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# **Solar controller APP and PC monitoring instruction manual**

## **Long-distance WiFi mode**

**File No:**  
**Version: V1.0**

**Description: This app is currently only available for device clients such as Android phones.**

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## 1. Description

This instruction manual guides users how to use APP operation and PC monitoring operation in WIFI mode, and view or set device parameters.

## 2. Software installation and hardware connection

### 2.1 Software installation

First put the CD-ROM attached to the controller into the CD-ROM drive of the computer, then open the CD-ROM and copy the APP software installation package to the Android system phone for installation (or the installation package provided by the relevant personnel of our company)

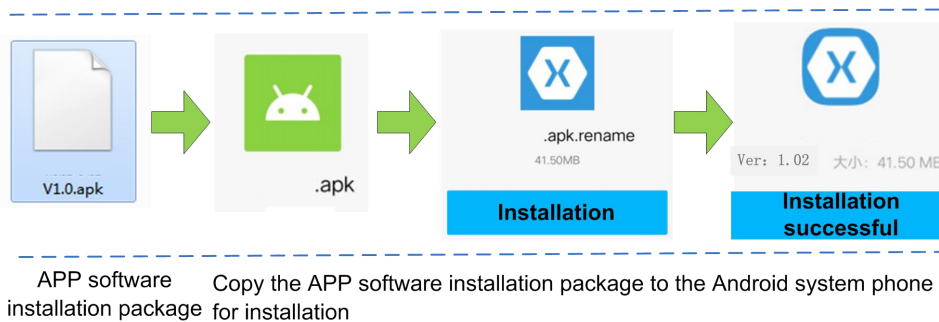


Figure 2-1 APP installation interface

Note: At present, the APP is only installed and used on electronic devices such as mobile phones of the Android operating system;

### 2.2 Hardware connection

Controller interface: using RJ45 interface (RS485 communication protocol):



Figure 2-2 RJ45 interface of the controller (RS485 communication protocol)

The controller device is connected to the GPRS module through a dedicated network cable accessory to achieve GPRS mode communication;

### 2.3 Device and WIFI module connection

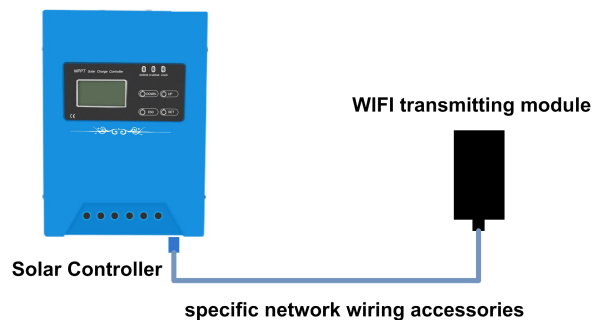


Figure 2-3 Connection diagram between device and WIFI module

Note: The special network cable crystal head blue sheath termination controller device, black sheath termination WIFI module.

Note: Network wire making Reference Appendix 1.

### 3. WiFi module configuration

#### 3.1 WiFi module login

After the device wiring is completed, connect the battery terminal of the device to the power supply, the green light of the WiFi module power indicator lights up, open the phone settings, turn on the WLAN wireless Internet function, select the WiFi module EW11\_xxxx for wireless connection, and exit after connecting;

Open the mobile browser, enter 10.10.100.254 in the address bar, and enter the account and password login interface (the account and password are both admin by default). After entering, click Sign in to enter the communication module and router configuration interface;

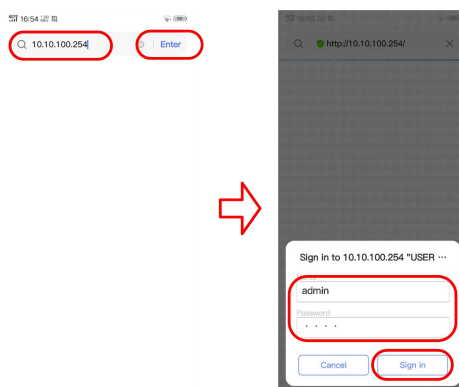


Figure 3-1 WiFi settings login

#### 3.2 WiFi module settings

Select the system settings on the main interface of EW11, enter the wireless router configuration interface, pull down the Menu to the wireless network settings item, click the scan button below, search for other wireless networks, select your own wireless network in the pop-up wireless network item, and click the next selection You can enter the network name of the unlimited network in the STA SSID field above, enter the wireless network password in the STA key field, and then click Submit at the bottom of the menu bar. Exit to the EW11 main interface and Click on the other option, Click the restart button at the bottom of the other options screen. The WiFi and router configuration is completed.

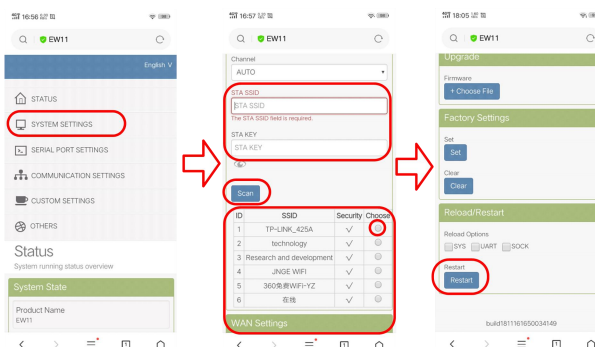


Figure 3-2 WiFi module communication settings

## 4. APP account login

After opening the mobile phone App, on the main interface of the device, click "My" in the lower right corner to enter the account login interface. The account and password are provided by the company.

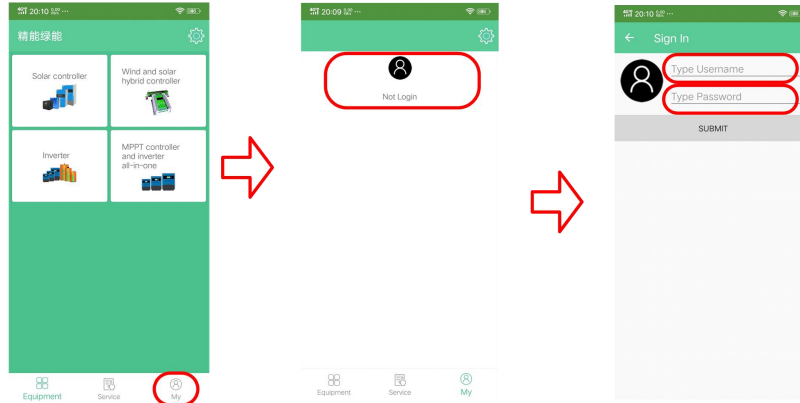


Figure 4-1 Account login interface

After login, click the setting icon in the upper right corner of the main interface of the APP to enter the "System Settings" interface, and click "Communication Mode" to enter the "Communication Settings" interface. Checking is "Remote Management Mode", that is, GPRS mode. The default communication of APP is GPRS mode.(Figure 4-2)

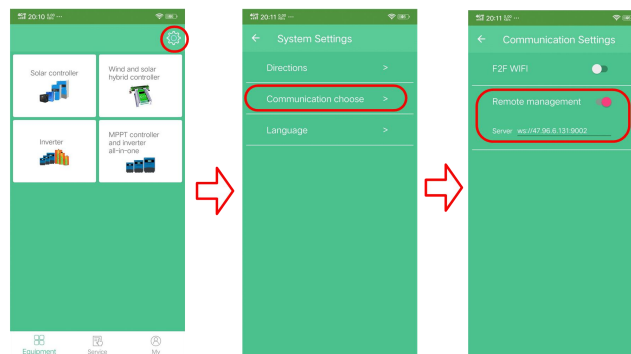


Figure 4-2 GPRS communication setting interface

After the communication method is set, exit to the APP main interface, select the type of device to view, and enter the device list. At this time, the device list will display the status of the added device and display the device online status in real time. When there are a large number of managed devices, choose to look only at the online devices or directly enter the device number to search (refer to Figure 4-3). For detailed viewing and setting methods, please refer to below "Viewing Devices".

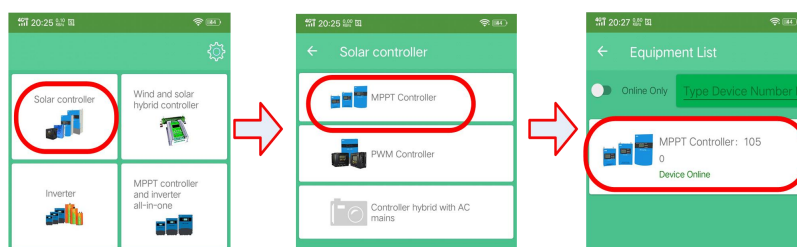


Figure 4-3 Solar controller in GPRS mode as an example

## 5.Viewing device

When the device status in the device list is online, click to view the device details after entering.

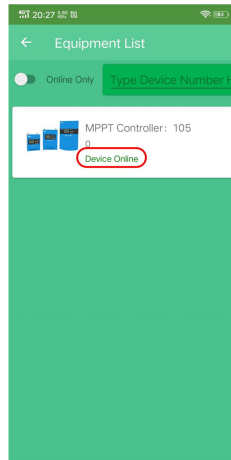


Figure 5 Device List

### 5.1 Viewing the running status of the device

Select any online device in the device list to enter the device details interface. The device details interface displays the "Run Status" tab by default, including "Charging Parameters", "Load Parameters", and "Device Parameters". More To view the above three parameters and other information, you can also control the "Charge Switching Machine" and "Load Switching Machine" through the above switches, and refresh the data by the pull-down operation in the parameter area below.

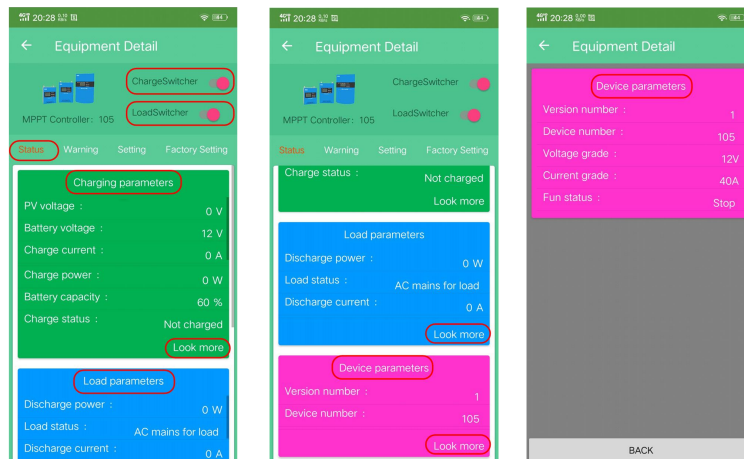


Figure 5-1 Device Details - Running Status

### 5.2 Viewing Device Alarm Information

Click the "Alarm Information" tab to view the real-time alarm information of the device. When the green circle after the alarm message turns red, it indicates an alarm. In the parameter area below, the data is refreshed by the pull-down operation.

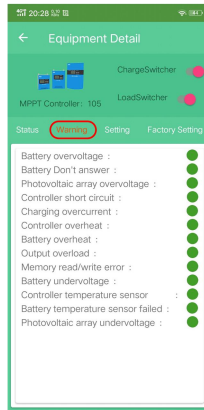


Figure 5-2 Device Details - Alarm Information

### 5.3 View battery parameters

Click the “Battery Parameters” tab to view the battery parameter setting information of the device. Click the “Restore Factory Settings” button at the bottom of the interface to restore the battery parameter settings of the controller to the factory state, and pull down the operation in the parameter area below. To refresh the data.

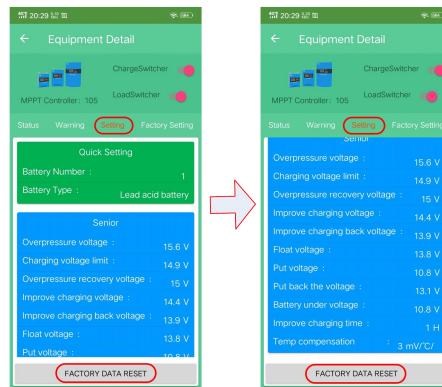


Figure 5-3 Device Details - Battery Parameters

### 5.4 Viewing Load Parameters

Click the “Load Parameters” tab to view the load parameter setting information of the device. Click the “Restore Factory Settings” button at the bottom of the interface to restore the controller's load parameter settings to the factory state, and pull down the operation in the parameter area below. To refresh the data

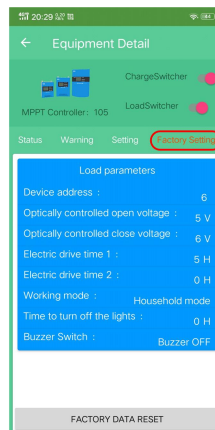


Figure 5-4 Device Details - Load Parameters

## 5.5 Parameter setting

The "battery parameter" and "load parameter" settings can be made in the device details interface;

“Quick Settings”: The default power-on of the device is the number of lead-acid batteries and the corresponding number of strings. To use other types of batteries, you need to reset the battery type and the corresponding number of strings.

“Advanced Settings”: Here is an example of setting “overvoltage voltage”. First enter the “Battery Parameters” interface, click on the “Overvoltage Voltage” line in the interface, open the “Parameter Settings” interface, and the “Overvoltage Voltage” parameter value. Enter the set value, such as "15", click the "Save Settings" button, automatically return to the "battery parameter" interface, the "overvoltage" parameter has been set to save to 15V, if the set value is not displayed, please refresh the view, if After the refresh, the parameters have not changed. Please re-set the parameters again. The other parameters are similar.



Figure 5-5 Parameter setting - overvoltage voltage setting

## 6. Chinese and English switching

Click the setting icon in the upper right corner of the APP homepage to enter the “System Settings” interface. Click “Language” in this interface to enter the language switching interface, select English or Simplified Chinese, and switch the interface to English or Chinese.

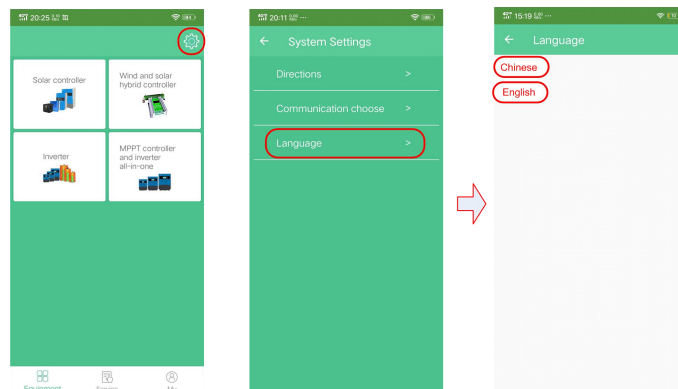


Figure 6-1 Chinese and English display switching



## 7. PC monitoring device

### 7.1 Photovoltaic background management system login

Open the browser, enter the URL: <http://47.96.6.131:8089> to enter the photovoltaic background management system, enter the account number and password (the account number and password are provided by the manufacturer), and click login to enter the monitoring interface;

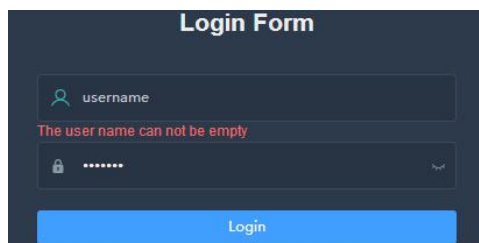


Figure 7-1 PC side login interface

### 7.2 Equipment parameter viewing

On the computer monitoring interface, click the device management on the right to pop up the device list, and display all the device information of the device on the right: including the device number, device address code, device type, belonging merchant, belonging project, device status, etc. You can monitor the operating status of the device.

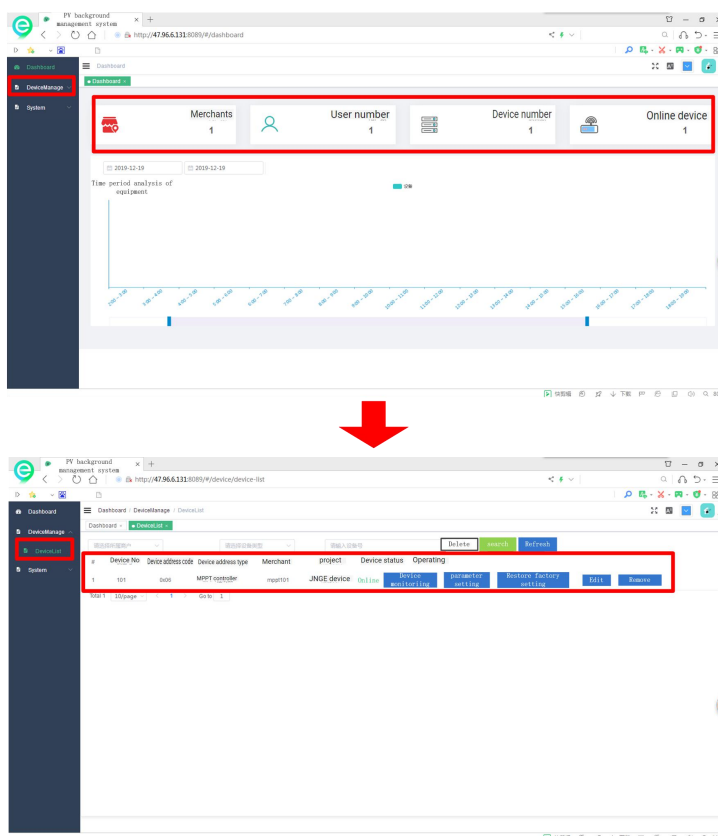


Figure 7-2 Device list interface

Click "device monitoring" on the right side of the information bar to enter the "real-time parameters" interface. In this interface, we can view the operating parameters

and customer settings parameters. Only online devices can refer to their real-time parameters. Click the refresh button in the lower right corner. Update the latest parameter information of the device and click the back button to exit the real-time parameter interface.

Real-time parameter

Running parameter | parameter setting | Manufacturer parameter

Version	1	PV voltage	0	Battery voltage	12.2
A Channel Current	0	B Channel Current	0	Charging total current	0
Current temperature	15	Charging power	0	discharging power	0
Storage capacity	68	Charging state	Uncharged	Loading state	loading
Discharge current	0	Overdischarge number	0	charge total watt-hour	0.3
Discharge total watt-hour	1671193.5	Battery temperature	0	Fault Code	
Voltage level	12V system	PV Sampling voltage	11.4	Current level	30A
Battery number	1	Battery type	Lead acid battery	Charging turn on/off	on
Fan running state	stop	Temperature supplement voltage of battery	0	Loading turn on/off	on

Refresh Go back

Figure 7-3 Operating parameters

Real-time parameter

Running parameter | parameter setting | Manufacturer parameter

Overpressure voltage	15.6	Charging voltage limit	14.9	Overpressure recovery voltage	15
Equalization charging voltage	14.8	Improve charging voltage	14.4	Improve charging back voltage	13.9
Float voltage	13.8	Overdischarge voltage	10.8	Overdischarge return voltage	13.1
Battery under voltage	10.8	Equalization charging time	2	Improve charging time	1
Temperature compensation coefficient	3	Device address	6	Optically controlled on voltage	5
Optically controlled opening time 2	0	Optically controlled off voltage	6	Optically controlled opening time 1	0
charging turn on/off	on	Household and streetlight mode	Household	Time to turn off the lights	0
Battery type	Lead acid battery	Buzzer enabled	on	Battery number	1
		Loading turn on/off	on		

Refresh Go back

Figure 7-4 Customer setting parameters

### 7.3 Parameter settings

Click the setting parameter on the right side of the device list information bar. In the pop-up setting parameter interface, set the specific parameters by parameter type and setting parameters. After setting, click the setting in the lower right corner to save it. After finishing, click Back to exit the setting parameter interface ;

parameter setting

parameter type 参数类型

Set parameter 请选择要设置的参数

setting Go back

Figure 7-5 Parameter settings

### 7.4 Restore leaving factory setting

On the right side of the device list information bar, click Restore leaving factory settings to restore the parameter settings at the factory.

Appendix 1:  
WIFI communication wiring method :

