



Quick Guide

WiFi Kit S-WE01S

From this page

WiFi Kit S-WE01S is an external data logger in the SolarMAN PV monitoring series.

By connecting with single or multiple inverters through RS485/422 interface, the Kit can collect information of PV systems from inverters. With the integrated WiFi function, the Kit can connect to router and transmit data to the web server, realizing remote monitoring for users. In addition, Ethernet is also available for connection to router, enabling transmission of data.

Users can check the runtime status of the device by checking the 4 LEDs on the panel, indicating Power, 485/422, Link and Status respectively.

A : Unpack

B : Install data logger

C : Connect data logger and inverters

D : Network setting

E : Register on SolarMAN Portal

F : Log in SolarMAN Portal to manage power station

G : Trouble shootings

This Quick Guide is intended to assist users in quick installation and start of WiFi Kit S-WE01S. If any problems, please refer to corresponding chapters of [S-WE01S User Manual](#) for details.

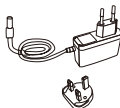
A:Unpack

1. Checklist

After unpacking the box, please make sure all the items are contained as follows:



① 1 PV data logger (WiFi Kit S-WE01S)



② 1 power adapter with European or British plug



③ 2 screws

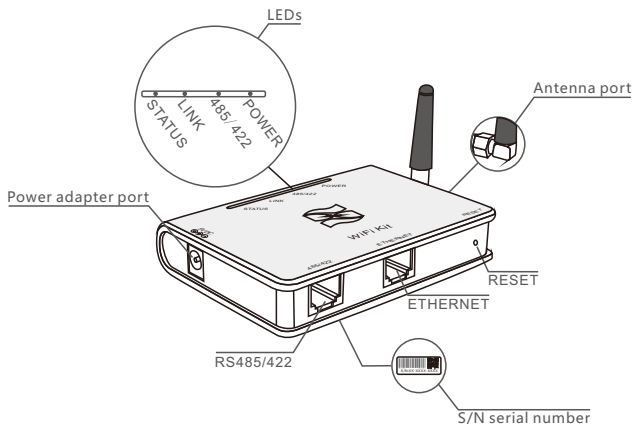


④ 2 expandable rubber hoses



⑤ 1 Quick Guide

2. Interface and connection



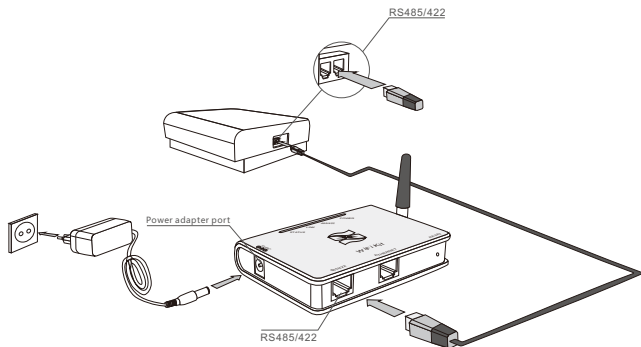
B: Install data logger

WiFi Kit can be either wall-mounted or flatwise. Please refer to 3. Installation of User Manual for details.

C:Connect data logger and inverters

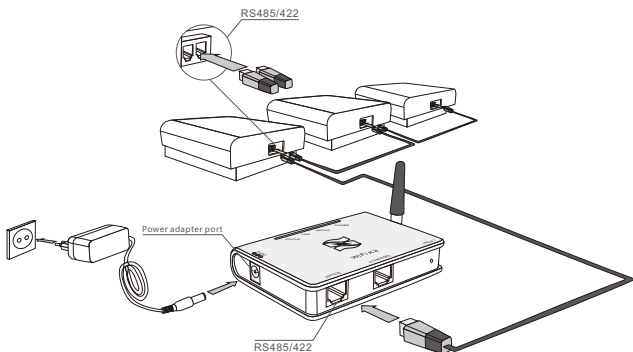
Notice: Power supply of inverters must be cut off before connection. Make sure that all connections are completed, then power the data logger and inverters, otherwise personal injury or equipment damage may be caused.

1. Connection with single inverter



Connect inverter and data logger with network cable, and connect data logger and power supply with power adapter.

1. Connection with multiple inverters



1. String connect multiple inverters with network cables.
2. Connect the first or last inverter in the string to data logger with network cable.
3. Connect data logger to power supply with power adapter.

3. Confirm connection

When all connections are finished and with the power on for about 1 minute, check the 4 LEDs. If POWER and STATUS are permanently on, and LINK and 485/422 are permanently on or flashing, connections are successful. If any problems, please refer to G:Debug.

D:Network setting

The Kit can transfer information via either WiFi or Ethernet, users may choose the appropriate method accordingly.

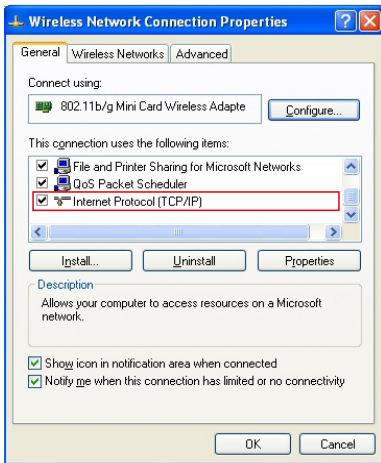
I. Connection via WiFi

Notice: The setting hereinafter is operated with Window XP for reference only. If other operating systems are used, please follow the corresponding procedures.

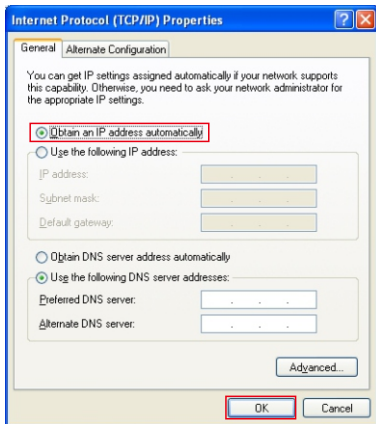
1. Prepare a computer or device, e.g. tablet PC and smartphone, that enables WiFi.

2. Obtain an IP address automatically

- ① Open [Wireless Network Connection Properties](#), double click [Internet Protocol \(TCP/IP\)](#)

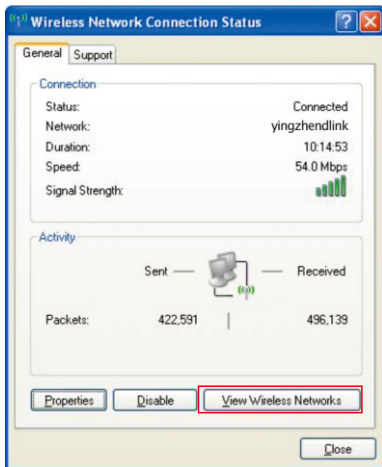


- ② Select **Obtain an IP address automatically**, and click **OK**

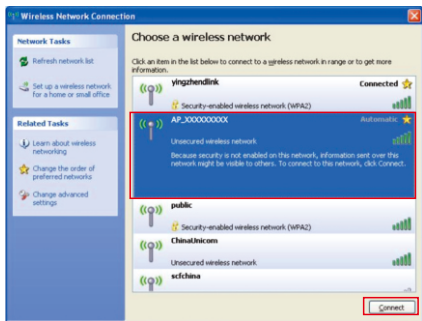


3. Set WiFi connection to the data logger

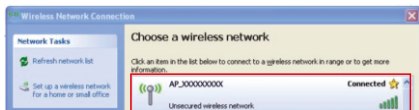
- ① Open wireless network connection and click **View Wireless Networks**



- ② Select wireless network of the data logging module, no passwords required as default. The network name consists of **AP** and the **serial number of the product**. Then click **Connect**.



- ③ Connection successful

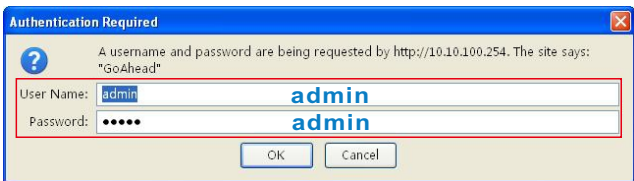
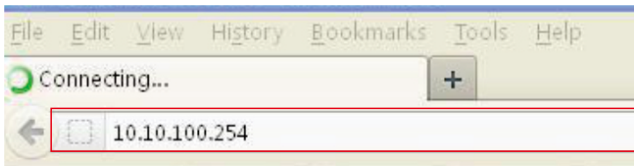


Notice: If **AP_(serial number of product)** is not available in the wireless network list, there may be problems in the connection or setting of data logging . Please refer to 5. Debug of User Manual for troubleshooting.

4. Set parameters of data logger

(a) Open a web browser, and enter **10.10.100.254**, then fill in username and password, both of which are **admin** as default.

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



(b) In the configuration interface of data logger, you can view general information of the data logger.

Follow the setup wizard to start quick setting.

① Click **Wizard** to start

Status
Wizard
Wireless
Cable
Advanced
Account
Update
Restart
Reset

^ Device information

Device serial number	501000000
Firmware version	
Wireless AP mode	Enable
SSID	Blue_A_AP
IP address	10.10.100.254
MAC address	AC-CF-23-10-52-20
Wireless STA mode	Enable
Router SSID	yingzhendlink
Signal Quality	0%
IP address	0.0.0.0
MAC address	AC-CF-23-10-52-21
Cable mode	Disable
IP address	
MAC address	

▼ 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.

If AP mode is turned off, or AP mode is on while STA mode is off, the device can only be connected to remote server through cable network.

② Click **Start** to continue

Status
Wizard
Wireless
Cable
Advanced
Account
Update
Restart
Reset

Dear user:

Thank you for choosing our device.
Next, you can follow the setup wizard to complete the network setting step by step;
or you can select the left menu for detailed setting.

*Note: Before setting, please make sure that your wireless or cable network is working.

Start

Help

The setup wizard will assist you to complete the device setting within one minute.

1 2 3 4 5 6

③ Select **Wireless connection**, and click **Next**

The screenshot shows a web interface for network configuration. On the left is a sidebar with links: Status, Wizard (highlighted), Wireless, Cable, Advanced, Account, Update, Restart, and Reset. The main area is titled "Network connection:" and contains two radio buttons: "Wireless connection" (selected and highlighted with a red box) and "Cable connection". To the right of these buttons is a "Wireless" status indicator showing "Enabled" with a small "on" button. At the bottom right are "Back" and "Next" buttons, with "Next" highlighted by a red box. At the very bottom are six numbered tabs: 1, 2, 3, 4, 5, and 6.

Status
Wizard
Wireless
Cable
Advanced
Account
Update
Restart
Reset

Network connection:

☒ Wireless connection

☐ Cable connection

Wireless Enabled on

Back Next

1 2 3 4 5 6

Help

The STA mode of wireless connection will be turned off by system automatically when you choose cable network connection.

Whether to keep the AP mode of wireless connection or not can be set by turning on or off the wireless function.

④ Click **Refresh** to search available wireless networks, or add it manually

The screenshot shows a web interface for selecting a wireless network. The sidebar is the same as in the previous screen, with "Wizard" highlighted. The main area is titled "Please select your current wireless network:". There is a "Refresh" button highlighted with a red box. Below this is a section titled "Add wireless network manually:" with three input fields: "Network name (SSID) (Note: case sensitive)" with the value "yingzhendlink", "Encryption method" with the value "WPA2PSK", and "Encryption algorithm" with the value "TKIP". At the bottom right are "Back" and "Next" buttons. At the very bottom are six numbered tabs: 1, 2, 3 (highlighted), 4, 5, and 6.

Status
Wizard
Wireless
Cable
Advanced
Account
Update
Restart
Reset

Please select your current wireless network:

Refresh

Add wireless network manually:

Network name (SSID)
(Note: case sensitive) yingzhendlink

Encryption method WPA2PSK

Encryption algorithm TKIP

Back Next

1 2 3 4 5 6

Help

This step will help to connect the device to your desired WLAN. If you do not find your wireless router on the left list, please refresh several times or add it manually.

Please check your wireless router for the right encryption method and encryption algorithm.

⑤ Select the wireless network you need to connect, then click **Next**

Notice: If the signal strength (RSSI) of the selected network is <10%, which means unstable connection, please adjust the antenna of the router, or use a repeater to enhance the signal.

Status

Wizard

Wireless

Cable

Advanced

Account

Update

Restart

Reset

Please select your current wireless network:

● AP_501000024	ac:d7:23:00:e7:1c	100%	1
● AP_SOLAR_PORTAL_M2M_20120615	ec:17:2f:e3:49:ce	70%	1
● CMCC	4c:ac:0a:2b:04:9f	50%	1
● anklam	90:94:e4:3c:61:1c	70%	1
● CMCC-AUTO	5e:ac:0a:2b:04:9f	55%	1
● AP_501000000	ac:d7:23:10:7c:bc	86%	5
<input checked="" type="radio"/> yingzhendlink	ec:6c:9f:04:b3:2c	100%	5
● GUEST1	ec:6c:9f:04:b3:2d	100%	5
● CMCC	4c:ac:0a:2b:04:9f	24%	5
● HappySys	74:ec:38:72:22:a8	34%	9
● ICOM	94:0c:6d:2a:bf:d6	5%	9
● CMCC	4c:ac:0a:45:42:3e	0%	11
● wedgenetworks	00:24:b2:16:76:d8	20%	11

Refresh

Add wireless network manually:

Network name (SSID)
(Note: case sensitive)

yingzhendlink

Encryption method

WPA2PSK

Encryption algorithm

TKIP

Back

Next

1

2

3

4

5

6

Help

This step will help to connect the device to your desired WLAN. If you do not find your wireless router on the left list, please refresh several times or add it manually.

Please check your wireless router for the right encryption method and encryption algorithm.

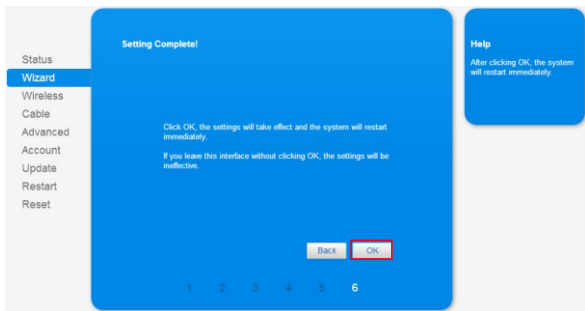
- ⑥ Enter the password for the selected network, then click **Next**

The screenshot shows a configuration wizard with a sidebar on the left containing links: Status, Wizard (highlighted), Wireless, Cable, Advanced, Account, Update, Restart, and Reset. The main panel has a blue header "Please enter the wireless network password:". Below it, there are two password input fields: "Password (1-32 bytes) (Note: case sensitive)" and "Re-enter password", both containing masked characters. A "Show Password" checkbox is located below the second field. At the bottom right are "Back" and "Next" buttons. A progress bar at the very bottom shows steps 1 through 6, with step 4 being the current step. A "Help" box on the right contains the text: "Please make sure you have entered the correct password."

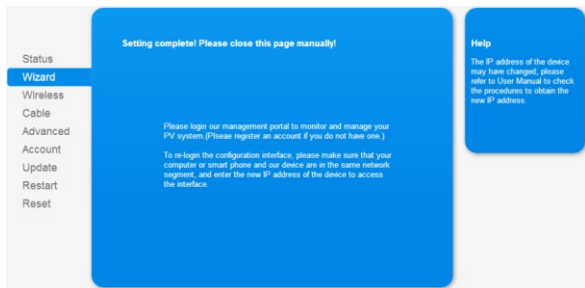
- ⑦ Select **Enable** to obtain an IP address automatically, then click **Next**

The screenshot shows the same configuration wizard. The sidebar is identical. The main panel has a blue header "Please fill in the following information:". Below it, there is a table-like form with the following fields: "Obtain an IP address automatically" (a dropdown menu set to "Enable"), "IP address" (text field with "0.0.0.0"), "Subnet mask" (text field with "0.0.0.0"), "Gateway address" (text field with "0.0.0.0"), and "DNS server address" (empty text field). At the bottom right are "Back" and "Next" buttons. A progress bar at the very bottom shows steps 1 through 6, with step 5 being the current step. A "Help" box on the right contains the text: "Most systems support the function of DHCP to obtain IP address automatically. Please select disable and add it manually if your router does not support such function."

- ⑧ If setting is successful, the following page will display. Click **OK** to restart.



- ⑨ If restart is successful, the following page will display.



Notice: After setting is completed, if STATUS is permanently on after about 30 seconds, and the 4 LEDs are all on after 2-5 minutes, the connection is successful. If STATUS is flashing, which means unsuccessful connection, please repeat the setting from step 3.

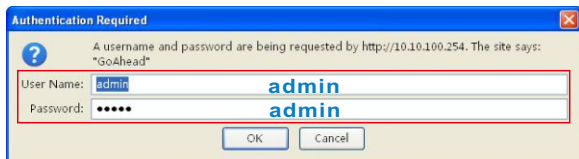
II.Connection via Ethernet

1. Connect router and data logger via Ethernet port with network cable
2. Reset the data logger.

Reset: Press the reset button with a needle or open paper clip and hold for a while when the 4 LEDs should be on. Reset is successful when 3 LEDs, except POWER, turn off.

3. Enter the configuration interface of your router, and check the IP address of the data logger assigned by the router. Open a web browser and enter the assigned IP address to get access to the configuration interface of the data logger. Fill in username and password, both of which are **admin** as default.

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



4. Set parameters of data logger

In the configuration interface of data logger, you can view general information of the device.

Follow the setup wizard to start quick setting.

① Click **Wizard** to start

The screenshot displays the configuration interface of a data logger. On the left is a vertical menu with options: Status, Wizard (highlighted with a red box), Wireless, Cable, Advanced, Account, Update, Restart, and Reset. The main area is a blue panel titled 'Device information' with a dropdown arrow. It contains several sections: 'Device serial number' (501000000), 'Firmware version', 'Wireless AP mode' (Enable), 'SSID' (Blue_A_AP), 'IP address' (10.10.100.254), 'MAC address' (AC:CF:23:10:52:29), 'Wireless STA mode' (Enable), 'Router SSID' (yingzhendlink), 'Signal Quality' (0%), 'IP address' (0.0.0.0), 'MAC address' (AC:CF:23:10:52:21), 'Cable mode' (Disable), 'IP address', and 'MAC address'. Below this is a section for 'Remote server information' with a dropdown arrow. To the right of the main panel is a 'Help' box containing text about the device's modes and connection options.

Wizard

Wireless
Cable
Advanced
Account
Update
Restart
Reset

Device information

Device serial number	501000000
Firmware version	
Wireless AP mode	Enable
SSID	Blue_A_AP
IP address	10.10.100.254
MAC address	AC:CF:23:10:52:29
Wireless STA mode	Enable
Router SSID	yingzhendlink
Signal Quality	0%
IP address	0.0.0.0
MAC address	AC:CF:23:10:52:21
Cable mode	Disable
IP address	
MAC address	

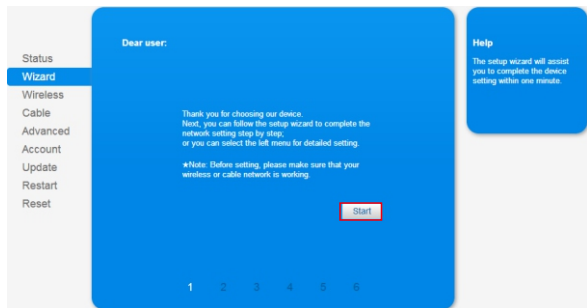
Remote server information

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.

If AP mode is turned off, or AP mode is on while STA mode is off, the device can only be connected to remote server through cable network.

② Click **Start** to continue



③ Select **Cable Connection**, and you can choose to enable or disable the wireless function, then click **Next**



- ④ Select **Enable** to obtain an IP address automatically, then click **Next**

The screenshot shows a configuration wizard with a sidebar on the left containing the following menu items: Status, Wizard (highlighted), Wireless, Cable, Advanced, Account, Update, Restart, and Reset. The main content area has a blue header with the text "Please fill in the following information:". Below this, there is a form with the following fields:

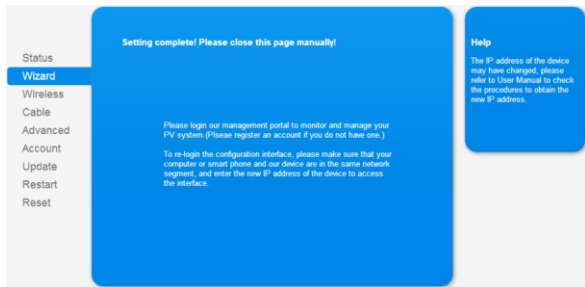
- "Obtain an IP address automatically" with a dropdown menu set to "Enable" (highlighted with a red box).
- "IP address" with a text input field containing "0.0.0.0".
- "Subnet mask" with a text input field containing "0.0.0.0".
- "Gateway address" with a text input field containing "0.0.0.0".
- "DNS server address" with an empty text input field.

At the bottom of the form are two buttons: "Back" and "Next" (highlighted with a red box). Below the buttons is a progress bar with six steps, where step 4 is highlighted. On the right side, there is a "Help" box with the text: "Most systems support the function of DHCP to obtain IP address automatically. Please select disable and add it manually if your router does not support such function."

- ⑤ If setting is successful, the following page will display. Click **OK** to restart.

The screenshot shows the "Setting Complete" screen of the configuration wizard. The sidebar on the left is the same as in the previous screenshot. The main content area has a blue header with the text "Setting Complete". Below this, there is a message: "Click OK, the settings will take effect and the system will restart immediately. If you leave this interface without clicking OK, the settings will be ineffective." At the bottom of the main area are two buttons: "Back" and "OK" (highlighted with a red box). Below the buttons is a progress bar with six steps, where step 5 is highlighted. On the right side, there is a "Help" box with the text: "After clicking OK, the system will restart immediately."

⑥ If restart is successful, the following page will display.



Notice: After setting is completed, **if STATUS is permanently on after about 30 seconds, and the 4 LEDs are all on after 2-5 minutes, the connection is successful.** If STATUS is flashing, which means unsuccessful connection, please repeat the setting from step 3.

E:Register on SolarMAN Portal

Open a web browser and visit the portal website:
<http://www.solarmanpv.com/portal>

Supported browsers: Internet Explorer 8+, Google Chrome 10+,
Firefox 9+, Safari 4+

① Click **Register Now**




② Fill in your email address and password, then click **Next**



③ Fill in the information as required, then click **Complete**

Create a New Account

Site Name: *Maximum 20 Letters

Upload Image: 

Country: *

Province/State: *

City: *

Street: [Locate Your Site On Map](#)

ZIP Code:

Telephone: *

Number Format: *

Temperature Unit: *

System Size(kwp): *

Feed-in Tariff(FIT): *

Panel Type: *

Inverter Type: *

Description:

☒ Make This Site Public

Registration

Datalogger SN: *

Inverter:

Contact

Name:

Phone:

④ If registration is successful, the following page will display. Click **OK** to return to the homepage of the portal.

192.168.1.76 上的网页显示:

Successful registration

Sign In

Email:

Password:

☐ Remember me

[My Site](#) [Demo Account](#)

Forgotten your password?

F:Log in SolarMAN Portal to manage power station

After successful registration, open the login page of SolarMAN Portal, and input your E-mail and password to access the monitoring system and start monitoring and management of power plants.

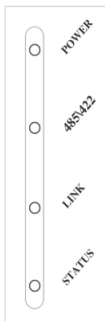


Notice: If users access the monitoring system for the first time within ten minutes after successful registration, please check the "Real Time" interface. If there are data shown in the Real Time interface, network setting of data logger and other connection are deemed successful.

No.	Inverter S/N	DC Input			AC Output			Total Energy(kWh)	Temperature(°C)
		Channel	Voltage(V)	Current(A)	Phase	Voltage(V)	Current(A)	Power(W)	Frequency(Hz)
1	089607812721307	PV1	0.0	0.0	L1	236.6	0.0	0	49.99
		PV2	289.0	0.0	L2	230.0	0.7	0	
		PV3	0	0	L3	230.0	0.7	0	
2	089607812721307	PV1	301.0	0.95	L1	232.4	0.2	51	50.05
		PV2	0.0	0.00	L2	0.0	0.0	0	
		PV3	0	0	L3	0.0	0.0	0	
3	082964021100003	PV1	277.9	0.0	L1	236.7	0.2	11	50.07
		PV2	176.1	0.0	L2	0.0	0.0	0	
		PV3	0	0	L3	0.0	0.0	0	

G:Trouble shootings

I. LED indication



LEDs	Status	Meaning
POWER	On	Power is normal
	Off	Power is abnormal
485\422	On	Connection between data logger and inverter is normal
	Flashing	Data is transmitting between data logger and inverter
	Off	Connection between data logger and inverter is abnormal
STATUS Off	LINK Flashing	Connecting WiFi
STATUS On	LINK Flashing	Data is transmitting via WiFi
	LINK On	Connection of data logger is normal
	LINK Off	Connection of data logger is abnormal
STATUS Flashing	LINK Flashing	Data is transmitting via port
	LINK On	WiFi in AP mode, a terminal connected
	LINK Off	WiFi in AP mode, no terminal connected

II. Trouble shooting

Phenomenon				Meaning	Solutions
POWER	485/422	LINK	STATUS		
Off	Off	Off	Off	No power supply	Connect power supply and ensure good contacts.
On	Off	X	X	Connection with inverter is abnormal	Check the connection cable, and ensure that the cable order comply with T568B.
					Ensure the stability of RJ-45.
					Ensure that inverter is working under normal condition.
On	X	X	Flashing	In AP mode	Set network.
On	X	Flashing	Off	No WiFi connected to data logger	Check if the antenna is loose or falls off. If so, please screw to tighten.
					Check if the required WiFi is covered.
					Reset data logger and set network again.
On	On	Off	On	Connection to remote server failed	Check if WiFi can connect to Internet
On	Off	Off	Off	System under initialization	Wait for 2 minutes, if no changes occur, reset data logger.
Weak WiFi					Check the connection of antenna
					Add WiFi repeater
					Connect via Ethernet

Note 1 X means uncertain status.

Note 2 : When screw or adjust the antenna, please note that only the metal part can be touched, and do not screw the plastic part, otherwise the antenna may be damaged.

Note 3 : If the equipment still fails to work upon above solutions, please contact your device customer service.

H:Contact

If any technical problems, please contact us, with the following information in hand:

- ◆ Device model
- ◆ Serial number of product

IGEN Tech. Co. Ltd.

Add: Rm.405, Block A1,
Tianan iPark, No.228 Linghu Avenue,
New District, Wuxi, Jiangsu Province,
P.R.China

Tel: +86-510-8181 6208

Fax: +86-510-8181 6208

E-mail: tech@solarmanpv.com

QG-WE01S-V1.0-0113-EN

www.solarmanpv.com