.



Then view “Plant Authorization Restrictions”, if the restriction is turned off, click “Revise” to change it.

Plant Settings

Calculation of Electric Energy

All Calculations

Revise

Data Source

Intelligent Selection

Revise

Plant Authorization Restrictions

The restriction is turned off

Revise

Choose “Turn on the restriction”, and “Save it”.

Plant Settings

Plant Authorization Restrictions

The restriction is turned off

☐ Turn on the restriction

After turning on the authorization restriction, if the merchant wants to view the data and operation of the plant, you need to authorize the plant.

☒ Turn off the restriction

After turning off the authorization restriction, if the merchant wants to view the data and operation of the plant, they only need to send you an authorization application, and the system will default to you agree to the external authorization of the plant.

Cancel

Save

Now, the authorization function could be used.

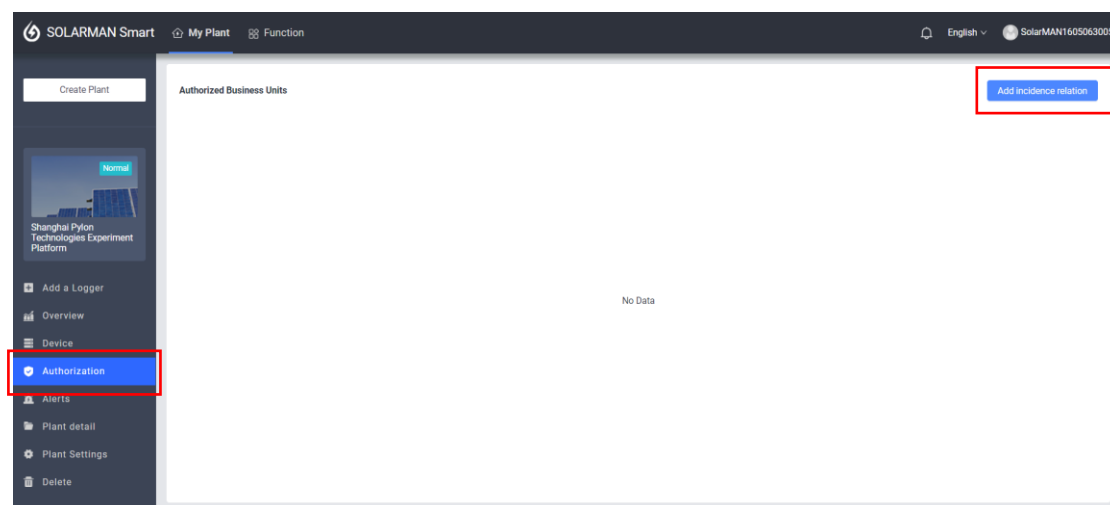
b. Definitions:

- 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. Authorize procedures:

Users need to search for the business unit information first, and then authorize to the business unit, the business unit can see the user registration information after authorization. After the authorization is successful, the user can also cancel the authorization, and multiple businesses can be authorized.

Select “Authorization” in the menu bar of the page and click “Add incidence relation”.



Enter business unit name and search.

Plant Authorization X

1

2

3

Please enter business name or key word first:


Click the authorized user and the “confirm” button will be lighted.

Plant Authorization X

1

2

3

 Pylontech

1 record(s) < 1 >

The user can be assigned as a new role.

Plant Authorization X

1


2


3

Assign a role

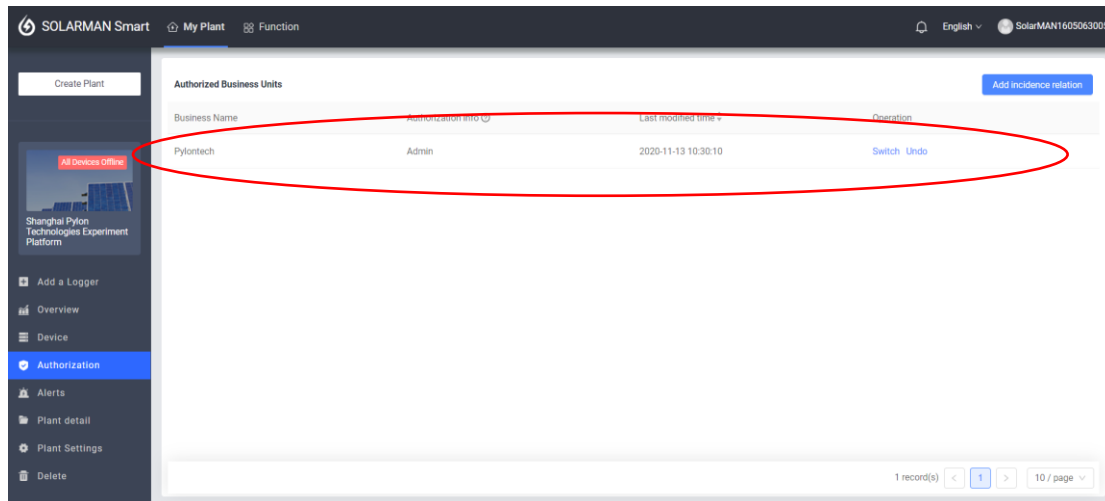
When you authorize a plant to a business unit, please assign the role first. Notice: The business unit will only be able to check the content or operate the functions you have set.

You are going to authorize other plants to the business unit. The business unit will continue to play the same role.


Ordinary member
Ordinary members can check the production data, detailed information, alert information and device information. But they cannot edit or set up the plant.


Admin
In addition to having the functions of ordinary members, Admin can set up or operate the plant and device, but cannot delete the plant.

The authorized business units can be viewed now.



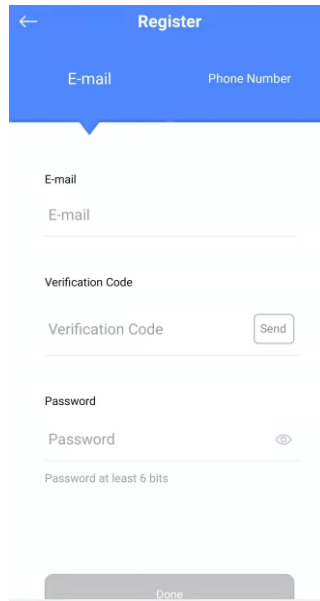
3. For Mobile Operation

Mobile device could also be used as a way for terminal users to monitor batteries(Suitable for Android and IOS).

- Download 'SOLARMAN Smart' APP from App Store.

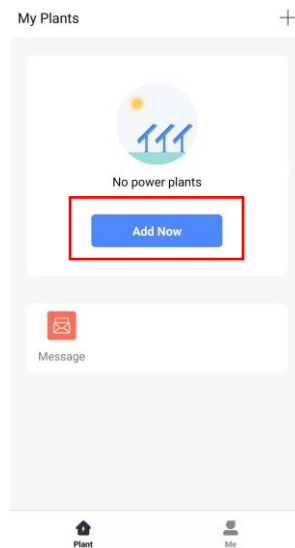


Open the application and finish the registration.
 Similar to laptop portal, it has two methods to register.



The Register screen features a blue header with a back arrow and the title "Register". Below the header are two tabs: "E-mail" (selected) and "Phone Number". The "E-mail" tab contains an "E-mail" input field, a "Verification Code" input field with a "Send" button, and a "Password" input field with a toggle icon. A note below the password field states "Password at least 6 bits". A grey "Done" button is at the bottom.

b. Create a new power plant.



Click "No" and "Create Now" respectively.

←
Notice

Dear owners, do you have an installer to do O&M in the later stage?

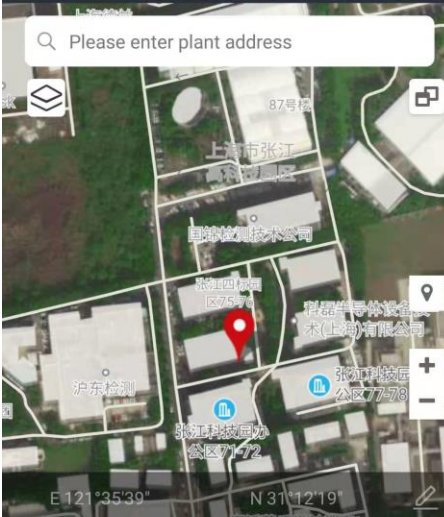
Yes
No

If your plant has no installer to do O&M in the later stage, please click "Create Now".

Create Now

Select or enter the power plant address, then click “Next”.

←
Confirm Plant Location



Plant Address
China, Shanghai, Shanghai Chenggu, Pudong Xinqu >

Next

Type in power plant information to complete the plant creation.

←
Plant Info

Basic Info

Plant Name
Name your plant

Time Zone

(UTC+08:00)
 Beijing,Chongqing,Hong Kong,Urumqi

>

System Info

Plant Type
Residential Rooftop
>

System Type
Please select
>

Installed Capacity(kWp)
Please enter

Operating Date i
2020-11-13
>

Yield Info

Currency
CNY
>

Unit Price(CNY/kWh) i
Please enter (Optional)

Total Cost(CNY)
Please enter (Optional)

Click “Go to Add” to add a logger for the plant.

Created

✓

Created

Continue the following steps

🔧

Add a logger
Go to Add

Logger can collect the data of related devices in the plant,upload to platform for data analysis

If you don't know the device information for a while, this step can be skipped and you can then operate in the power station details.Skip

- c. Add a logger.
Enter or scan the SN of the device.



Add a logger

Please enter the logger SN belongs to the plant. System will calculate plant data according to the logger.

SN Please enter device SN



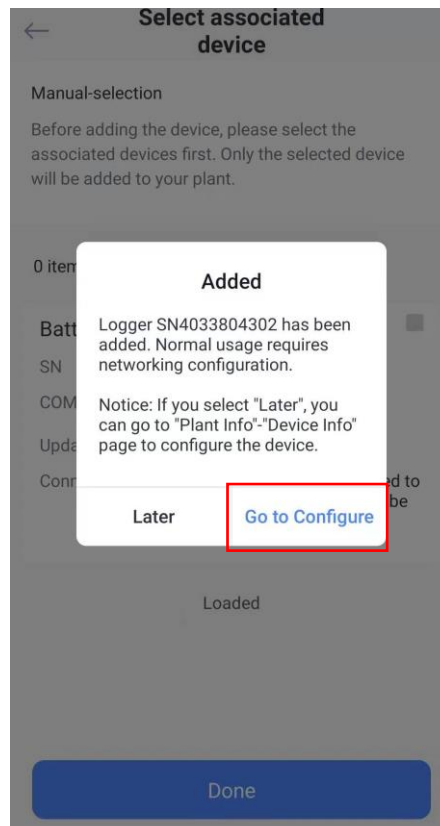
Cannot Find SN/Barcode?

Add

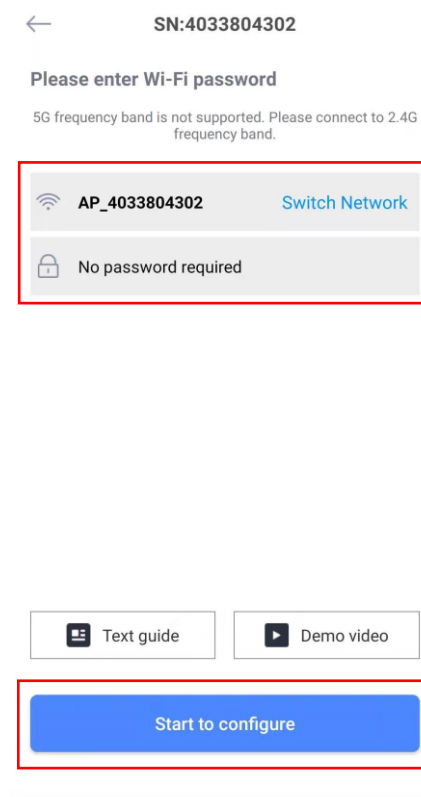
The serial number is located on the back of the box



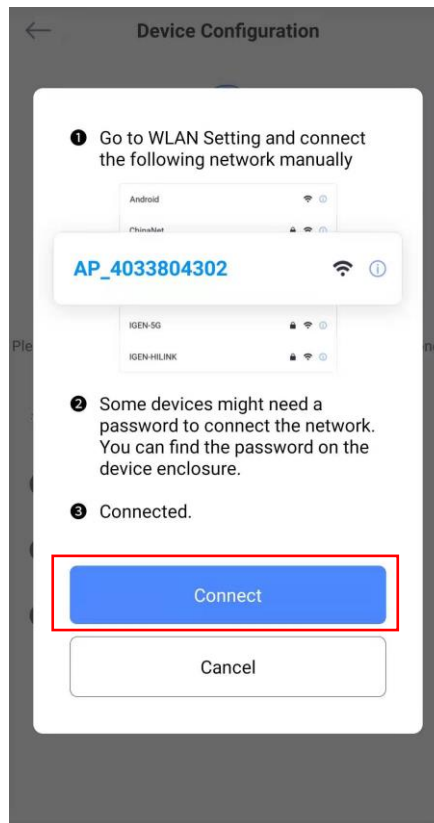
Select “Go to Configure” to start the setting.



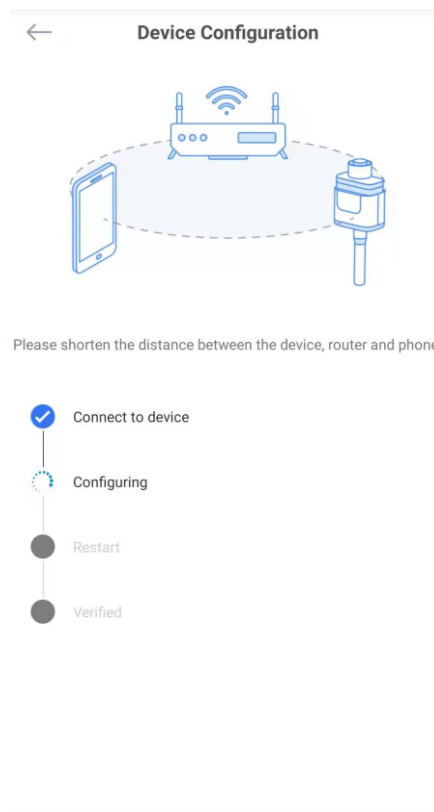
d. Connect to the Wi-Fi network.



Click "Connect" to switch the network to the device Wi-Fi network.



Device enter the status of configuration.



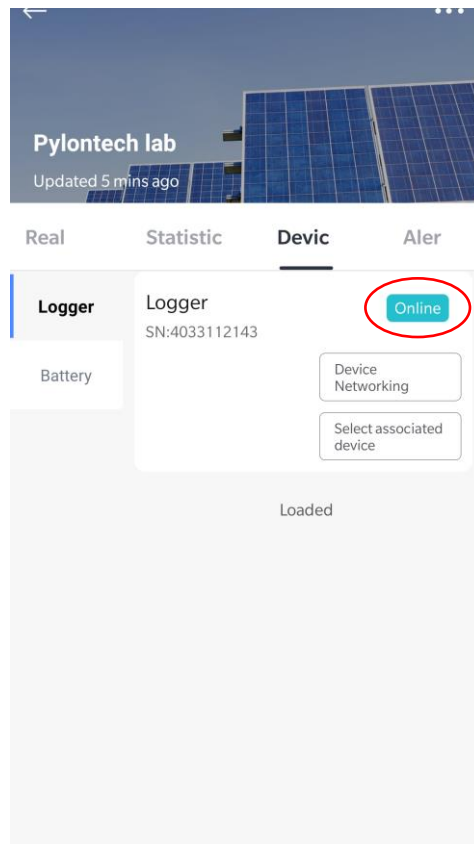


Configuration succeeded

Device data will be displayed in 10 mins. After that, you can check device status in device list.

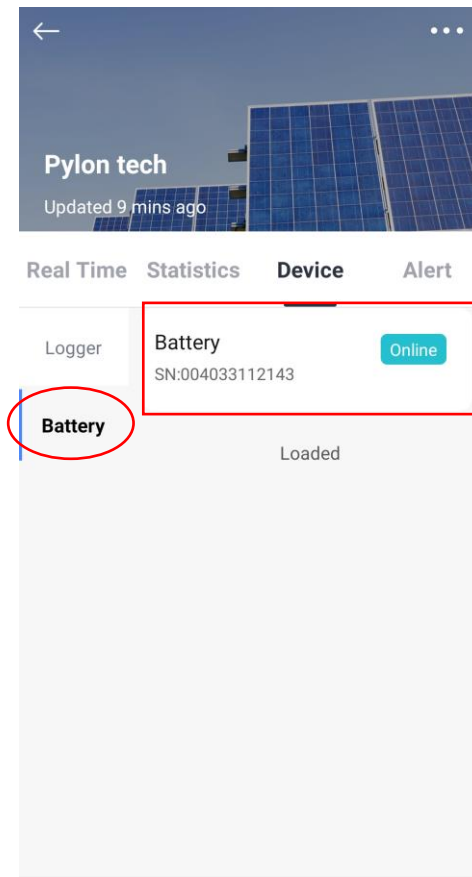
Done

When finishing the configuration, wait for 3-10 minutes, the logger could be online.



e. View the battery information.

Open the battery window, the battery information can be viewed now.



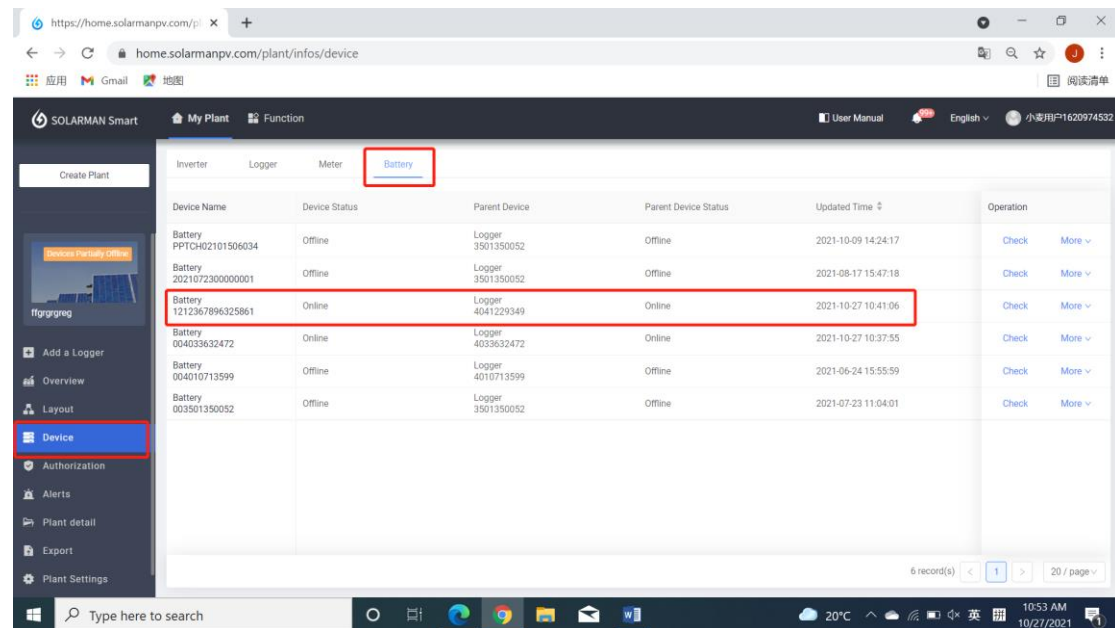
← Battery ***	
Device Parameters	Statistics Architecture
Basic Information	
Connected Device SN: 004033112143	
Battery pack	
No. of Battery Pack: 1	
Battery Pack 1	
Battery Pack 1 Connected Device Sn: 0000000000000007	Battery Pack 1 Device Name: Force_L
Battery Pack 1 Brand: Pylon-----	Voltage-1: 48.64V
Current-1: -0.10A	Battery Pack 1 SOC: 15.00%
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: 11.08AH	Battery Pack 1 Module Total Capacity: 73.85AH

4. Maintenance

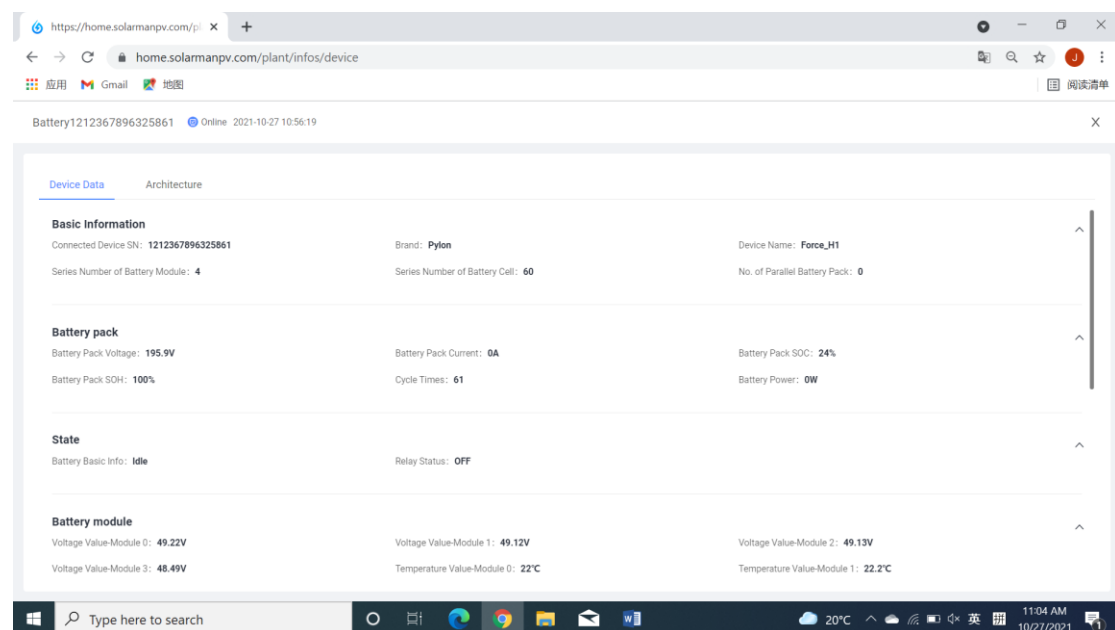
a) Download battery logs

Method 1:

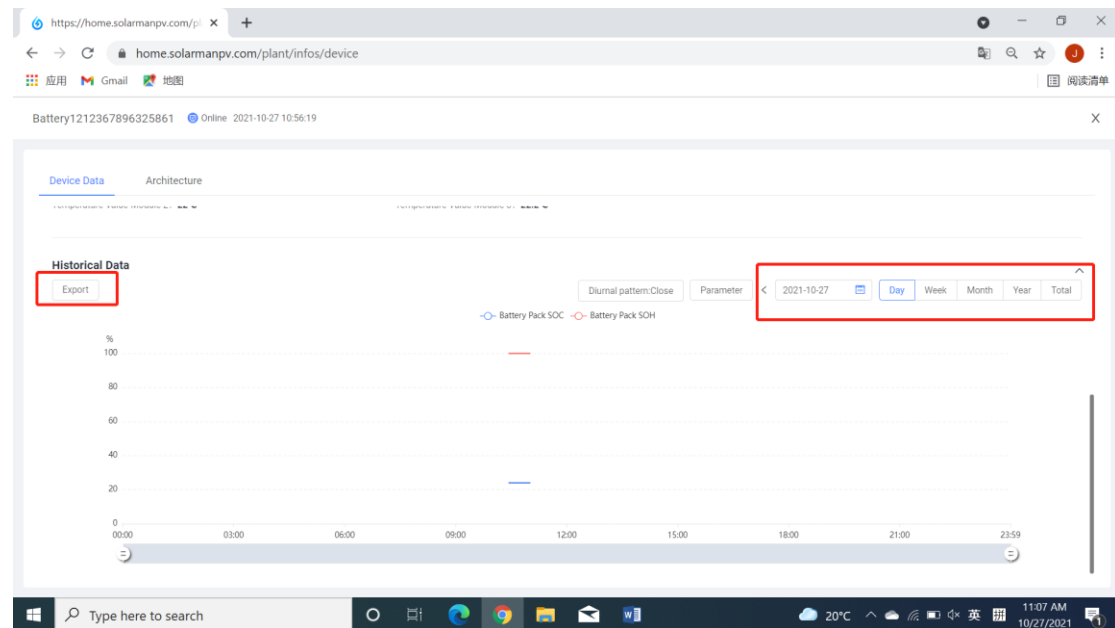
1. Go to the main window of the portal, click “Device” on the left, then choose “Battery”, select the battery you want to view.



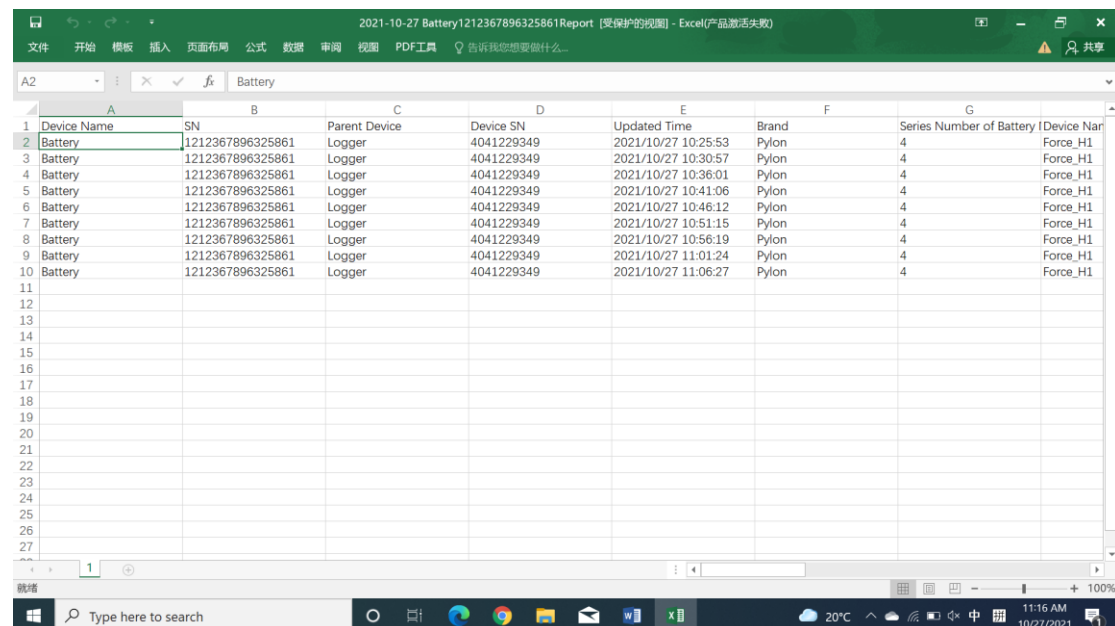
2. Drag the scroll wheel to the bottom of the page.



- You can choose the date and length of the logs, then click the “Export” to download the data. Note that you can download the logs up to one month.



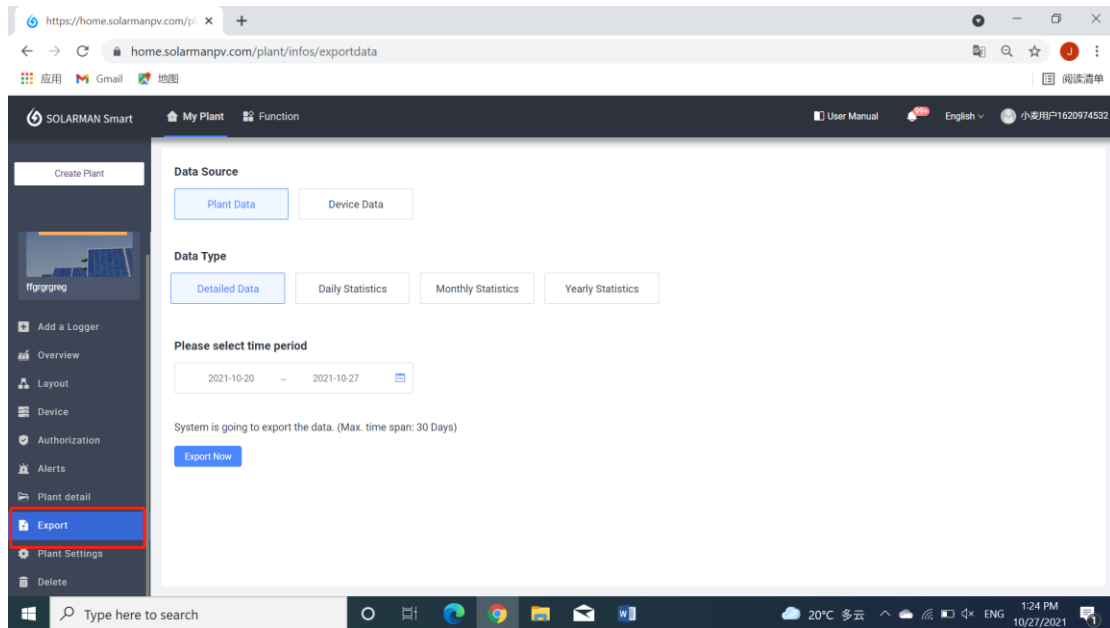
The history data will be like this:



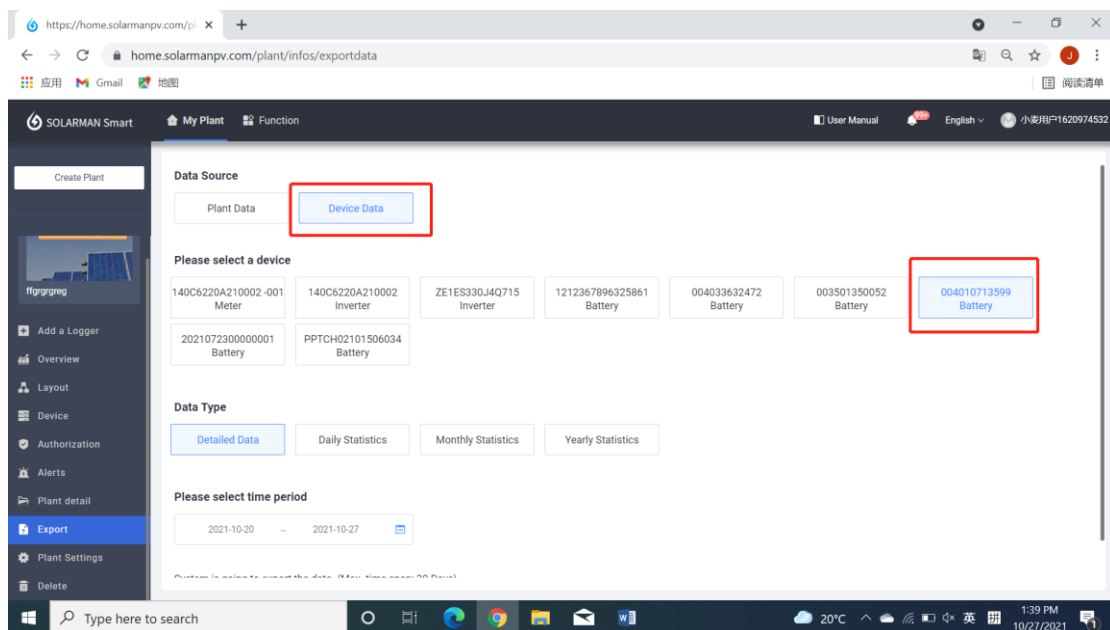
Device Name	SN	Parent Device	Device SN	Updated Time	Brand	Series Number of Battery	Device Name
Battery	1212367896325861	Logger	4041229349	2021/10/27 10:25:53	Pylon	4	Force_H1
Battery	1212367896325861	Logger	4041229349	2021/10/27 10:30:57	Pylon	4	Force_H1
Battery	1212367896325861	Logger	4041229349	2021/10/27 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

Method 2:

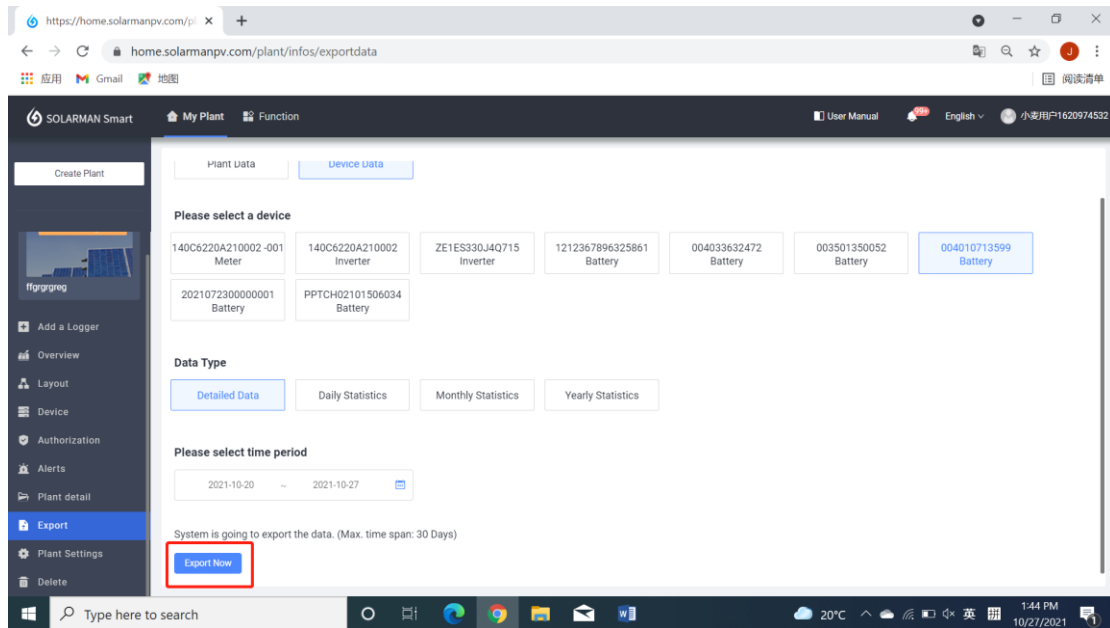
- Click “Export” on the left of the main window.



2. Select “Device Data”, choose the battery that you want to download logs, select the data type you want and choose the time period you required.



3. Click “Export Now” to download the logs.



b) Battery firmware upgrade

If you meet the problem that should be solved by 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.