User Manual of
Z10 Internal Data Collector

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1. Unpacking

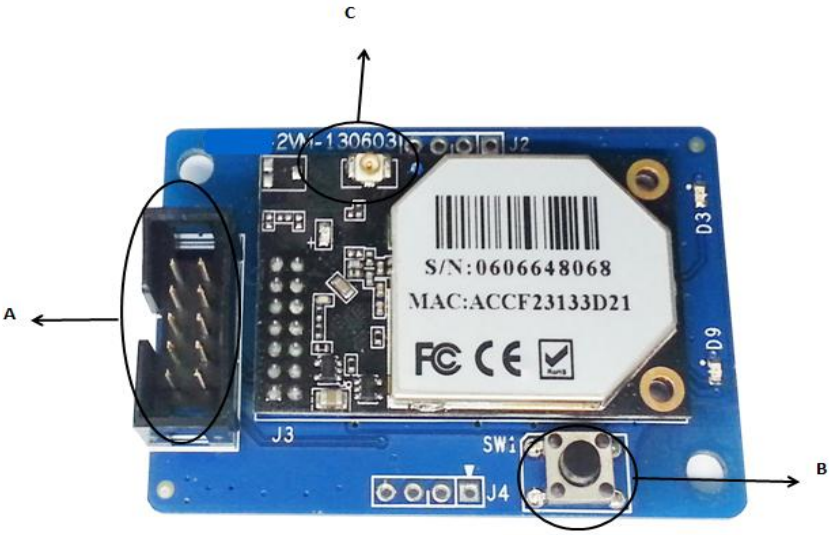
If your inverter has installed the Wi-Fi card, please go directly to **6. Register on monitoring website.**

After unpacking the bag, please check the parts according to the list below. Contact the sales agent immediately, should you find any damaged, or missing components or it is the wrong model.

Picture1-1

No.	Name	Quantity
A	Plastic sealed bag	1
B	Wi-Fi antenna	1
C	Ribbon cable	1
D	PV data collector	1
E	Terminal set	1
F	Bar code	2
G	Screw	2

2. PV Data Collector



Picture 2-1

No.	Name
A	10 pin connector
B	Reset Button
C	I-PEX Interface

3. S/N Label

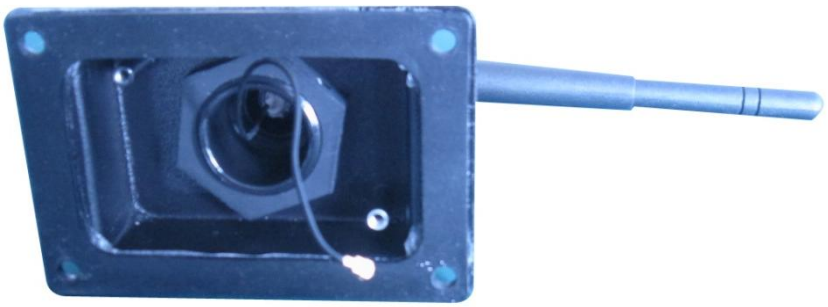
Picture 3-1

4. Wi-Fi Card Installation

Warning: Before installing the Wi-Fi module, you must disconnect both the AC and DC side of the inverter to ensure personal safety.

Picture 4-1

Unscrew the four screws on the interface panel with the screwdriver as shown in **Picture 4-1** and keep the screws aside.



Picture 4-2

Insert the Wi-Fi antenna through the gland and screw the hex nut with a torque of 2.0N.m as **Picture 4-2**.

Picture 4-3

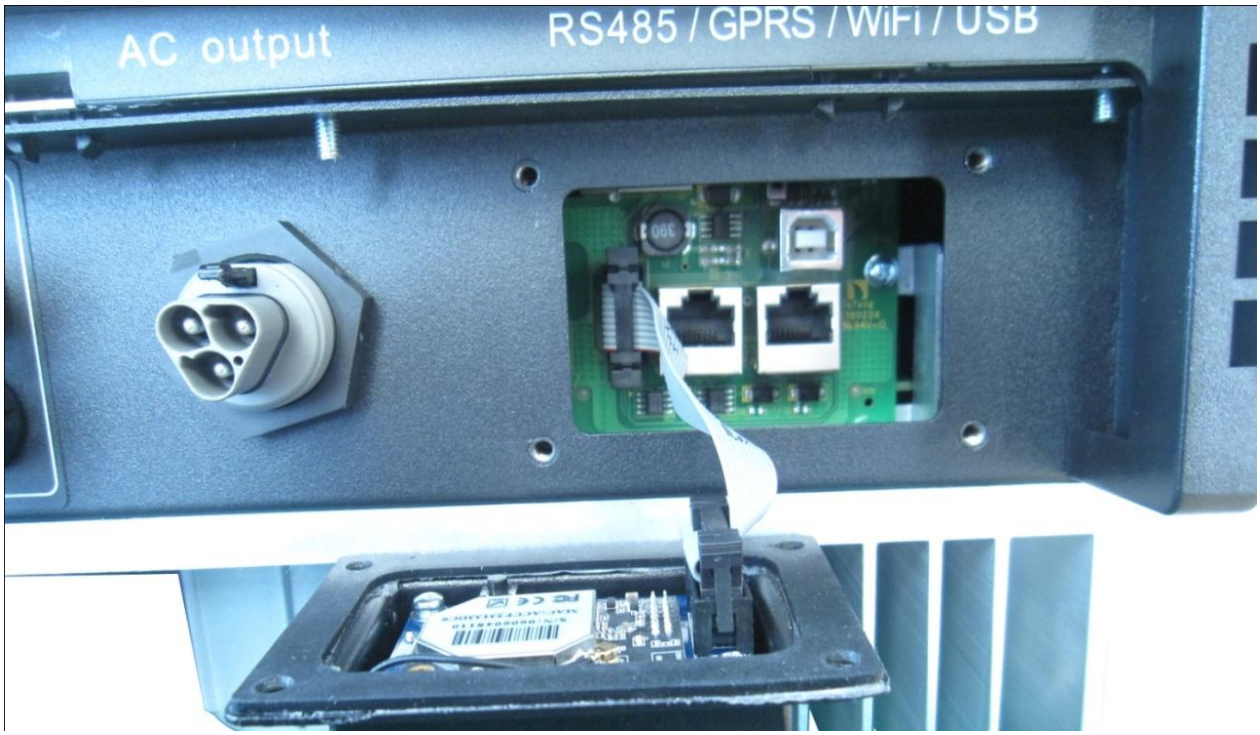
Plug the PV antenna connector into the socket circled in **Picture 4-3**.

Picture 4-4

Fix the PV data collector to the case with two screws as in **Picture 4-4**.

Picture 4-5

Turn on the switch on the communication board inside of the inverter to the upside as **Picture 4-5**.



Picture 4-6

Connect the PV data collector to the communication board with the communication bus cable as **Picture 4-6**.

Picture 4-7

Tighten the water-proofing case securely to the inverter with 4 screws as in **Picture 4-7** thus completing the installation. Antenna will now be correctly mounted and can be turned 360 degrees.

5. Wi-Fi Card Information

After installation of the Wi-Fi Module, reconnect the AC side of the inverter to display the Wi-Fi information.

Picture5-1

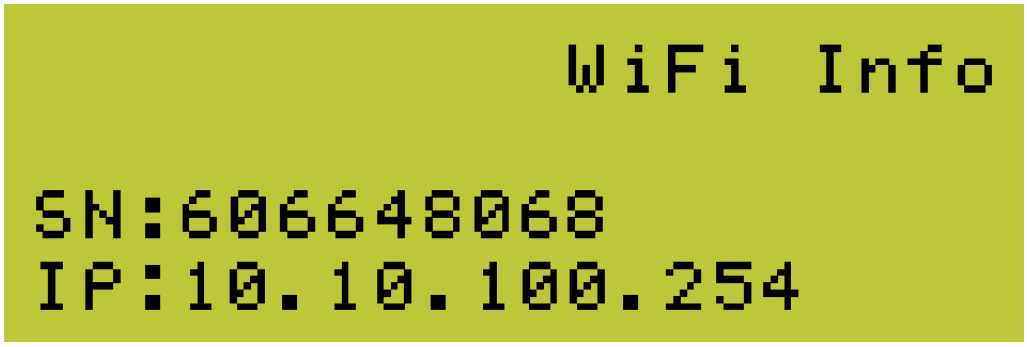
Click the **“ENTER”** button on the display panel until the screen shows Wi-Fi information. The display includes the S/N: xxxxxx and the IP address as in **Picture 5-1**.
The IP address consists of three values:

Picture 5-2: 0.0.0.0 (router SSID & password is not found by Wi-Fi card if you have not set to connect to your router, factory value)

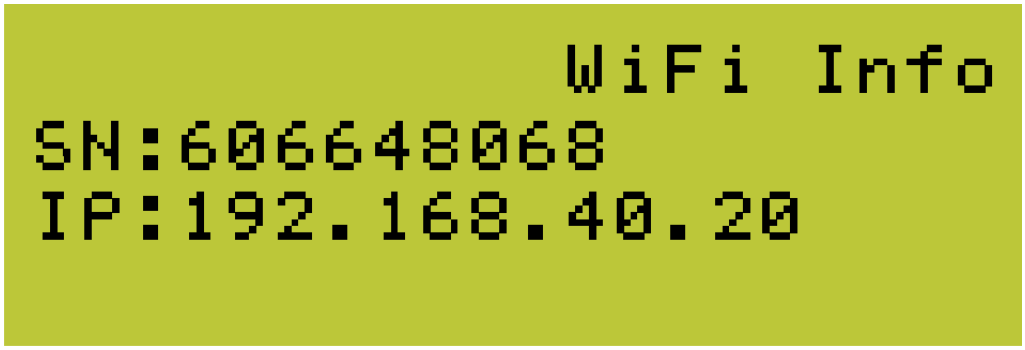
Picture 5-3: 10.10.100.254 (restore default value)

Picture 5-4: 192.168.40.20 (after the setting is completed)

Picture5-2



Picture 5-3



Picture 5-4

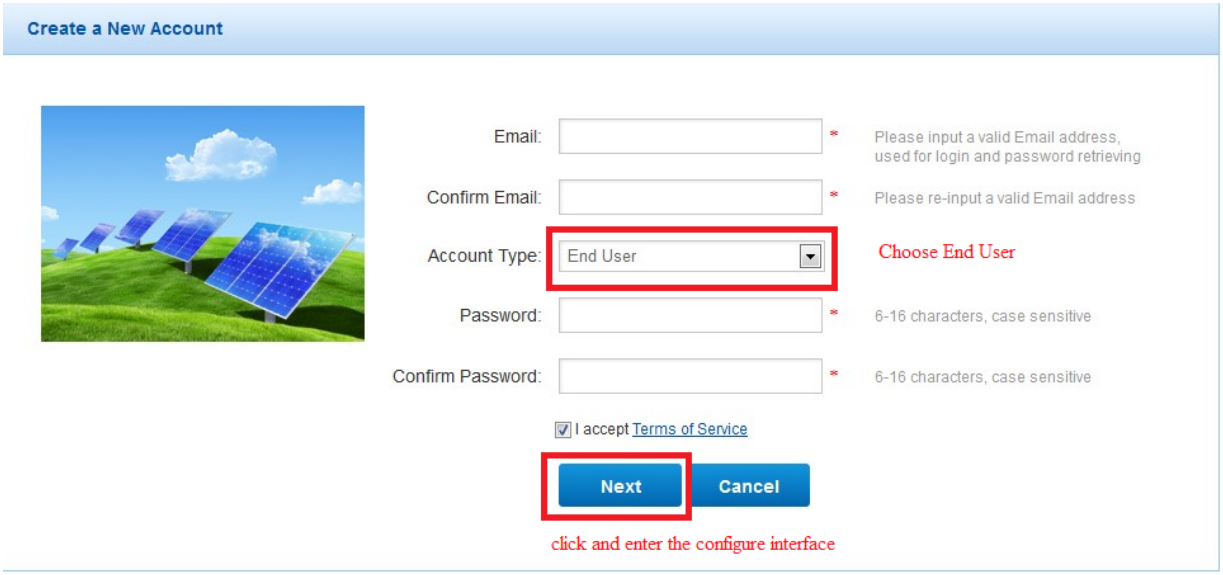
6. Register on Monitoring Website

Zeus Appollo Solar PV monitoring system is supported by: IE8, Firefox, Chrome, and Safari. Login to the website www.monitoring.zeusappollosolar.com.au, click register to enter the user registration page, follow the requirements for registration; please fill in the information for registration. After successful registration, enter the mailbox and activate the account, then the registration is complete.

6.1 Register New Account

Picture 6-1

6.2 Fill in User's Information

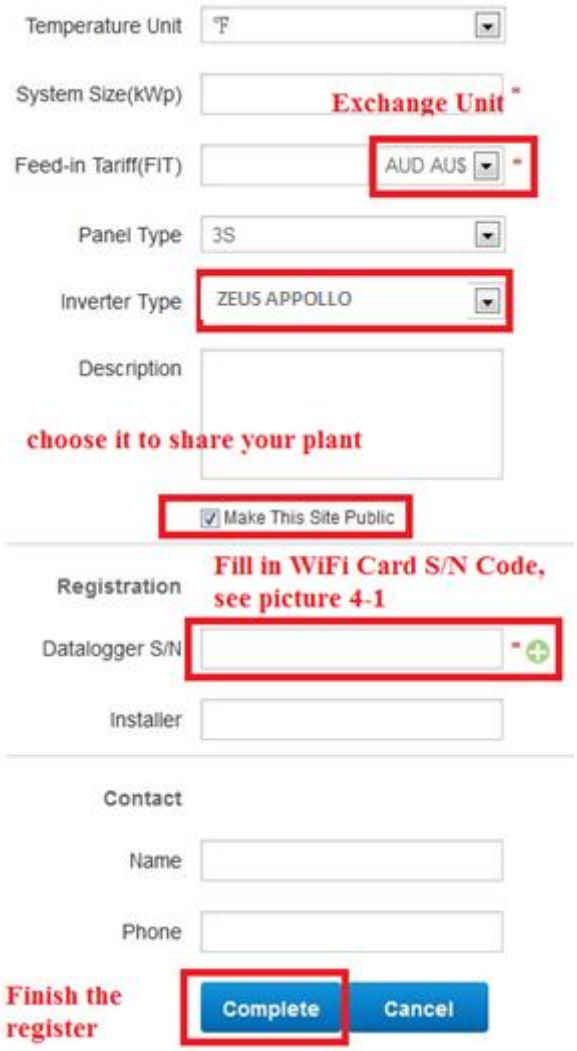


Picture 6-2

*Note: please read the Zeus Appollo **Solar Warranty Terms and Conditions** carefully, the enclosure is the cost list for all countries; please choose your operator. **End User** means the final user.*

"" means the compulsory information which must be filled in.*

"End User" Account

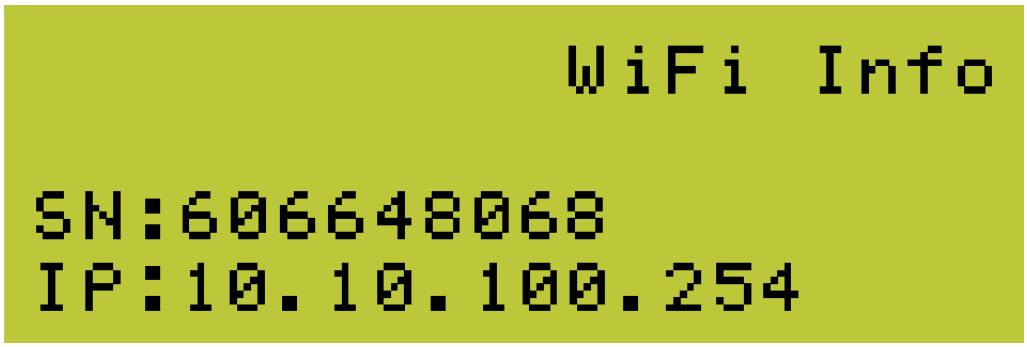


Picture 6-3

After the registration, you may go to the next chapter **7. Network Settings** (In AP mode by Wi-Fi)

7. Network Settings

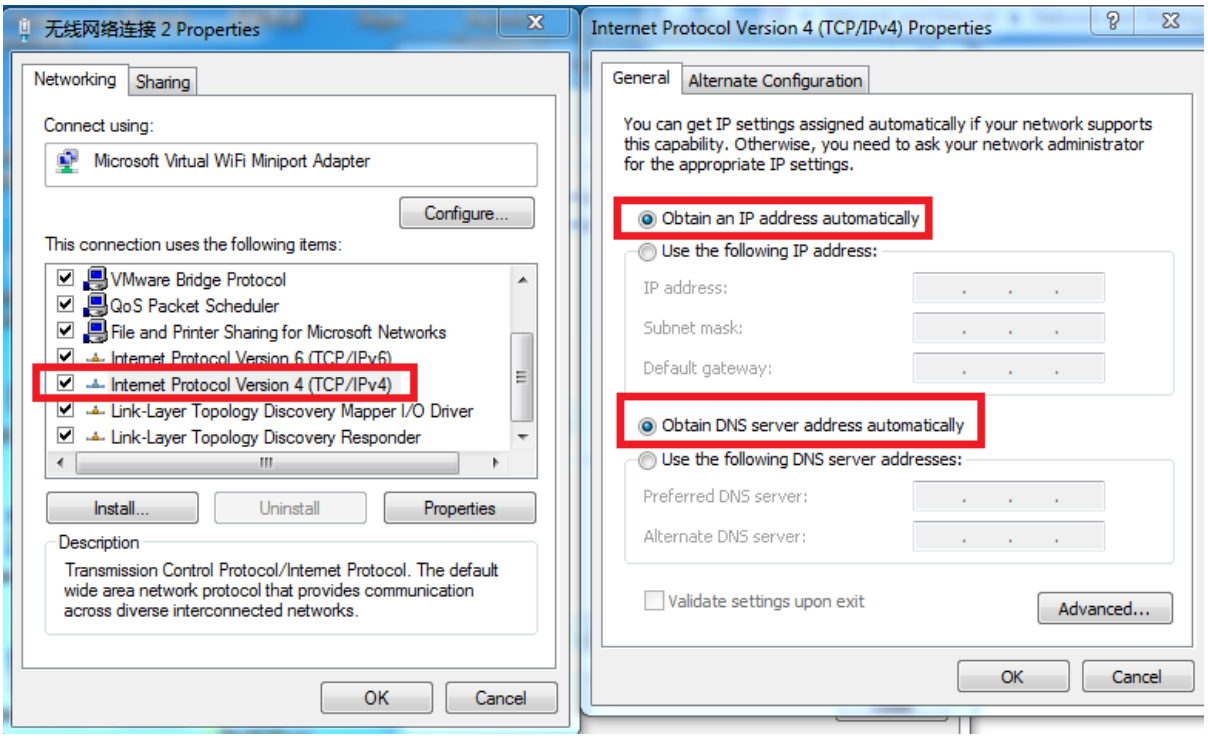
Make sure the AC side of inverter is connected to the grid and the display maintained .



Picture 7-1

1) Prepare a computer or other device, e.g. a tablet a PC or a smart phone with a Wi-Fi function.
2) Obtain an IP address automatically:

- Open Wireless Network Connection Properties, double click **“Internet Protocol Version 4 (TCP/IPv4)”**.
- Select **“Obtain an IP address automatically”**, and **click “OK”**.



Picture 7-2

3) Open the wireless network connection and click **“View Wireless Networks”**: Select the wireless network of the data logging module, no passwords are required as

default. The network name consists of the **AP** and the **serial number** of the product. Then click **“Connect”**.

Picture 7-3

Picture 7-4

Connection successful

*Note : If **AP_ (the serial number of the product)** is not available in the wireless network list, there may be problems in the connection or setting up of the data logging module. Please check if the Wi-Fi has installed correctly, and the inverter has been powered on.*

Before troubleshooting, please ask your inverter installer whether you are allowed to remove the cover of the inverter to trouble shoot the module. If not permitted please contact customer service.

4) Set the parameters of the Wi-Fi module:

(a) Open a web browser, and enter 10.10.100.254 (the default IP address of the Wi-Fi card, you may set the domain name access as in **picture 7-5**), then fill in the username: **admin** and password: **admin**, both of which are admin as default.

Recommended browsers: Internet Explorer 8+, Google Chrome 15+, Firefox 10+

Note:

① *If the IP address shows **0.0.0.0** (factory value) on your LCD (**Picture5-2**), this is not a correct address. There are 2 circumstances where 0.0.0.0 is displayed:*

- *Router not connected correctly, you need to reset to connect your router to ensure its functionality You can reset the data collector by pressing the reset button for about 5s or reset it in the wizard interface.*
- *The inverter card installation is not functioning, please check your inverter according to chapter **4. Wi-Fi Card Installation.***

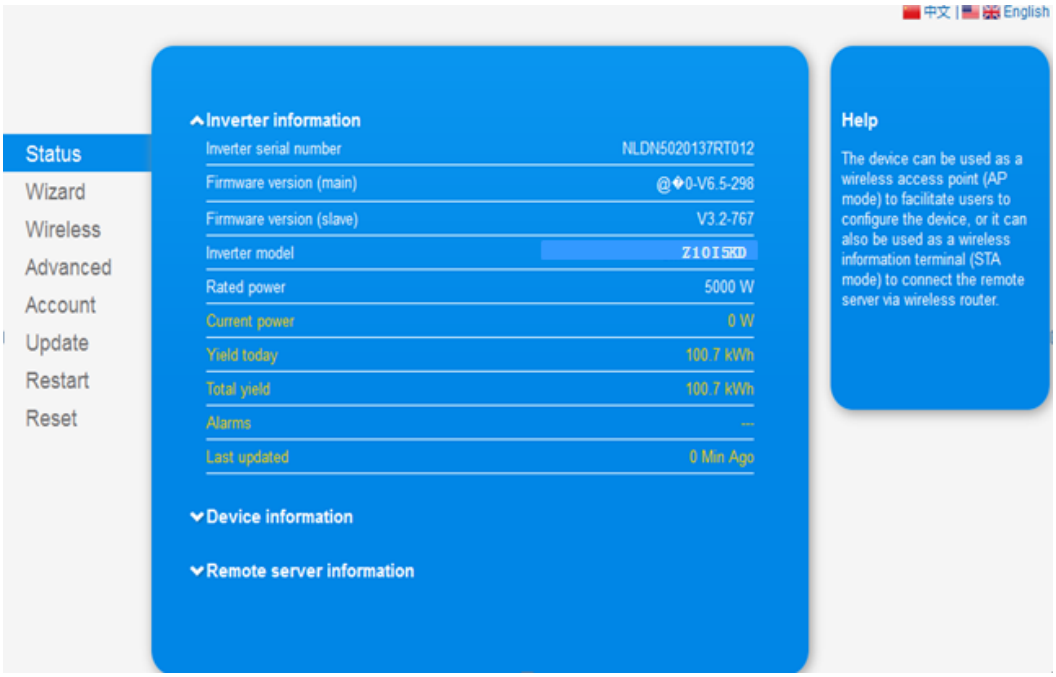
② *The default username & password is :**admin**, **admin**, we recommend changing the user name &password:*

Step: choose Account; input your username & password.

Picture 7-5

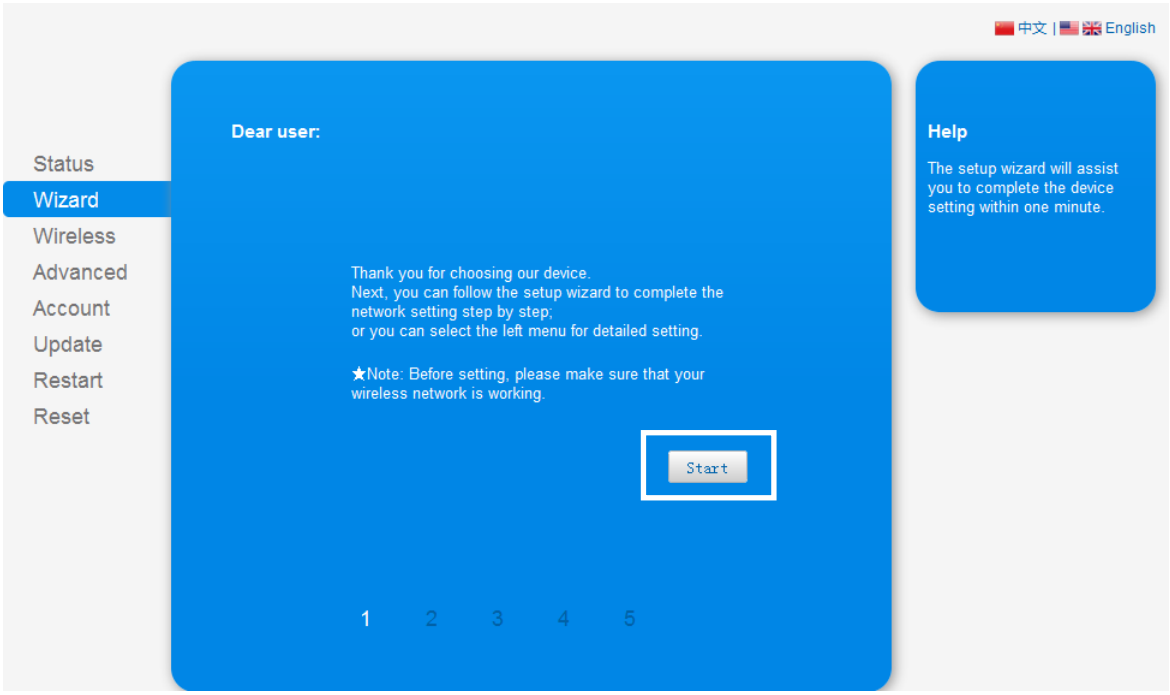
(b) In the configuration interface of the Wi-Fi module, you can view general information about the module.

Follow the setup wizard to start the quick setting.



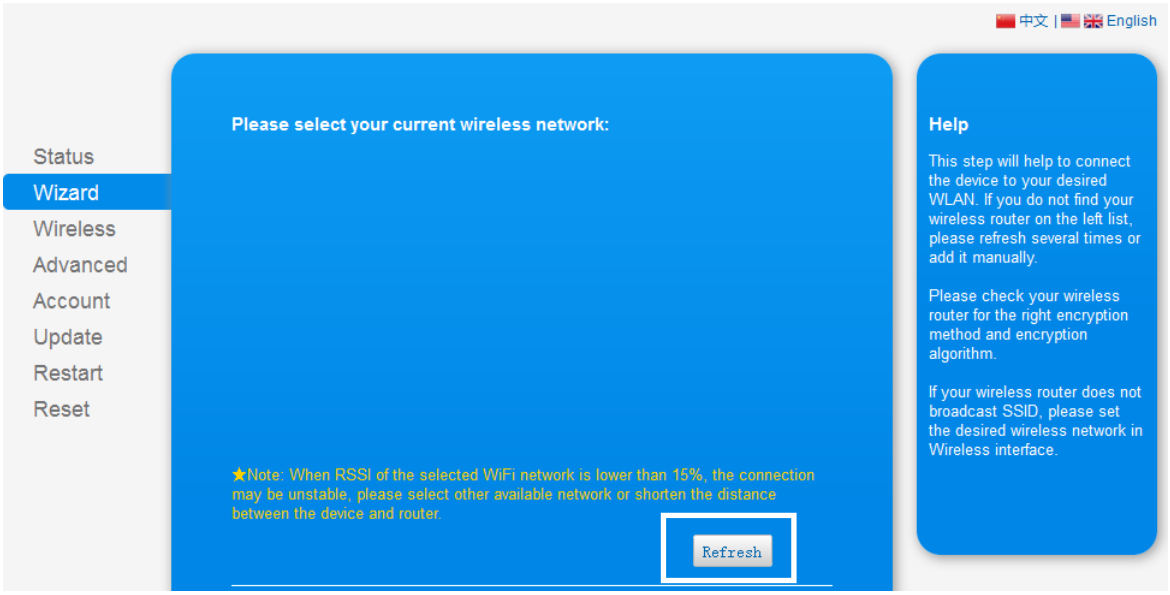
Picture 7-6

Click **“Wizard”**to start



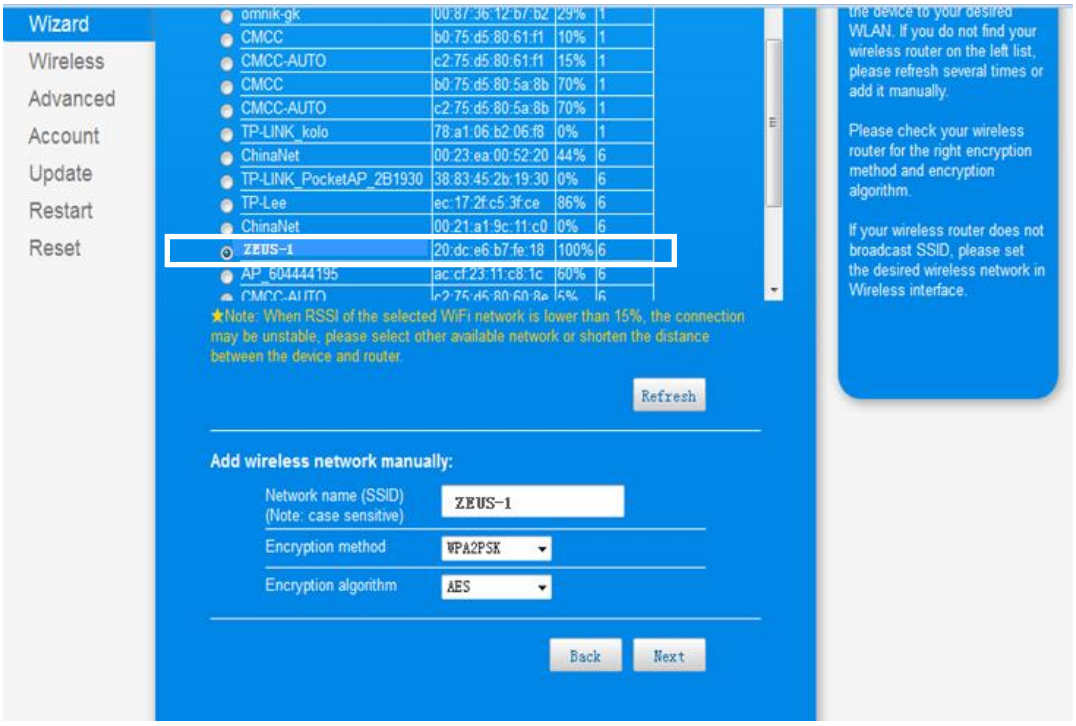
Picture 7-7

Click**“Start”** to continue



Picture 7-8

Click **“Refresh”** to search available wireless networks, or add it manually.



Picture 7-9

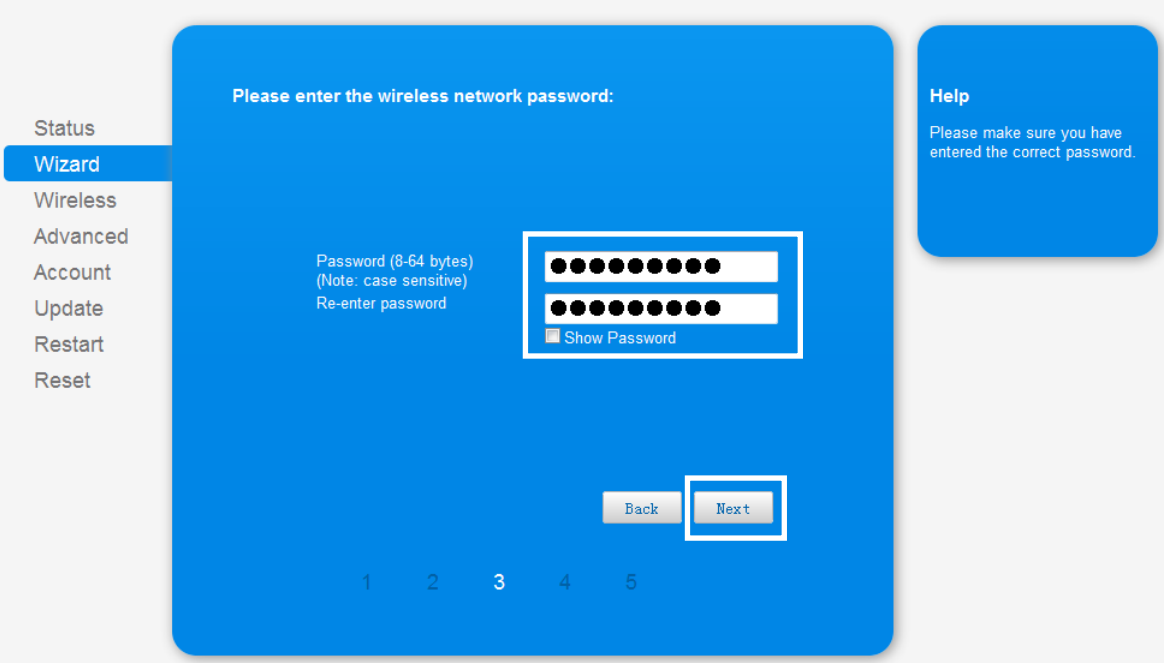
Select the wireless network you need to connect, and then click **“Next”**.

Notice:

① If the signal strength (RSSI) of the selected network is <10%, this indicates an unstable connection, please adjust the antenna on the router, or use a repeater to enhance the signal.

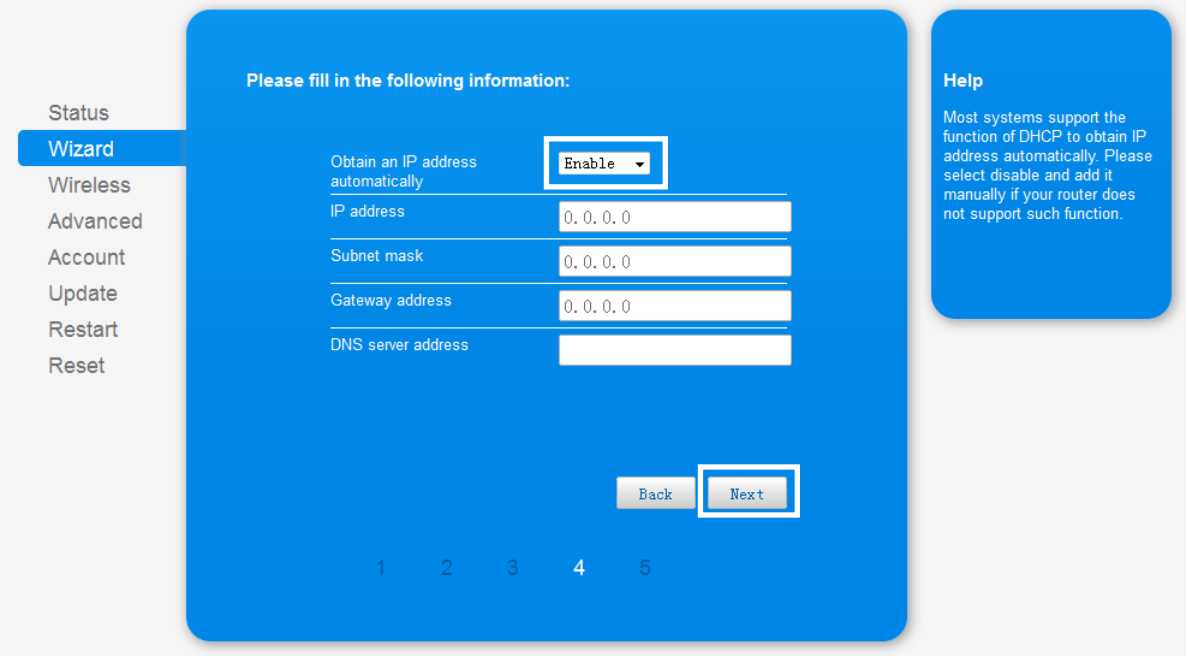
②Recommended router setting:

- *Security setting:WPA2-personal*
- *Encryption type: AES*



Picture 7-10

Enter the password for the selected network, and then click **"Next"**.



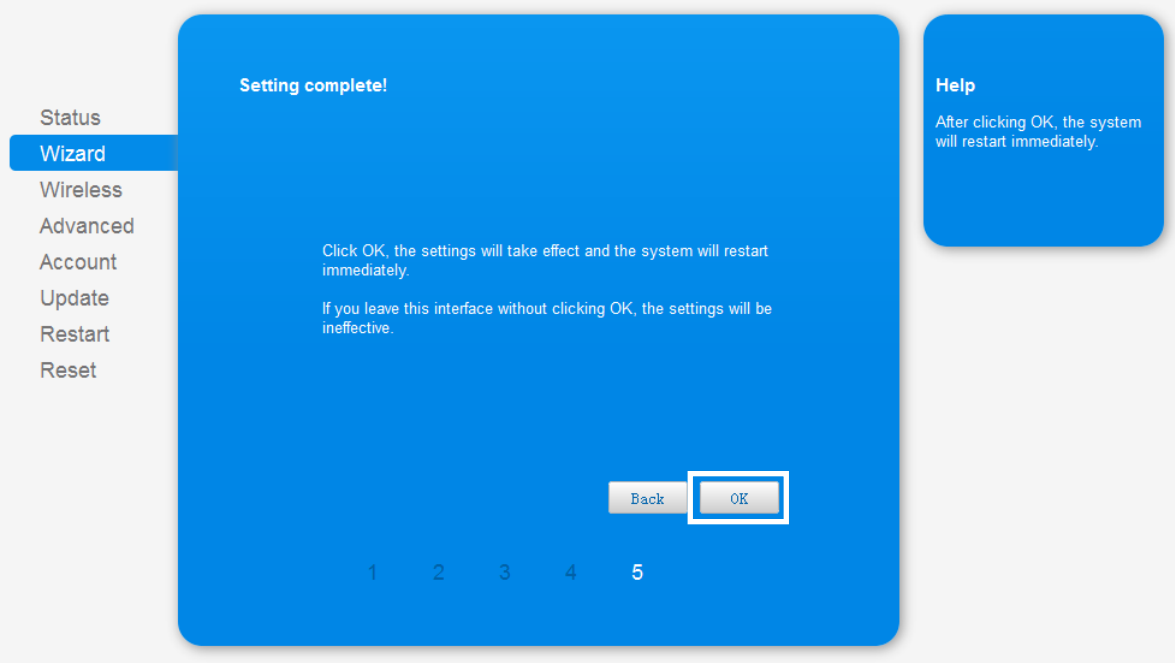
Picture 7-11

Select **"Enable"** to obtain an IP address automatically, then click **"Next"**.

Notice:

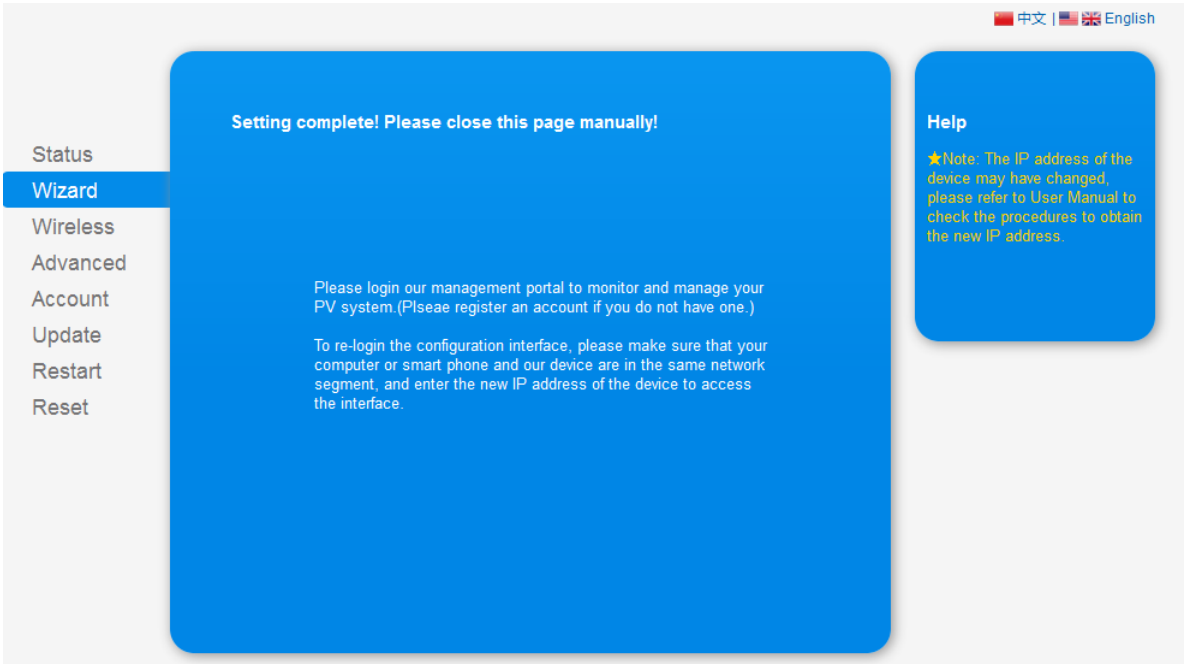
① Turn off the firewall of the router.

② Make sure the DHCP function of the router is enabled.



Picture 7-12

If the setting is complete, the above page will display. Click **"OK"** to restart.

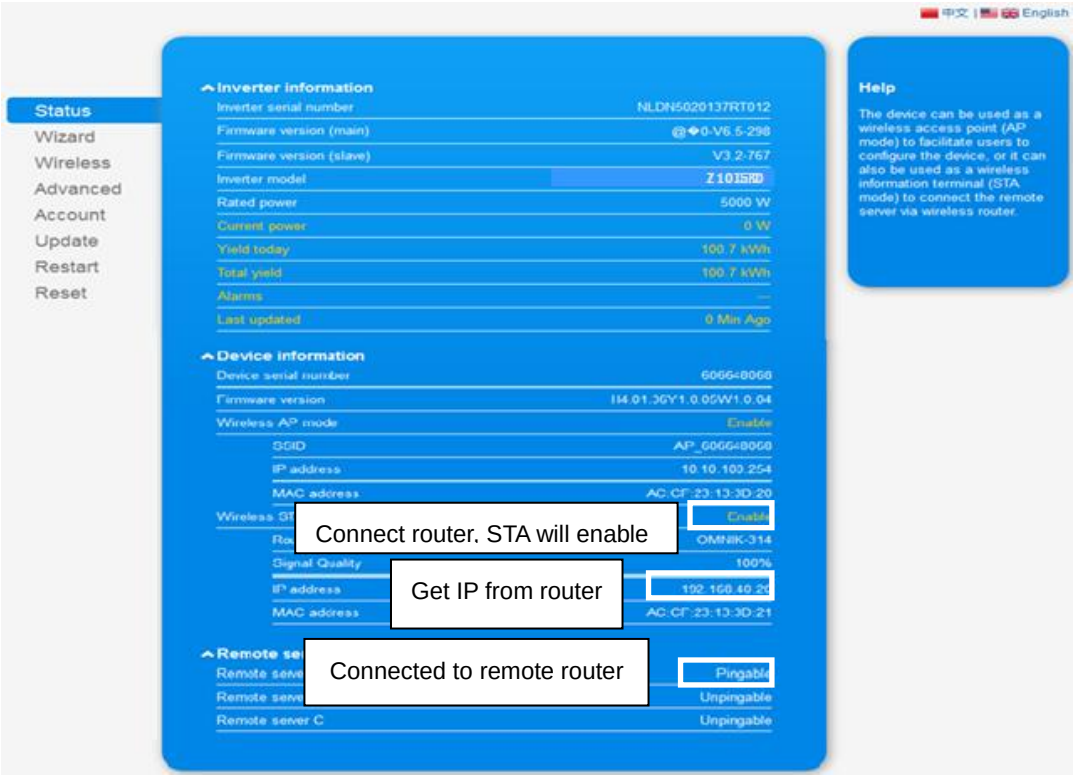


Picture 7-13

If the setting up is complete, the above page will display after about 10s.

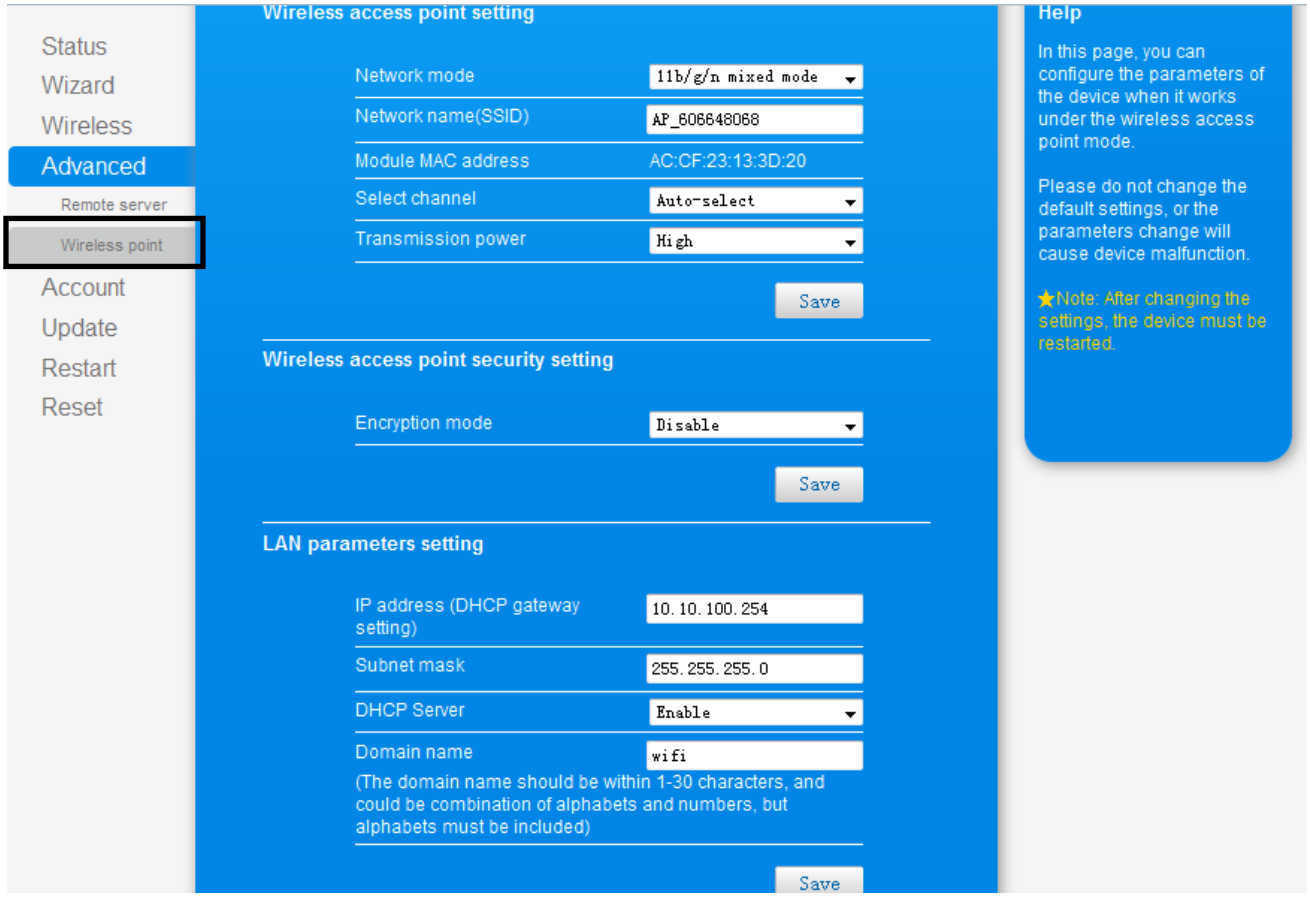
After your Wi-Fi card setup is complete and has accessed an IP address from your router for example: 192.168.40.20 (You may see the IP address from LED as **picture 5-4**).

Input: **http://192.168.40.20/** which will display the following page:



Picture 7-14

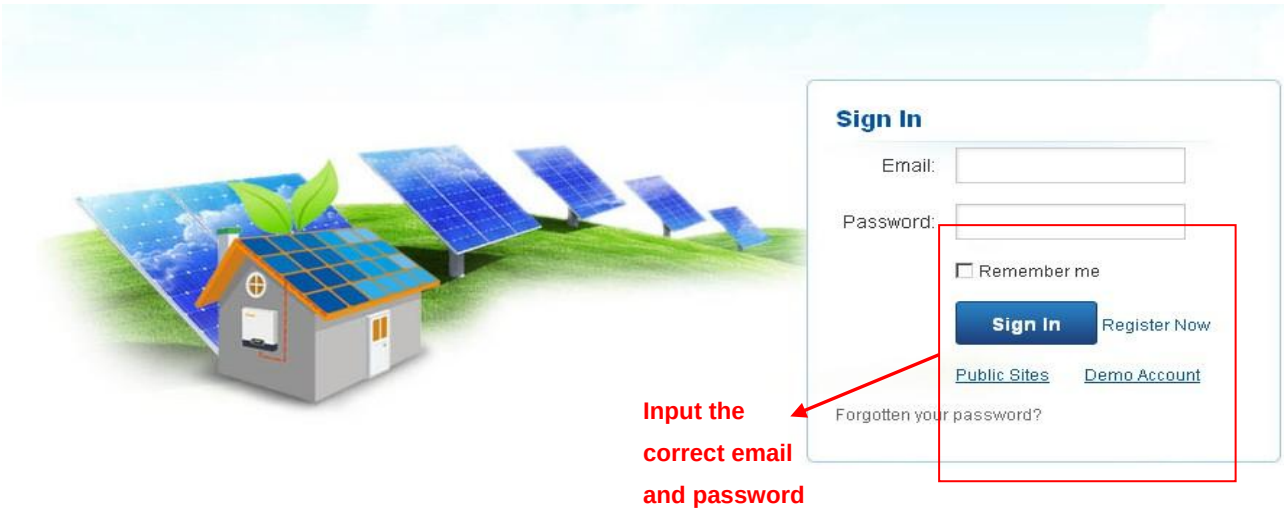
You may also add the domain name of the Wi-Fi card to simplify access according to the picture below, after your setting up is completed, input **http://Wi-Fi**, you may also access the related page:



Picture 7-15 Now having finalized the network setting, you may login www.monitoring.zeusappollosolar.com.au to browse your data.

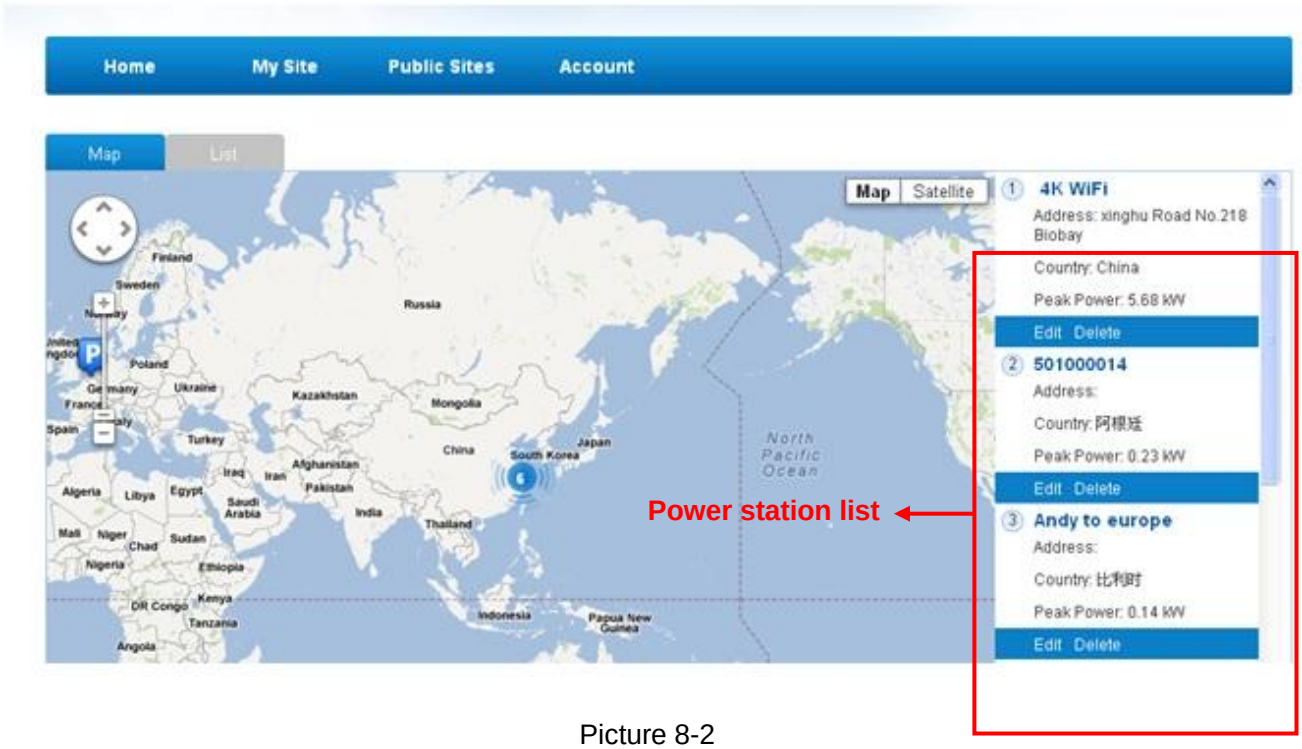
8. Login Monitoring System

After the successful registration and account activation, open the login interface as below **picture 8-1**, input the correct email and password, and enter the PV monitoring system, then you can monitor and manage the power station.

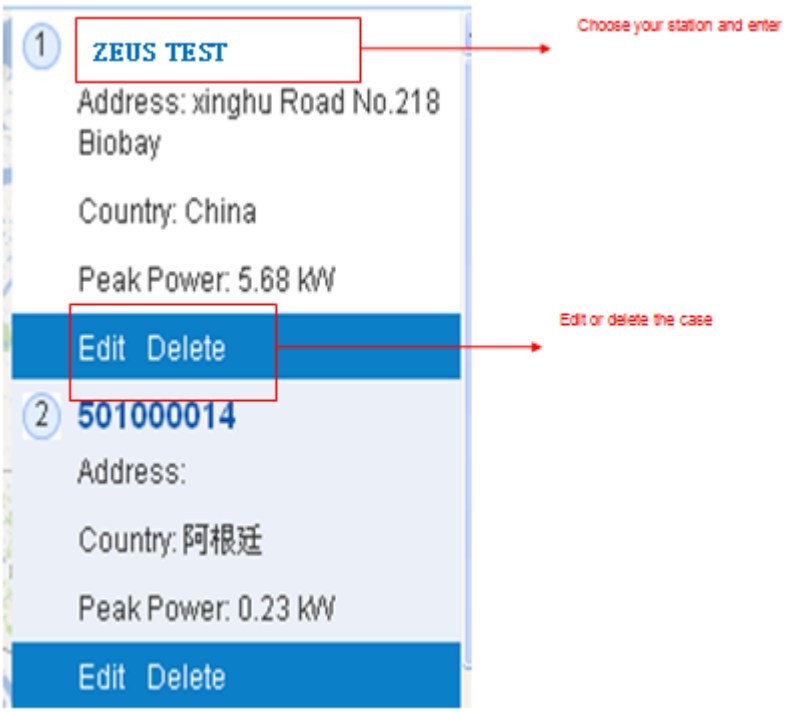


Picture 8-1

“End User” User Interface

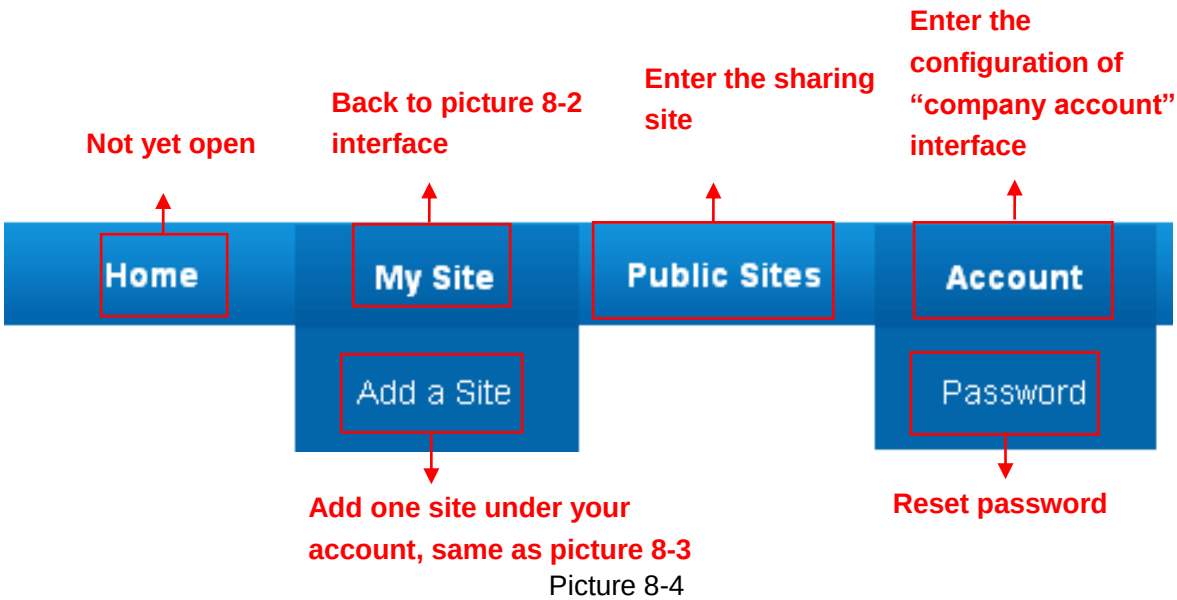


Picture 8-2



Picture 8-3

List of Power Stations

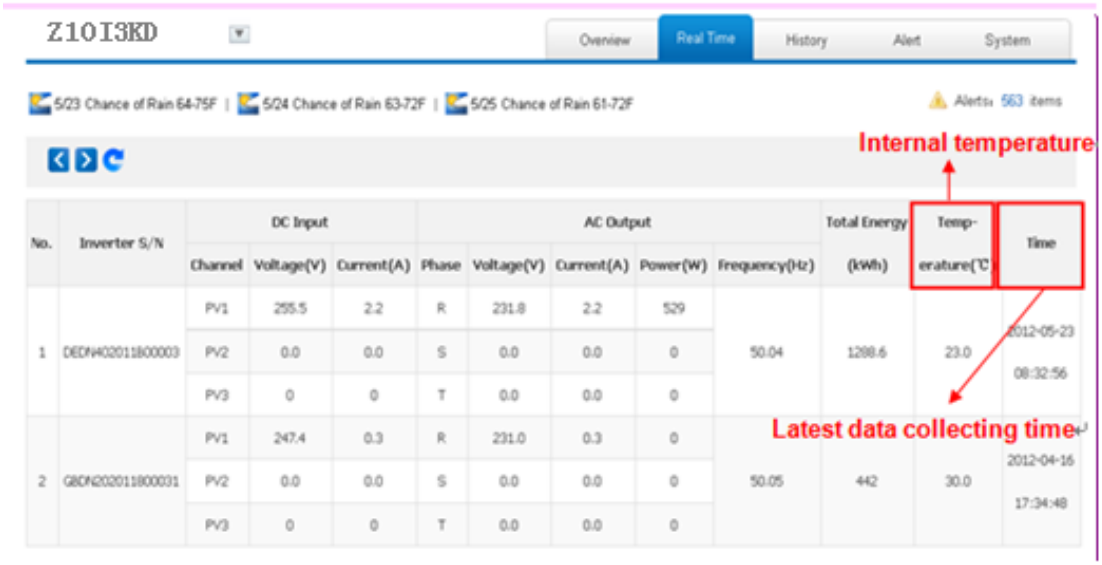


Picture 8-4

Navigation Bar

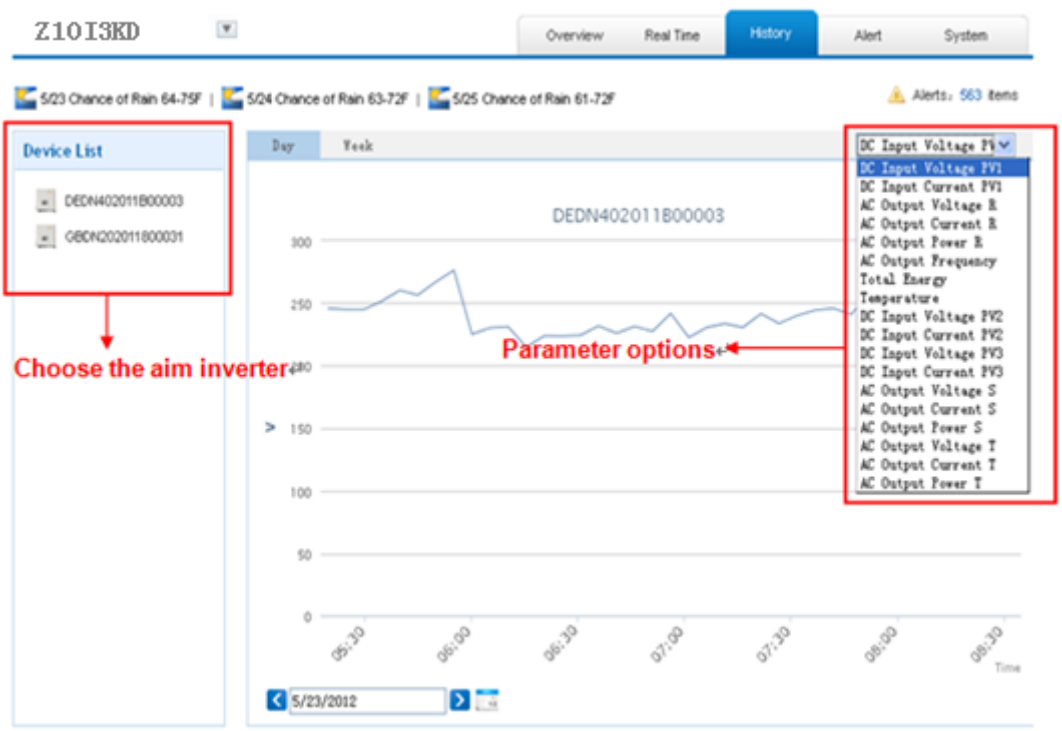
Picture 8-5

Main interface of Power Station



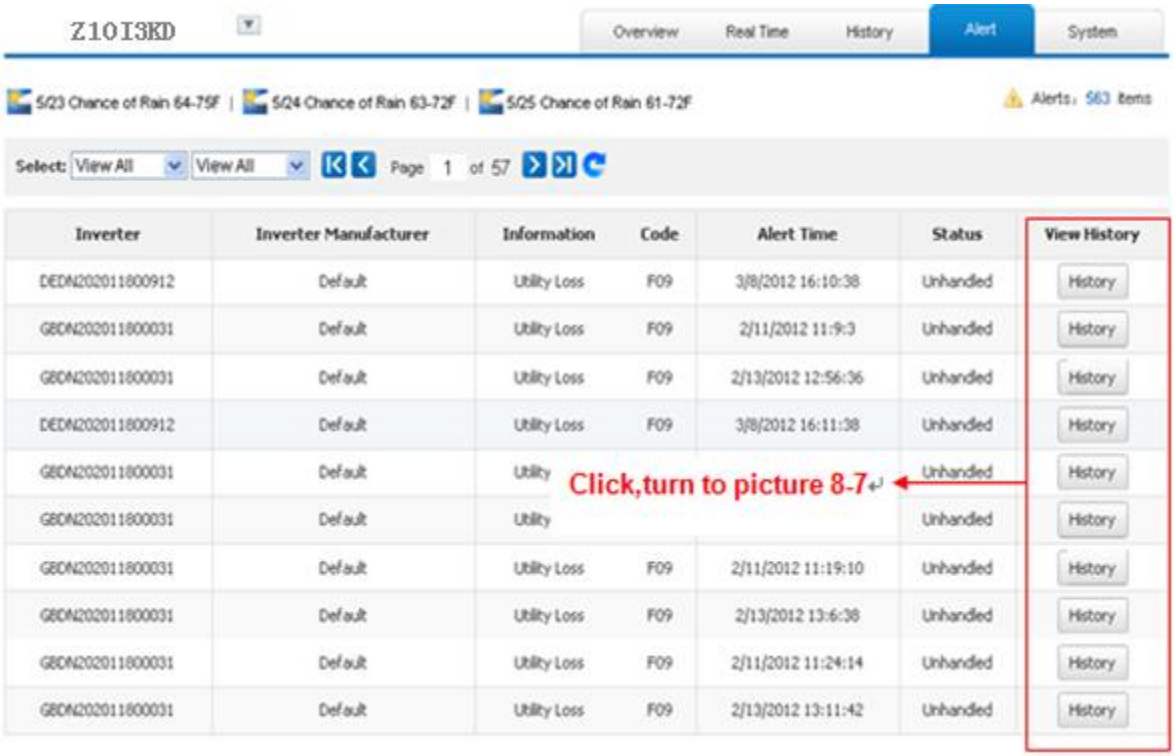
Picture 8-6

Real Time Interface



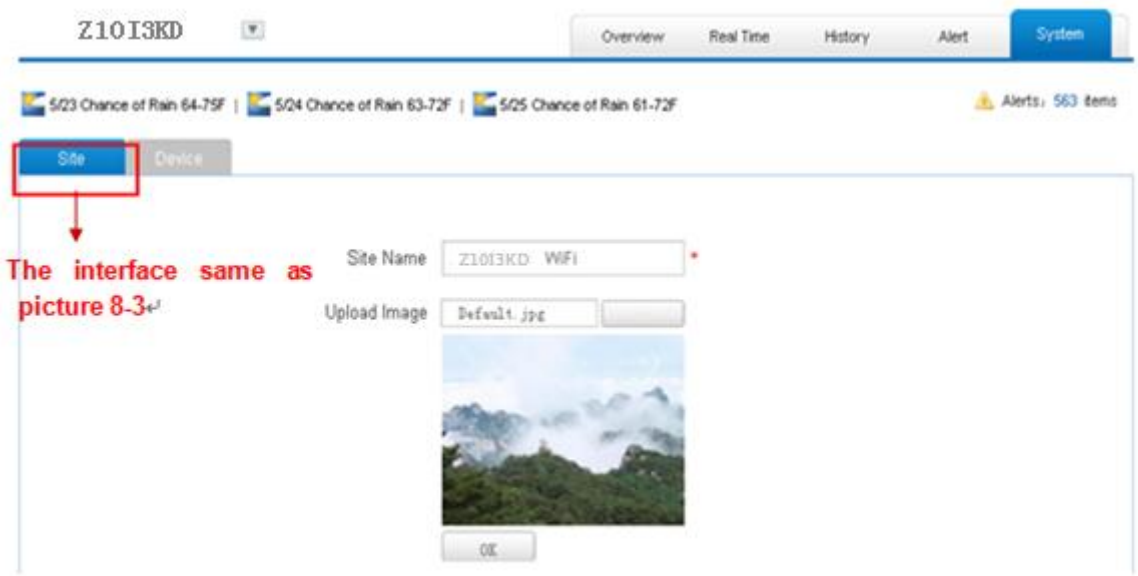
Picture 8-7

History Interface



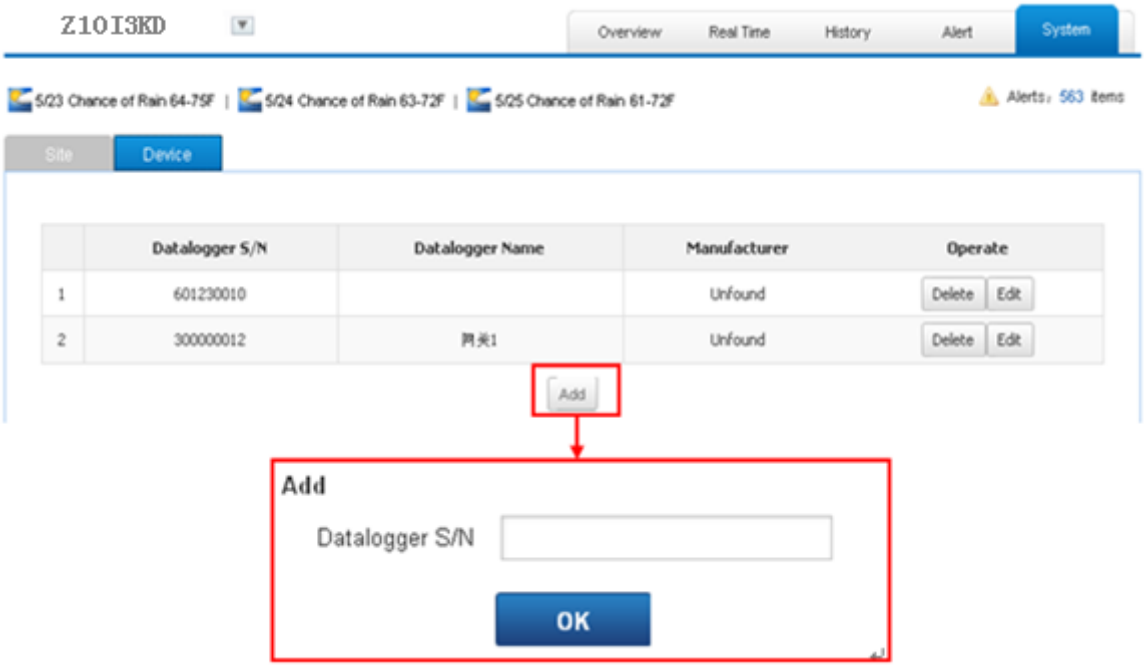
Picture 8-8

Alert Interface



Picture 8-9

System Setting Interface



Picture 8-10

System Setting Interface

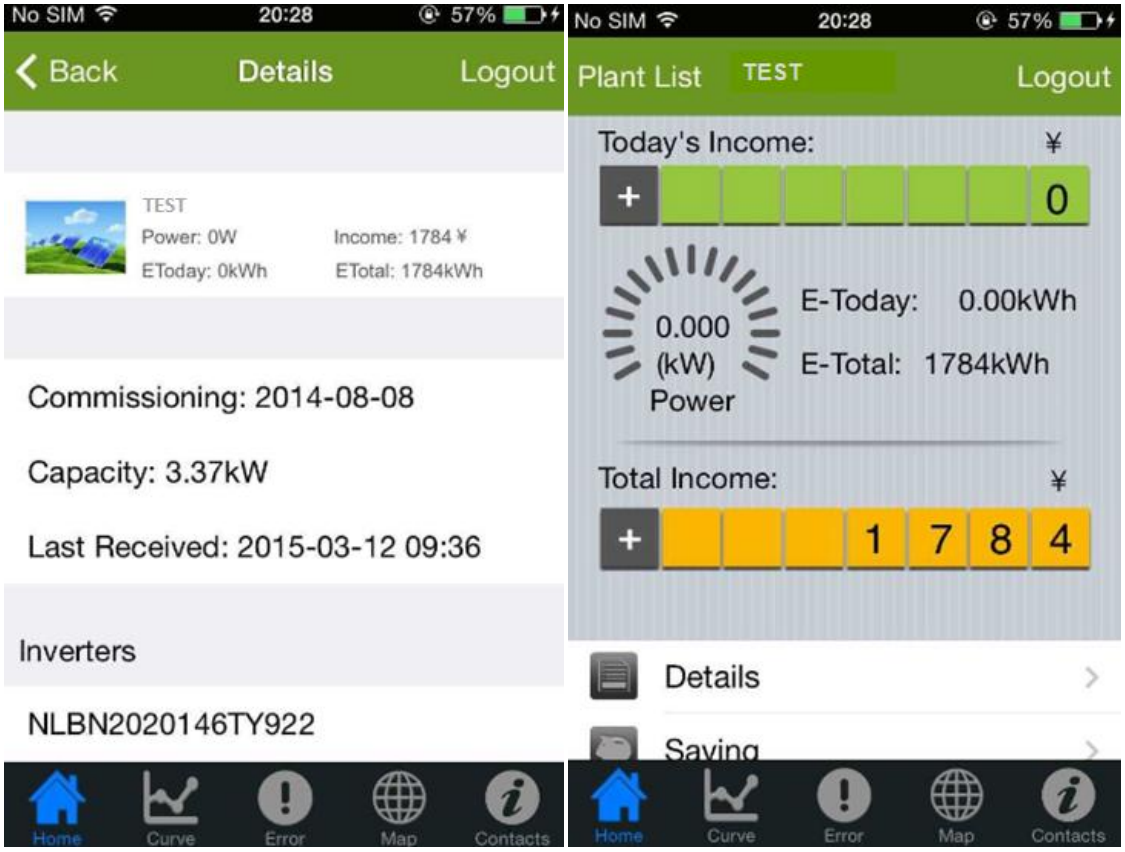
9. Smart Phone & iPad Application

9.1 Auto Mode

After registration of the power station, you can input the key words: solar, inverter, PV, energy, plant, or monitor at the app store, then you can download the Zeus Appollo Solar (smart phone) and Zeus Appollo Solar HD (iPad) at app store.

After downloading the app and inputting your user name and password, then you may visit your station (we supply a free demo for the visitor who has not registered), choose the power station and enter the main interface, and then the daily energy output etc. will be displayed.

Meanwhile, you can select the relevant date to view the curve as below:



Picture 9-1

1. Log in interface
2. Power station list interface
3. Main interface
4. Daytime curve interface

9.2 Manual Mode

1) Steps for monitoring without Internet connection (Manual Mode)

There are two methods to monitor the inverter via Wi-Fi without the internet connection.

- Device connected directly to the Inverter Wi-Fi.

Search the Wi-Fi list on your smart device and connect to the relevant Inverter Wi-Fi data logger beginning with AP_6xxxxxxx (as shown in the example below).

Open **"Z10 View"** on your device (which you should have downloaded from the APP store), and choose **"Manual Mode"**. You are now able to monitor the inverter and the power being generated through it.

This example shows device connection to an inverter with 601184936 Wi-Fi:

- Both the Inverter Wi-Fi and monitoring device (Smart Devices using IOS) connected to the LAN (not Internet) via the wireless router. Please follow the

instructions from **7. Network Settings** (In AP mode by Wi-Fi).

After completing the above procedures, launch the **“Z10 View”** on your device and click **“manual mode”**. You are now able to monitor the inverter and the power being generated through it.

Picture 9-2

2) Features

a. Monitoring Wi-Fi device without internet connection.
b. Display all the relevant data from the inverter.
c. Local access is much faster, and does not rely on external networking.
d. Same functions as online monitoring system.

Picture 9-3

1.Choose interface
2.Connect Wi-Fi card completely
3.Setting page
4.Inverter information

10. Contact

If you have any technical problems about our products, please contact us. You need to confirm the following information before contacting us:

- Device model
- Data collector serial number
- The number of connected inverter

Beijing Hua Xin Liu He Investment (Australia) Pty Ltd.
Website: www.zeusappollo.com
Perth Office
1/87 President Street, Welshpool, WA 6106
Phone: (08) 6555 6518 Fax: (08) 9470 4103
Email: sales@zeusappollosolar.com.au

Brisbane Office
32 Crockford Street, Banyo, QLD 4014
Phone: (07) 3123 6148 Fax: (07) 3266 4758
Email: bris@zeusappollosolar.com.au

Appendix.

1. LED Indicators

Picture A1

2. Troubleshooting

LED Name	Status	Description
RUN	On/Blinking	Module is working
	Off	Module is not working
LINK	On	Module is successfully connected to the server by Wi-Fi under STA mode
	Blinking	The Wi-Fi module is in AP mode
	Off	In STA mode; No Wi-Fi connection or no connection to the server
STATUS	On	Communication with the inverter is working
	Blinking	Communicating with the inverter (transferring data)
	Off	Communication with the inverter is not working

Status	Possible Causes	Solution

RUN	LINK	STATUS		
On/Blinking	On	On	Connection is successful	No need
On/Blinking	On	Blinking	Communicating with the inverter	No need
Off	Off	Off	No power connection	Check if the connecting fingers are contacting properly
				Check if the inverter is working properly
On/Blinking	Off	Off	Inverter connection is abnormal	Check if the inverter is working properly
			Resetting or initializing	Check the LEDs again after 1 minutes
			Wi-Fi connection is not successful	Change the position of the inverter or the antenna to get better signal reception
			Antenna is not properly connected	Check if antenna is connected properly. Screw tight if loose
On/Blinking	On	Off	Communication with the inverter is abnormal	Check if the connecting fingers are contacting properly
On/Blinking	On	X	Connection of the data collector is abnormal	Check the setting of AP wireless router
				Check the Wi-Fi settings

Note 1：X means status unknown.

Note 2：If the device is still not working after above operations in the table, please try resetting the device. If it is still not working after the reset, please contact customer service of the manufacturer.