

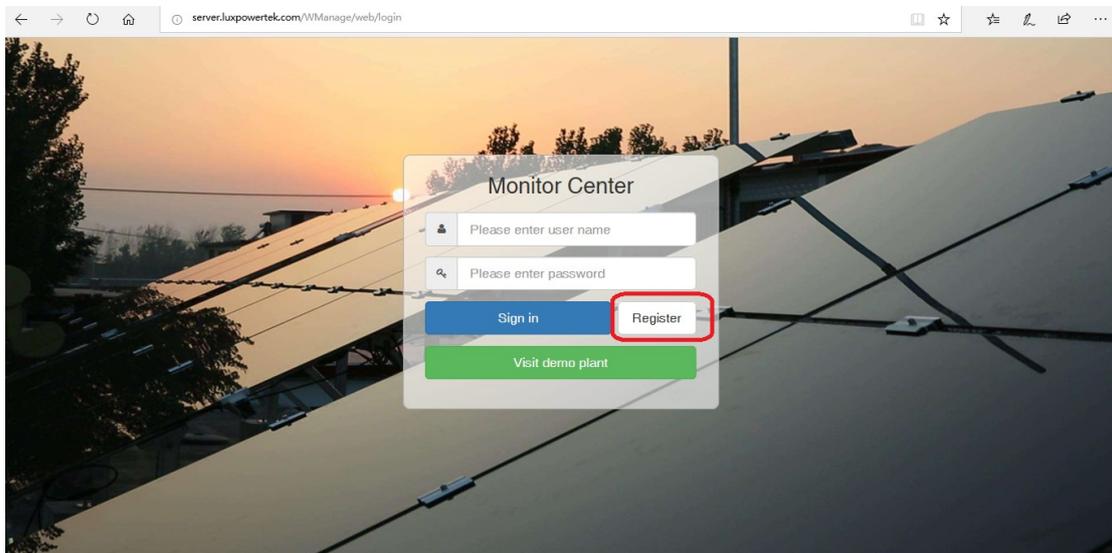
Smart Energy Management System Guidance

Smart energy management system(SEMS) is developed to monitor and control the Luxpower energy storage system. After the inverter installation and commissioning, we strongly recommend that you connect the inverter to the network to better know the real-time operation of the system and maintain it in time. Follow the steps below to get your account and finish WiFi/LAN connection, which will make your installation, connection, configuration and operation easier.

1. Control and Monitoring By Internet

Step 1: Register an account

1. If you use PC computer to register an account, please visit the web <http://server.luxpowertek.com/WManage/web/login> and click "Register".



2. You can also download "Luxpowerview" APP to register and monitor the system. Scan the two code bar below to get the APP. If you can not download the APP, please go to google store or apple store first, and search "Luxpower", you will find the APP. After download and install the app, you can begin to register



Andriod APP



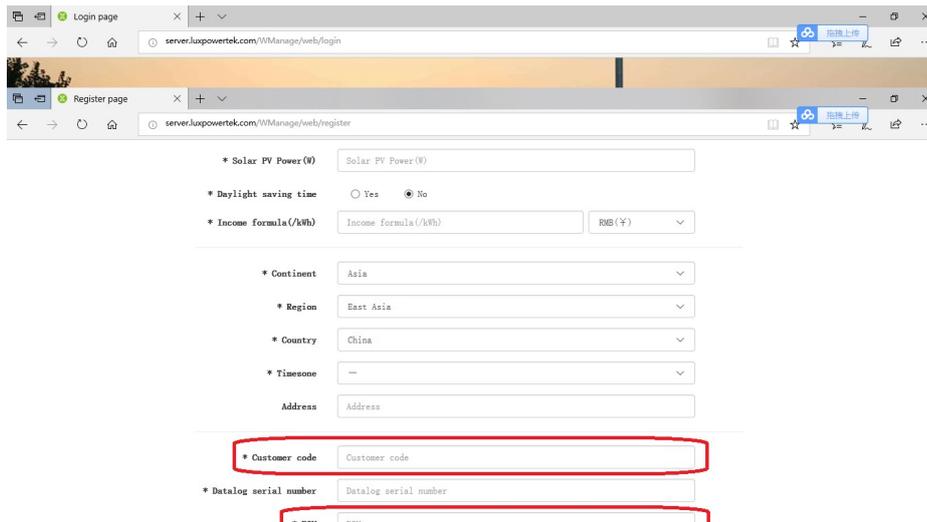
IOS APP

The screenshot shows the Android app interface. At the top is the LuxPower logo. Below it are two input fields for 'Username' and 'Password'. There are two checkboxes: 'Remember username' and 'Auto login', both of which are checked. A green 'LOGIN' button is positioned below the password field. A separator line with '- or -' is in the middle. At the bottom, there are four buttons: 'REGISTER' (highlighted with a red border), 'WIFI MODULE CONNECT', 'PRODUCT WARRANTY', and 'LOCAL CONNECT'. The version number 'Version 1.7.1' is at the very bottom.

The screenshot shows the IOS app registration form. The title bar at the top says 'LUXPOWER TEK'. The form includes the following fields: '* E-mail', '* Language' (set to 'English'), 'Tel number', '* Station name', '* Nominal power(W)', '* Daylight saving time' (with a toggle switch), '* Income formula(/kWh)' (set to 'RMB(¥)'), '* Continent' (set to 'Asia'), '* Region' (set to 'East Asia'), '* Country' (set to 'China'), and '* Timezone' (set to 'GMT +8'). Below these are 'Address', '* Customer code', '* Datalog serial number', and '* PIN'. The 'REGISTER' button at the bottom is highlighted with a red border.

3. When you register your account, you need to fill in the following information
 - a. Customer code: it is the code of distributor or installer, please contact the distributor or installer to get the customer code
 - b. Datalog serial number: the serial number is attached to the wifi/LAN shell.
 - c. PIN: PIN is attached to the wifi/LAN shell below the SN





4. For the distributor, please ask luxpower team to get the distributor account, for the installer, you can ask the distributor or luxpower team to get the installer account.

Step 2: Set WIFI password for wifi module

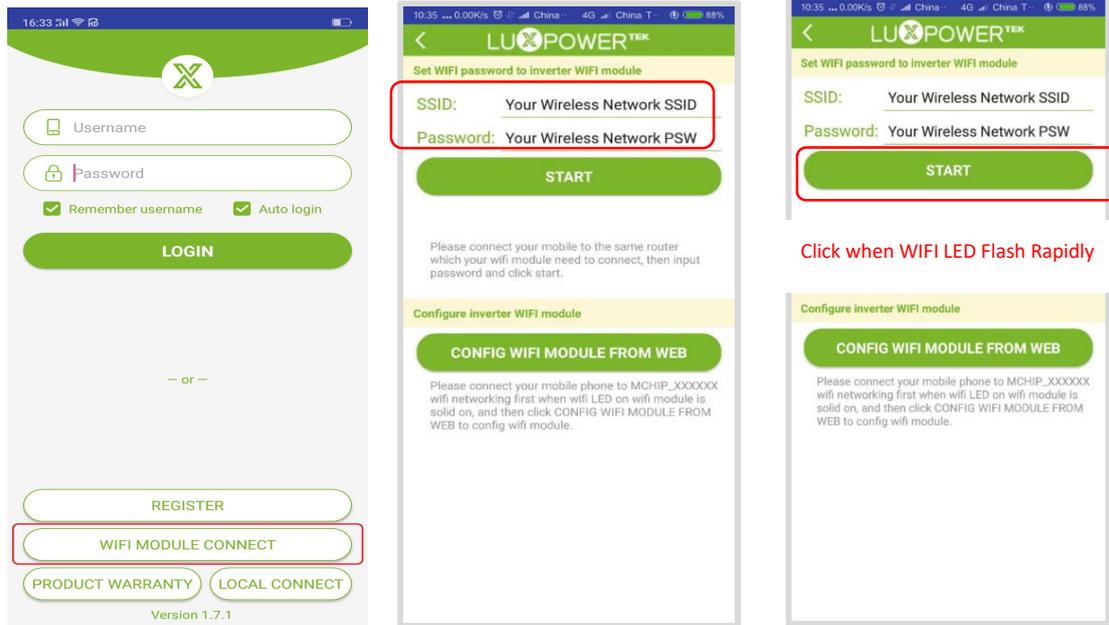
Once you get the monitor account, you can start the WiFi module connection. Plug in the WiFi module to the communication interface on the bottom of the inverter as below.



When connecting for the first time, please set the password for the wifi module. There are two ways to make wifi password settings.

1. Use APP for quick password setting

- a. Install LXPView on your smartphone. Connect your smartphone to the wireless network that the wifi module needs to connect to, it means the phone and wifi module should be connected to the same wireless network.
- b. Open the app. Click on "WIFI MODULE CONNECT" and input your wireless network name and password



- c. Power on the inverter and plug in the wifi module
- d. When the WIFI LED on the wifi module starts flashing rapidly, click the "Start" button as shown to set the password. Wait for about 10 seconds, the first green LED is always on, it means you set it successfully. Note that it must be clicked when the WIFI LED flashes **quickly, and otherwise it is invalid.**



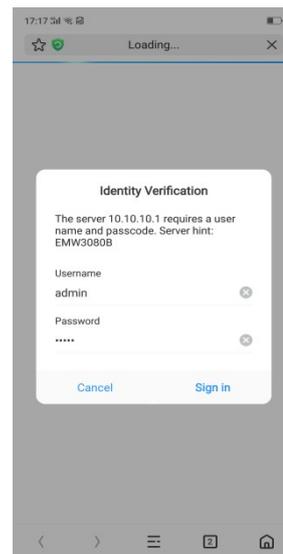
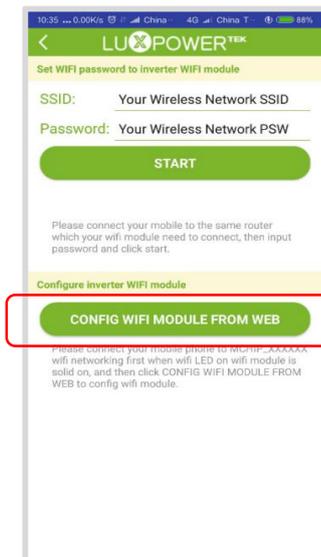
After set password successfully, the Cloud LED of wifi will blink for about 2 minutes, and then it is solid on, which indicate that the wifi module has successfully connected to the wireless network. After 5 minutes, the INV LED of the WiFi module is always on, indicating that the wifi module and the inverter are successfully communicated. After 10 minutes, you can check the information about the system by website or APP.

Note: You do not need to log in to your account using the WIFI MODULE CONNECT function. After 10 minutes, **if INV LED is solid on and Cloud LED is blink, it means the wifi module do not connect to wireless network successfully, please plug out wifi module and then plug in , and repeat the work from step (b).**

2. Password setting via the Web

The steps to set a password via the web are as follows:

- a. Connect your mobile phone or laptop to the hotspot sent by the wifi module. The name of the hotspot is the same as the serial number on the wifi module shell.
- b. Power on the inverter. When the WIFI LED on the wifi module is solid on, enter 10.10.10.1 in the browser in PC, or Click "CONFIG MODULE FROM WEB" of APP. A dialog box for entering the user name and password will pop up. The username is admin and the password is admin.



- c. After logging in, select English. Go to the "Station Mode Setting" page.

setting

MICO IoT OS

• 中文 | English

Run State

- Wifi Mode Select
- AP Mode Setting
- Station Mode Settting**
- Uart Setting
- Network Setting
- Module Management

AP State

Function	Enable
IP	10.10.10.1
Netmask	255.255.255.0

STA State

Function	Enable
Channel	6
Signal Strength	-48 %
IP	192.168.0.140
Netmask	255.255.255.0
Gateway	192.168.0.1

Command Mode State

Function	Disable
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Network 1 State

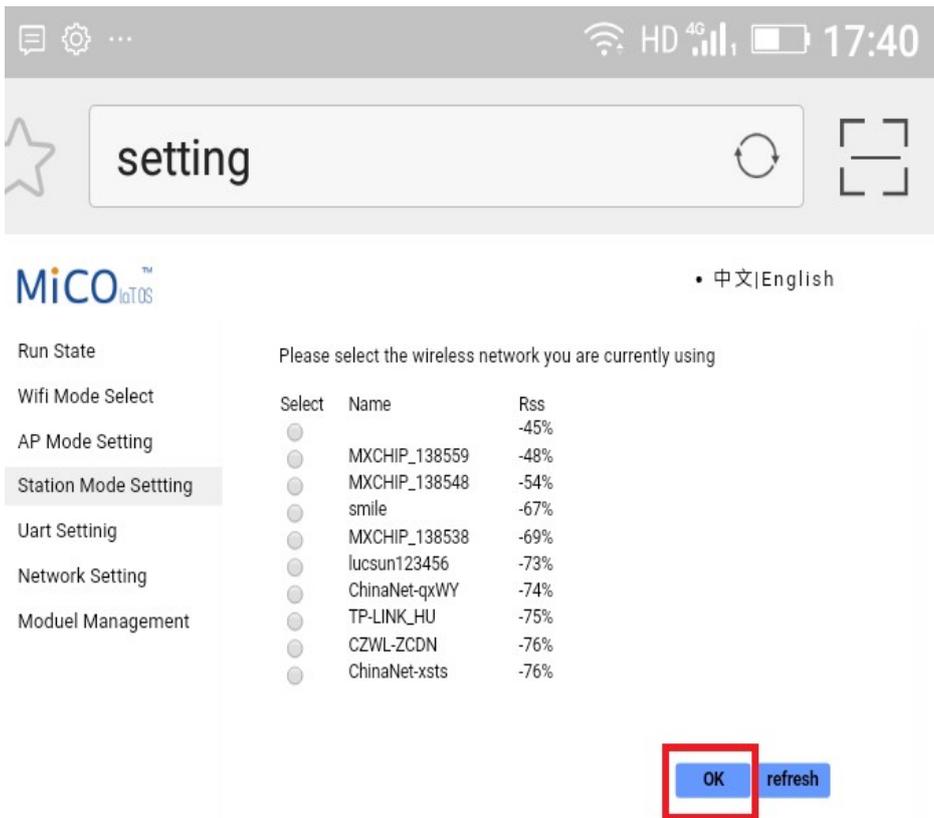
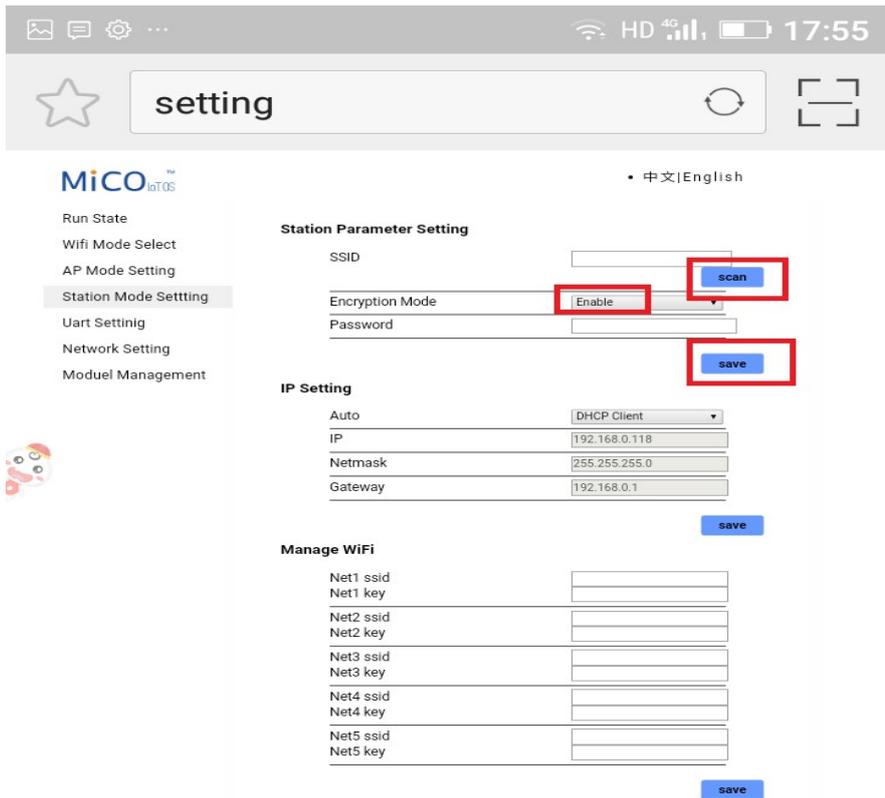
Function	Enable
Protocol	TCP client
TCP Client State	Connected

Network 2 State

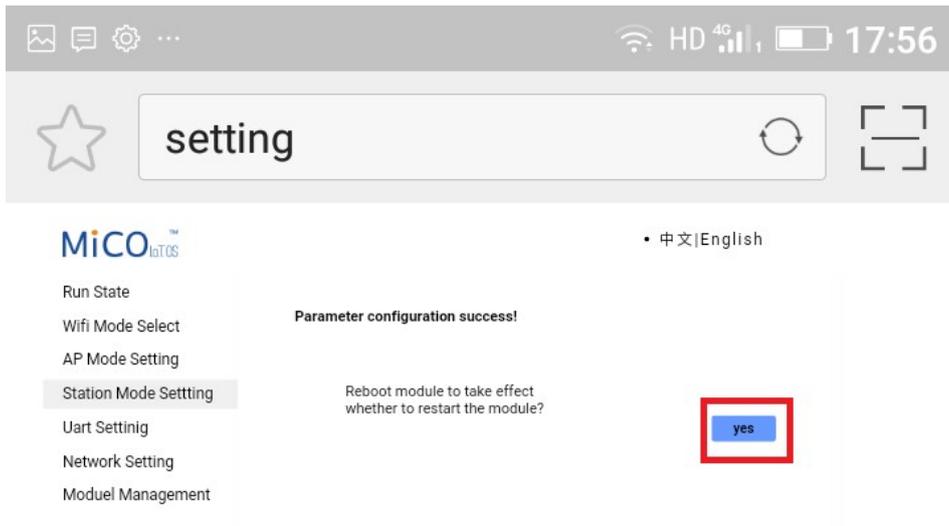
Function	Disable
Protocol	无

Run Time 853142 ms

- d. Click on "Scan" and select the wifi network you want to connect to. Input wifi password, click "Save" .



e. After saving, restart the module.



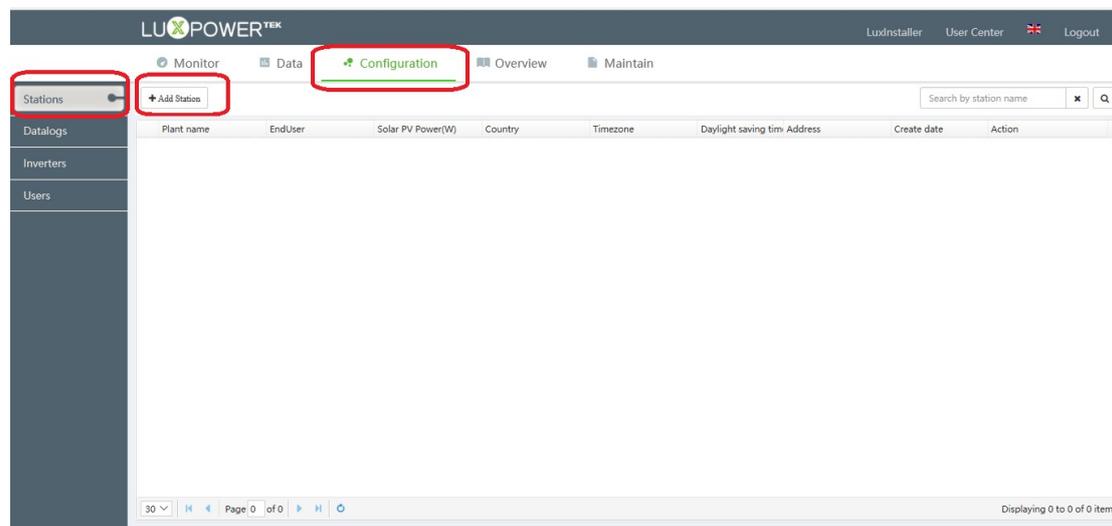
Wait 10 minutes, when all LEDs on wifi are solid on, you can view the running data through web or APP. Please note **if INV LED is solid on and Cloud LED is blink, it means the wifi module do not connect to wireless network successfully, please plug out wifi module and then plug in , and repeat the work from step (b)**

For the LAN module, just plug in the module and connect the module to internet by cable, you do not have to set the password.

Step 3: Add a new power station or datalog

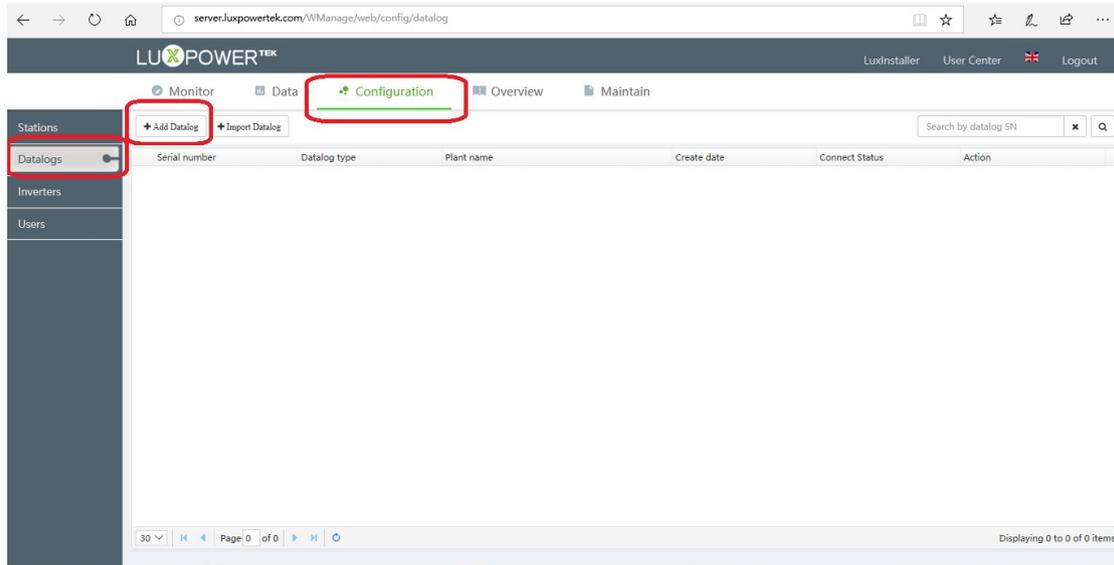
1. Add new power station

If you have more than one power station, you can enter the "Configuration" page, select "Station", and click "Add Station", then fill in the information and complete the power station addition.



2. Add Datalog

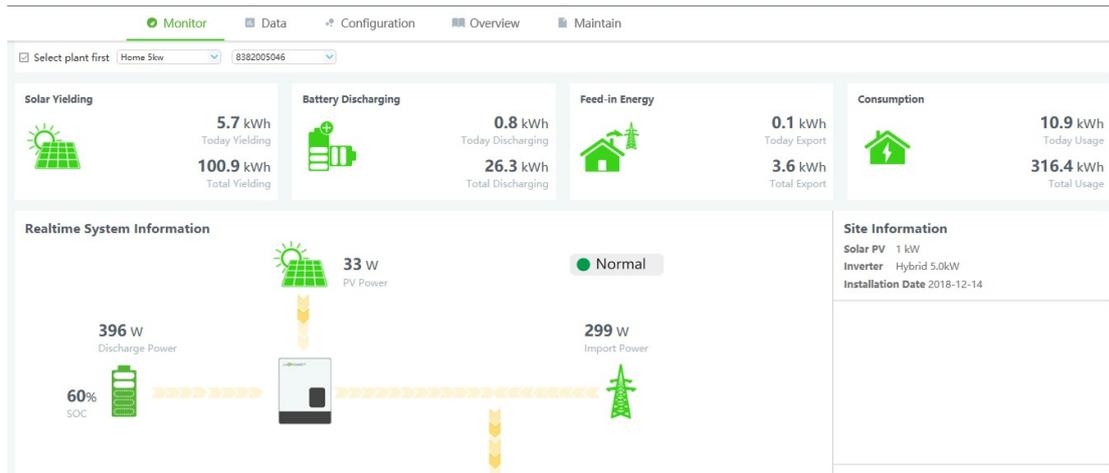
If you have more than one inverter installed, follow the steps below to add a new datalog. Click "Configuration", "Datalogs", "Add Datalog" to add the datalo. Note that after the datalog is added, the inverter will be added automatically after it is connected.



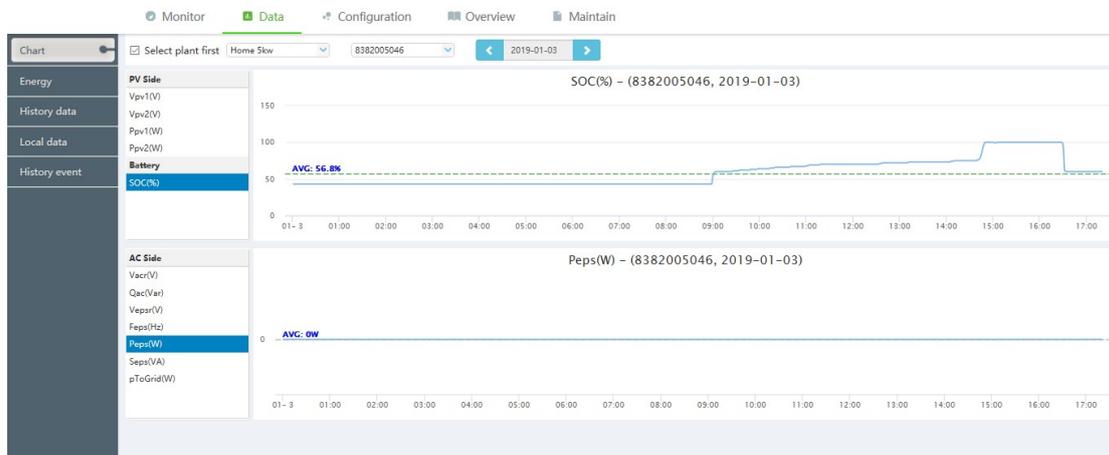
Step 4: Monitoring and setting

The function of the smart energy management system is mainly composed of the following parts:

- a. Monitor: including real-time monitoring and historical data uploaded from your system. The monitor parameter includes solar panel power, battery discharge power, load power, power feed into the grid, real-time operating status of the system. The system also counts the total power generation of the solar panel, the total discharge power of the battery, the total amount of power consumed by the load, and the total amount of electricity feed into the grid.



b. Data: You can view detailed real-time and historical data of the system as well as event log information, and support exporting data in EXCEL format.

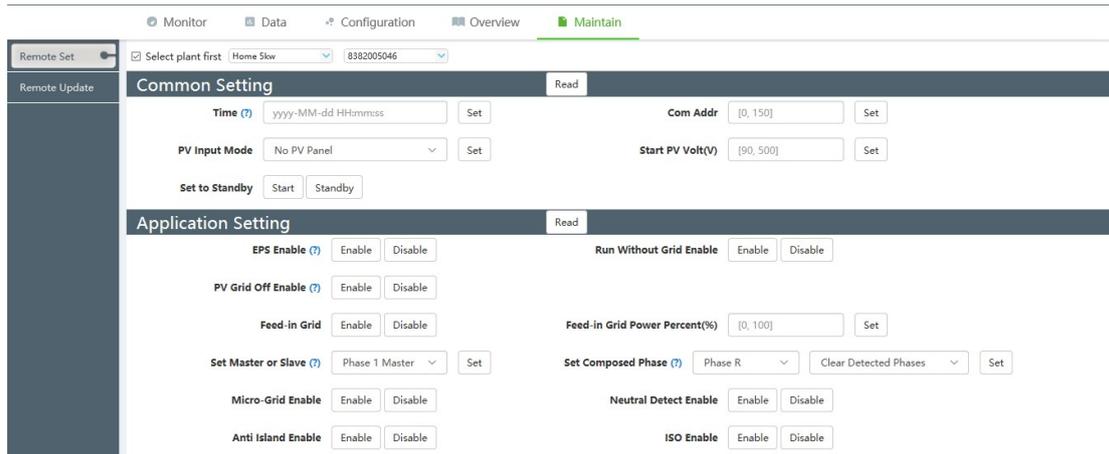


c. Configuration: User and plant management, you can add, edit or delete monitoring station, datalog and user information.

The Configuration page shows a table for managing monitoring stations:

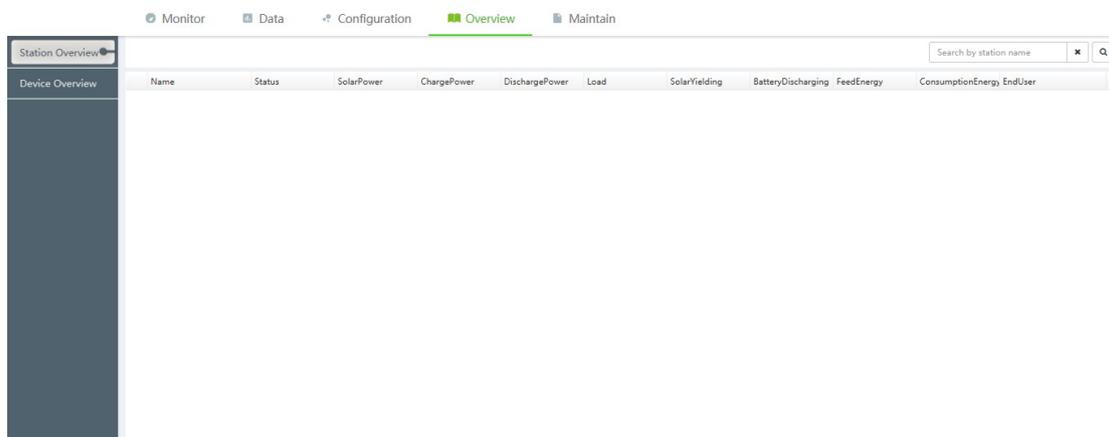
Plant name	EndUser	Solar PV Power(W)	Country	Timezone	Daylight saving time	Address	Create date	Action
[Empty table body]								

d. Maintain: Remote settings and system upgrades are available to make your system more convenient and efficient, maximizing revenue.



e. Overview

To get the overview of all station and device

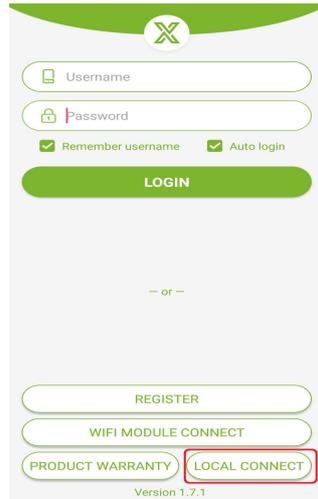


2. Control and monitor without internet

If you do not have internet in the station, there is another way to monitor the system in the station.

Step1, Connect your mobile phone to the hotspot sent by the wifi module. The name of the hotspot is the same as the serial number on the wifi module shell.

Step2, Open LuxpowerView and click "LOCAL CONNECT" After that, you can monitor and control the system.



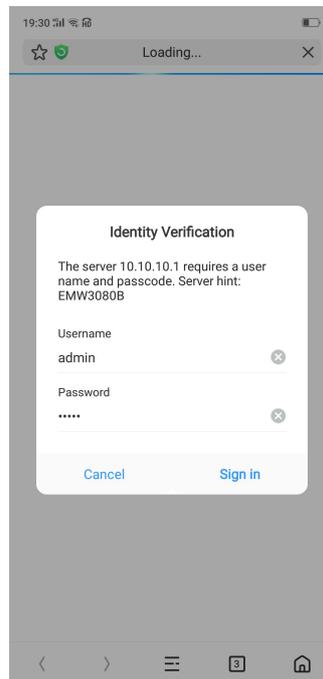
Step3, If you can not open "LOCAL CONNECT" page(for the old module, you need to have step3, for the datalog manufactured after April 2019, you can skip step3), please go to web 10.10.10.1 and set server function as below,

(1) open browser and visit 10.10.10.1

(2) Choose network setting and Network connection2,change the setting to "TCP Server", and the Local port set to"8000"

(3) Save

after that repeat step2 and you can monitor the system locally.



- Run State
- Wifi Mode Select
- AP Mode Setting
- Station Mode Setting
- Uart Setting
- Network Setting**
- Moduel Management

Network Connection 1 Setting

Protocol	TCP Client
Remote Port	4346
Server Address(ip or domain)	100.79.53.27

save

Network Connection 2 Setting

Protocol	TCP Server
Local Port	8000

save

- Run State
- Wifi Mode Select
- AP Mode Setting
- Station Mode Setting
- Uart Setting
- Network Setting**
- Moduel Management

Parameter configuration success!

Reboot module to take effect
whether to restart the module?

yes