



solis GL-WE01 Wifi Data Logging Box User Guide

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solis GL-WE01 Wifi Data Logging Box



Data Logging Box WiFi is an external data logger in the Ginlong monitoring series.

By connecting with single or multiple inverters through RS485/422 interface, the Kit can collect information of PV /wind 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.

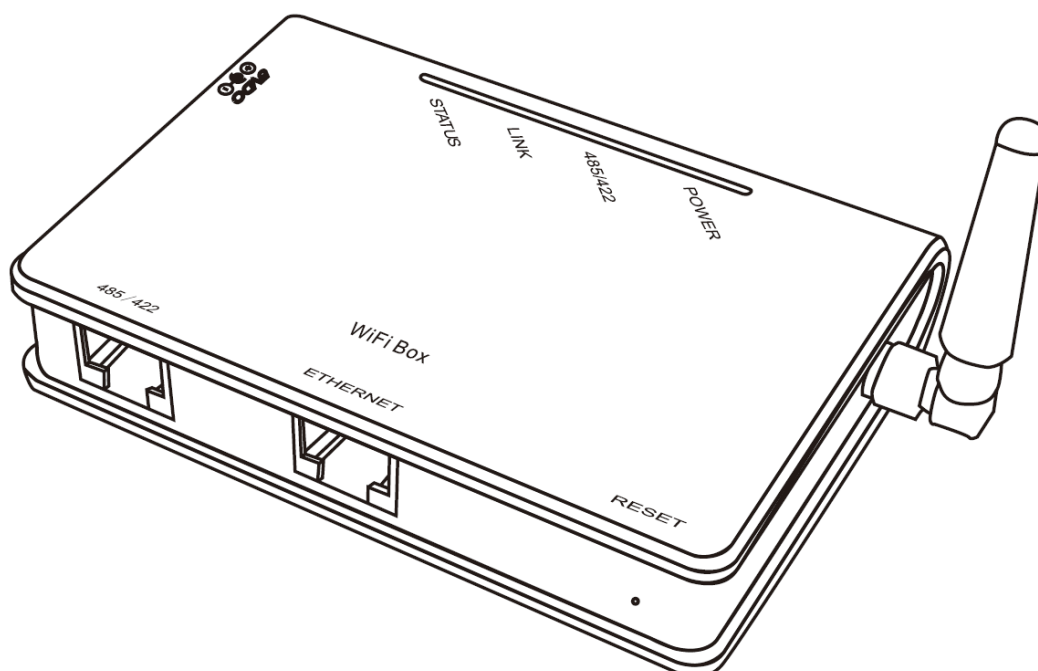
Users can check the runtime status of the device by checking the 4 LEDs on the panel, indicating Power, 485/422, Link and Status respectively.

Unpack

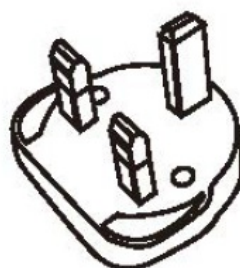
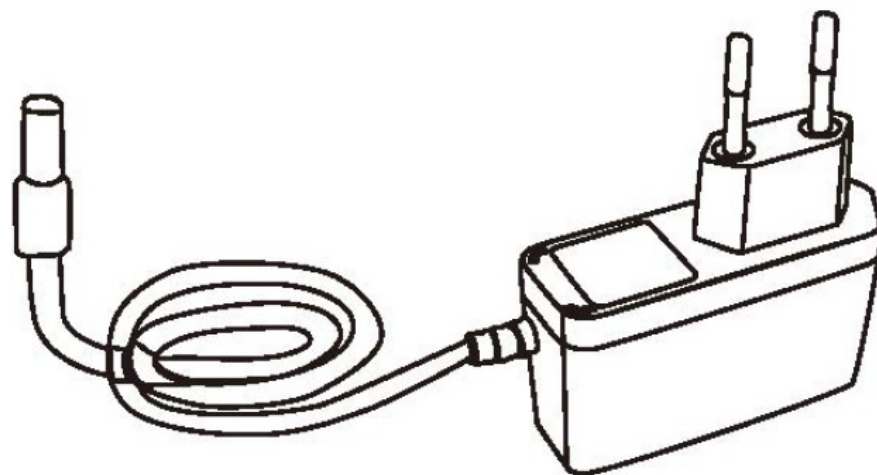
Checklist

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

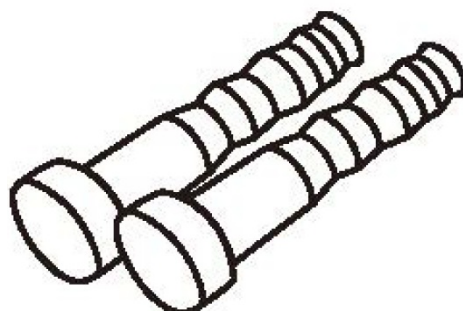
1. 1 PV/wind data logger (Data Logging Box WiFi)



2. 1 power adapter with European or British plug



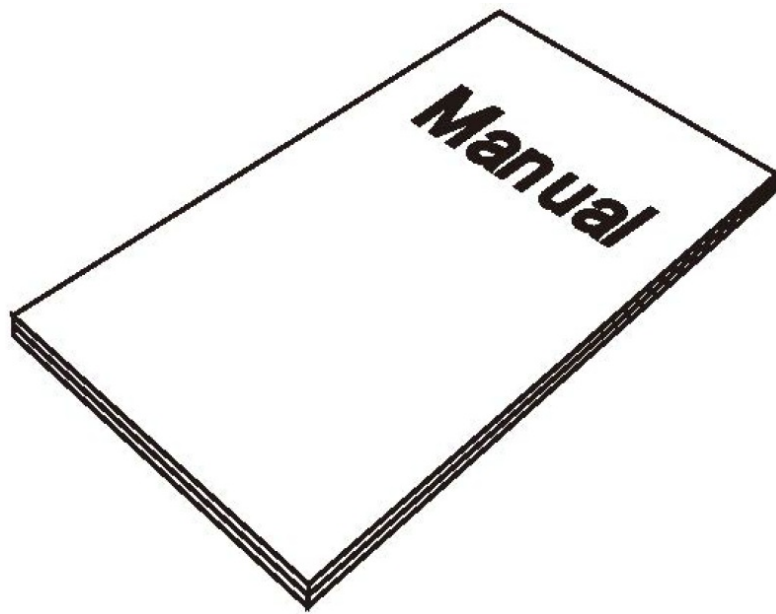
3. 2 screws



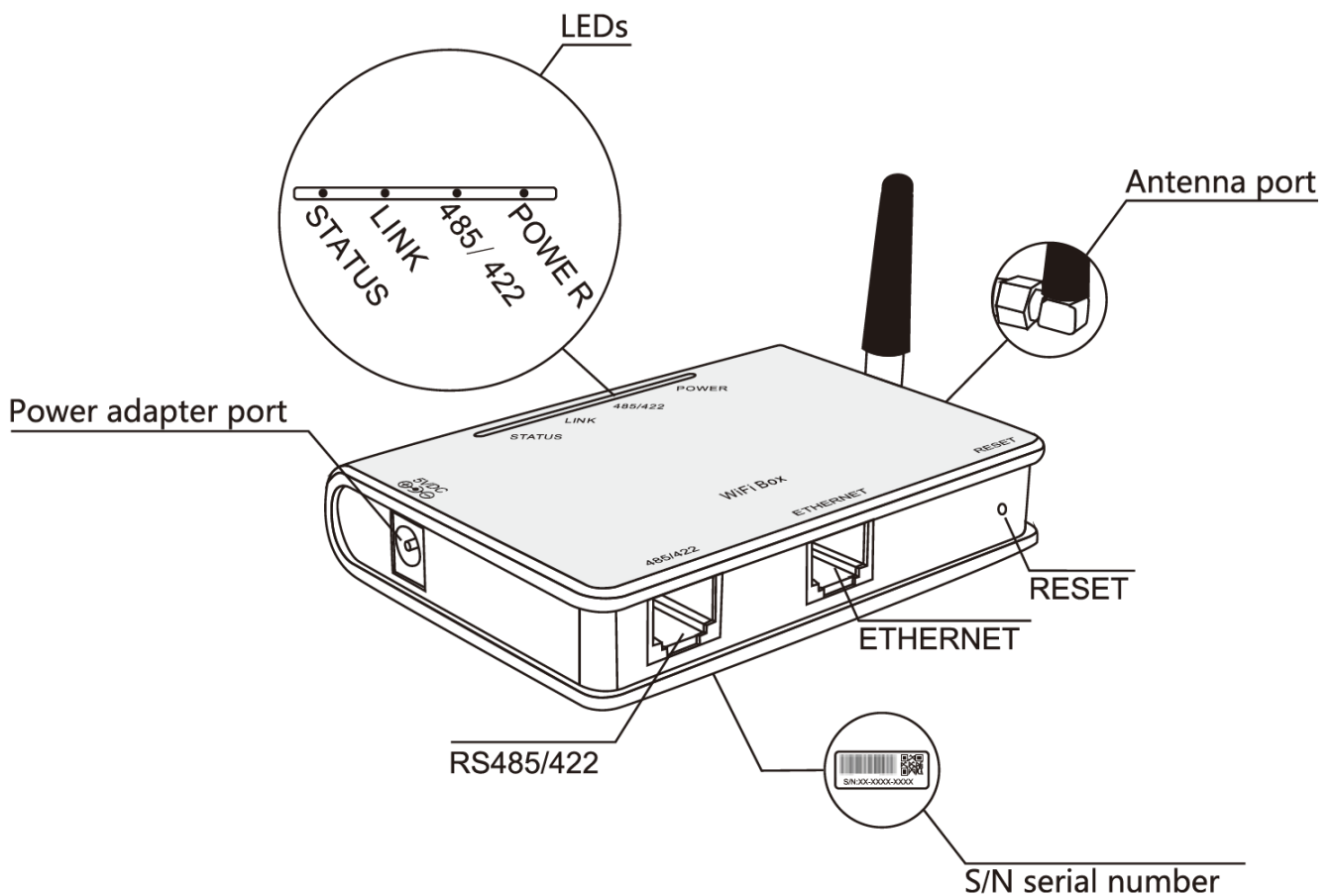
4. 2 expandable rubber hoses



5. 1 Quick Guide



Interface and Connection



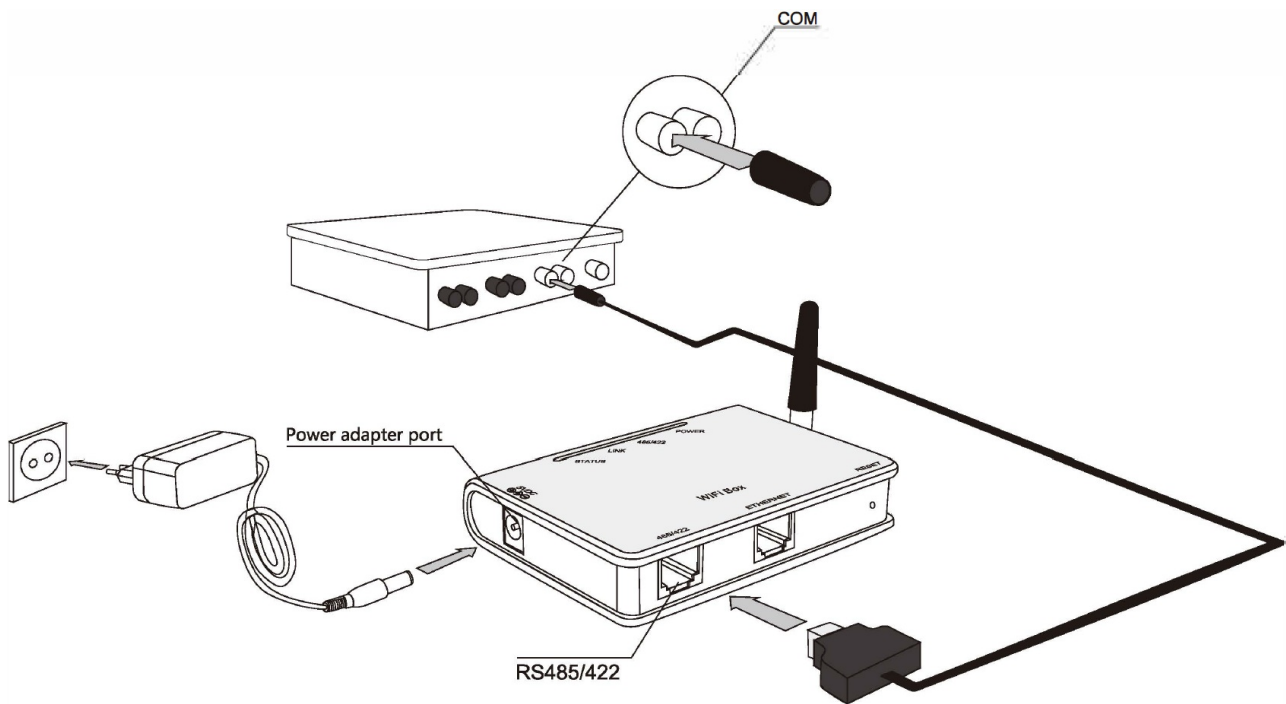
Install Data Logger

WiFi Box can be either wall-mounted or flatwise.

Connect Data Logger and Inverters

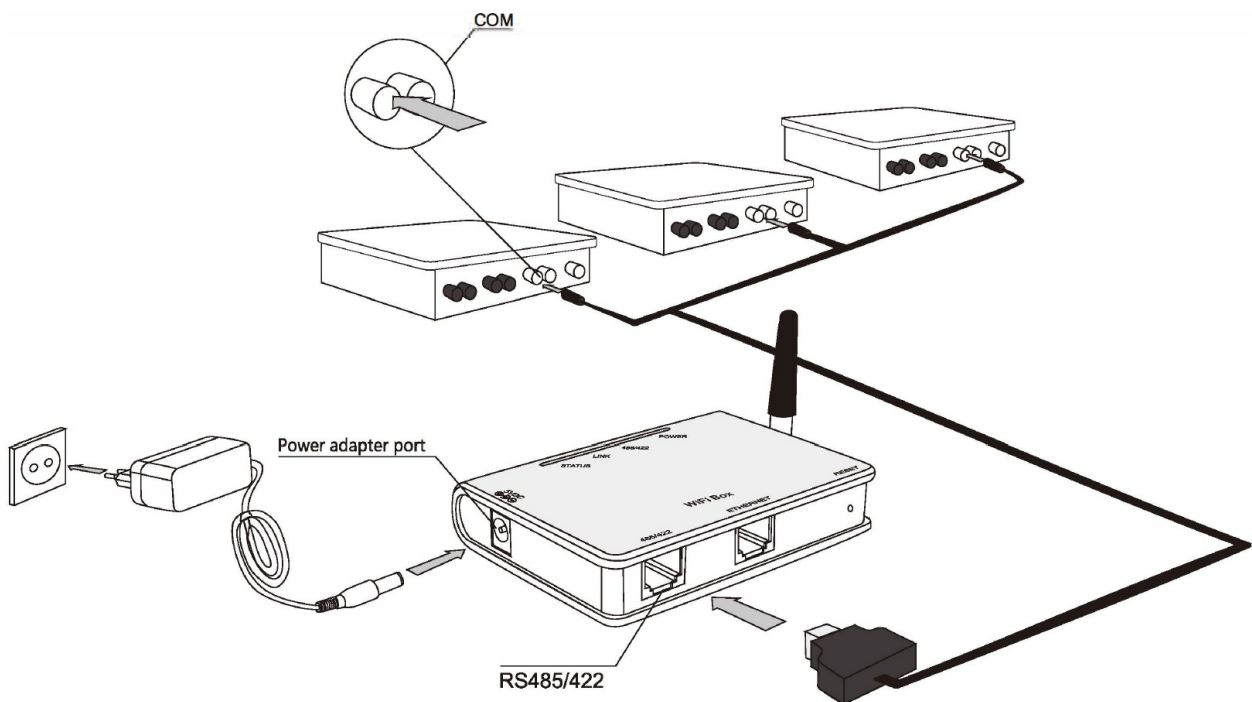
Notice: Power supply of inverters must be cut off before connection. Make sure that all connections are completed, then power the data logger and inverters, otherwise personal injury or equipment damage : may be caused.

Connection with Single Inverter



Connect inverter and data logger with 485 cable, and connect data logger and power supply with power adapter.

Connection with Multiple Inverters



1. Parallel connect multiple inverters with 485 cables.
2. Connect all inverters to data logger with 485 cables.
3. Set different address for each inverter. For example, when connecting three inverters, the address of first inverter must be set as "01 ", the second must be set as "02", and the third must be set as "03" and so on.
4. Connect data logger to power supply with power adapter.

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.

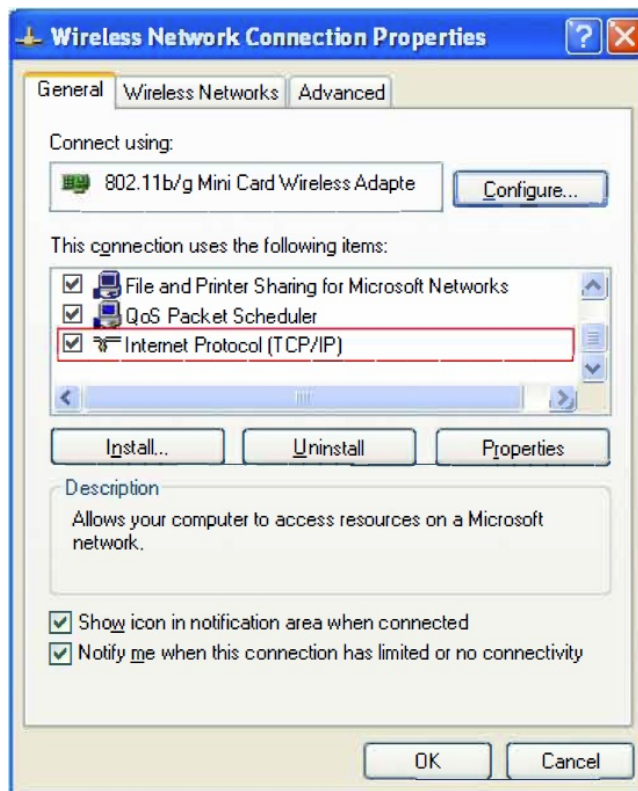
Network Setting

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

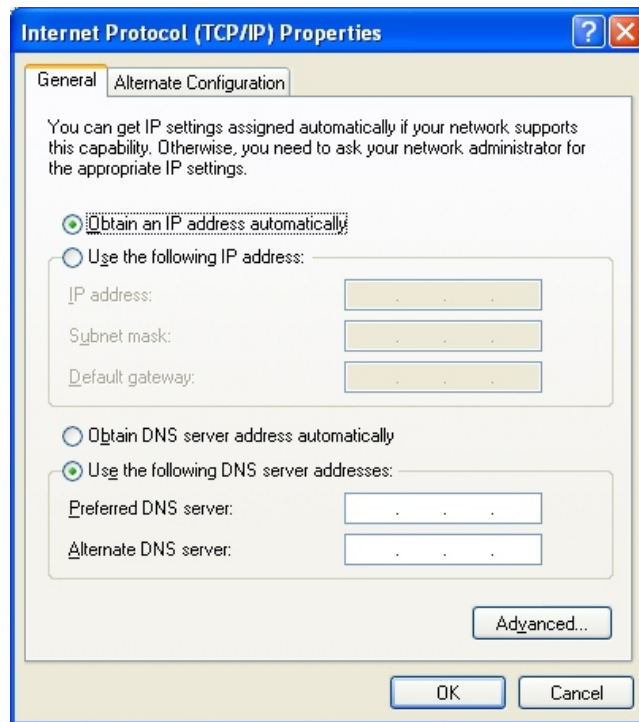
Connection via WiFi

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
 - Open Wireless Network Connection Properties, double click Internet Protocol (TCP/IP).

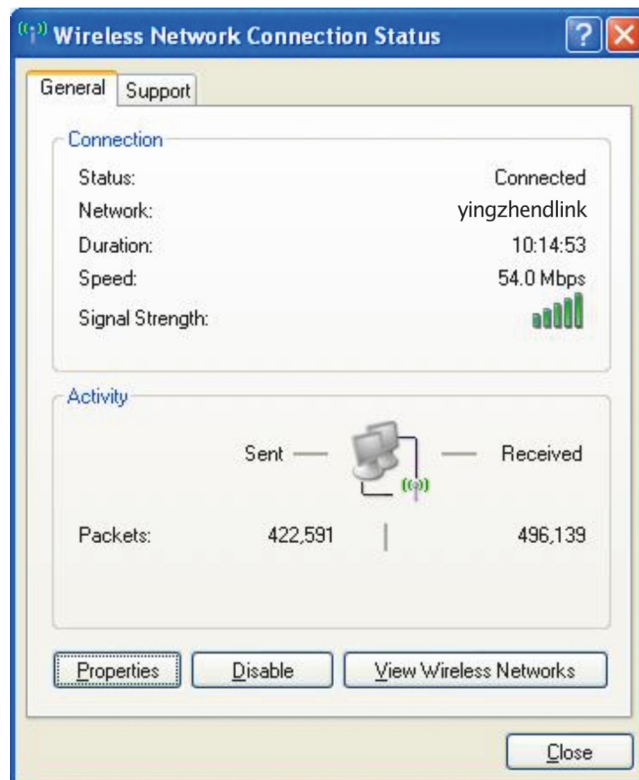


- Select Obtain an IP address automatically, and click OK.

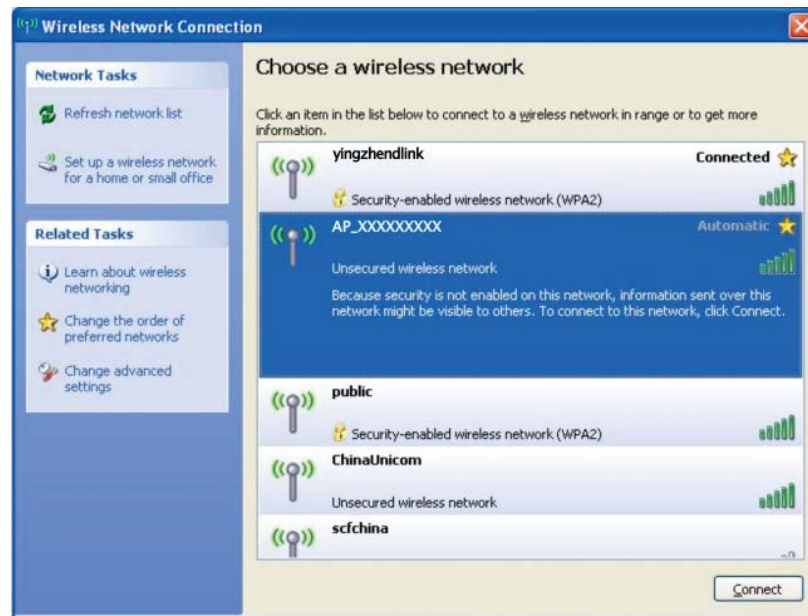


3. Set WiFi connection to the data logger

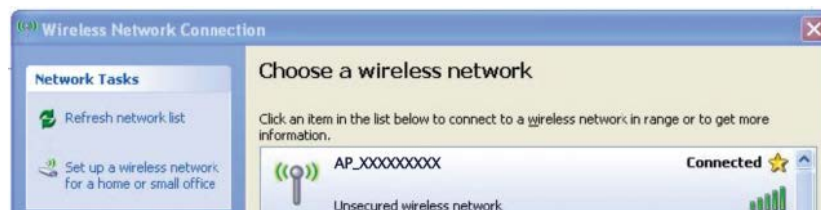
- Open wireless network connection and click View Wireless Networks.



- 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.



- Connection successful.



4. Set parameters of data logger

- 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+



- In the configuration interface of data logger, you can view general information of the data logger. Follow the setup wizard to start quick setting.
- Click Wizard to start.

Status

Wizard

Wireless

Cable

Advanced

Account

Update

Restart

Reset

Device information

Device serial number	501292599
Firmware version	S-W01 V2.0.4A(ginlong)
Wireless AP mode	Enable
SSID	AP_501292599
IP address	10.10.100.254
MAC address	AC:CF:23:10:F3:58
Wireless STA mode	Disable
Router SSID	
Signal Quality	
IP address	
MAC address	
Cable mode	Enable
IP address	0.0.0.0
MAC address	AC:CF:23:10:F3:5B

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.

- 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

1 2 3 4 5 6

Help

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

- Select Wireless connection, and click Next.

Status

Wizard

Wireless

Cable

Advanced

Account

Update

Restart

Reset

Please select your current wireless network:

Site Survey

	SSID	BSSID	RSSI	Channel
<input type="radio"/>	dlink	14:d6:4d:75:71:a0	65%	6

★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.

Refresh

Add wireless network manually:

Network name (SSID)

(Note: case sensitive)

dlink

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.

If your wireless router does not broadcast SSID, please set the desired wireless network in Wireless interface.

- Enter the password for the selected network, then click Next.

Status

Wizard

Wireless

Cable

Advanced

Account

Update

Restart

Reset

Please enter the wireless network password:

Password (8-64 bytes)

(Note: case sensitive)

.....

Re-enter password

.....

☐ Show Password

Back

Next

1 2 3 4 5 6

Help

Please make sure you have entered the correct password.

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

Status
Wizard
Wireless
Cable
Advanced
Account
Update
Restart
Reset

Please fill in the following information:

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	

BackNext

123456

Help
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.

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

Status
Wizard
Wireless
Cable
Advanced
Account
Update
Restart
Reset

Setting complete!

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.

BackOK

123456

Help
After clicking OK, the system will restart immediately.

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

Status
Wizard
Wireless
Cable
Advanced
Account
Update
Restart
Reset

Setting complete! Please close this page manually!

Please login our management portal to monitor and manage your PV system.(Please register an account if you do not have one.)

To re-login the configuration interface, please make sure that your computer or smart phone and our device are in the same network segment, and enter the new IP address of the device to access the interface.

Help
★Note: The IP address of the device may have changed, please refer to User Manual to check the procedures to obtain the new IP address.

Notice: After setting is completed, if ST A TUS 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.

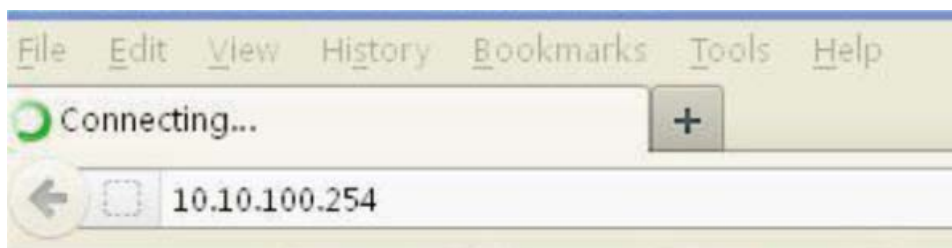
Connection via Ethernet

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.

- Click Wizard to start.

Status

Wizard

Wireless

Cable

Advanced

Account

Update

Restart

Reset

▲ Device information

Device serial number	501292599
Firmware version	S-W01 V2.0.4A(ginlong)
Wireless AP mode	Enable
SSID	AP_501292599
IP address	10.10.100.254
MAC address	AC:CF:23:10:F3:58
Wireless STA mode	Enable
Router SSID	dlink
Signal Quality	76%
IP address	192.168.0.103
MAC address	AC:CF:23:10:F3:59
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.

- Click Start to continue.

The screenshot shows the 'Dear user' screen of a setup wizard. On the left is a vertical menu with options: Status, Wizard (highlighted), Wireless, Cable, Advanced, Account, Update, Restart, and Reset. The main area has a dark background with white text. It says 'Dear user:' followed by a welcome message and instructions. A 'Start' button is at the bottom right. A progress bar at the very bottom shows six steps, with the first step '1' being active. On the right, a 'Help' box contains text about the setup wizard's purpose.

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

1 2 3 4 5 6

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

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

The screenshot shows the 'Network connection' screen. The left menu is the same as the previous screen. The main area has a dark background with white text. It shows two radio button options: 'Wireless connection' (selected) and 'Cable connection'. To the right of 'Cable connection' is a 'Wireless' dropdown menu with 'Enabled' selected. Below the dropdown are 'Enabled' and 'Disabled' options. 'Back' and 'Next' buttons are at the bottom right. A progress bar at the bottom shows six steps, with the first step '1' being active. On the right, a 'Help' box contains text about the STA mode of wireless connection.

Status
Wizard
Wireless
Cable
Advanced
Account
Update
Restart
Reset

Network connection:

☒ Wireless connection
☐ Cable connection

Wireless **Enabled**
Enabled
Disabled

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.

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

StatusWizardWirelessCableAdvancedAccountUpdateRestartReset

Please fill in the following information:

Obtain an IP address automaticallyEnable

IP address0.0.0.0

Subnet mask0.0.0.0

Gateway address0.0.0.0

DNS server address

BackNext

123456

Help

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.

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

StatusWizardWirelessCableAdvancedAccountUpdateRestartReset

Setting complete!

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.

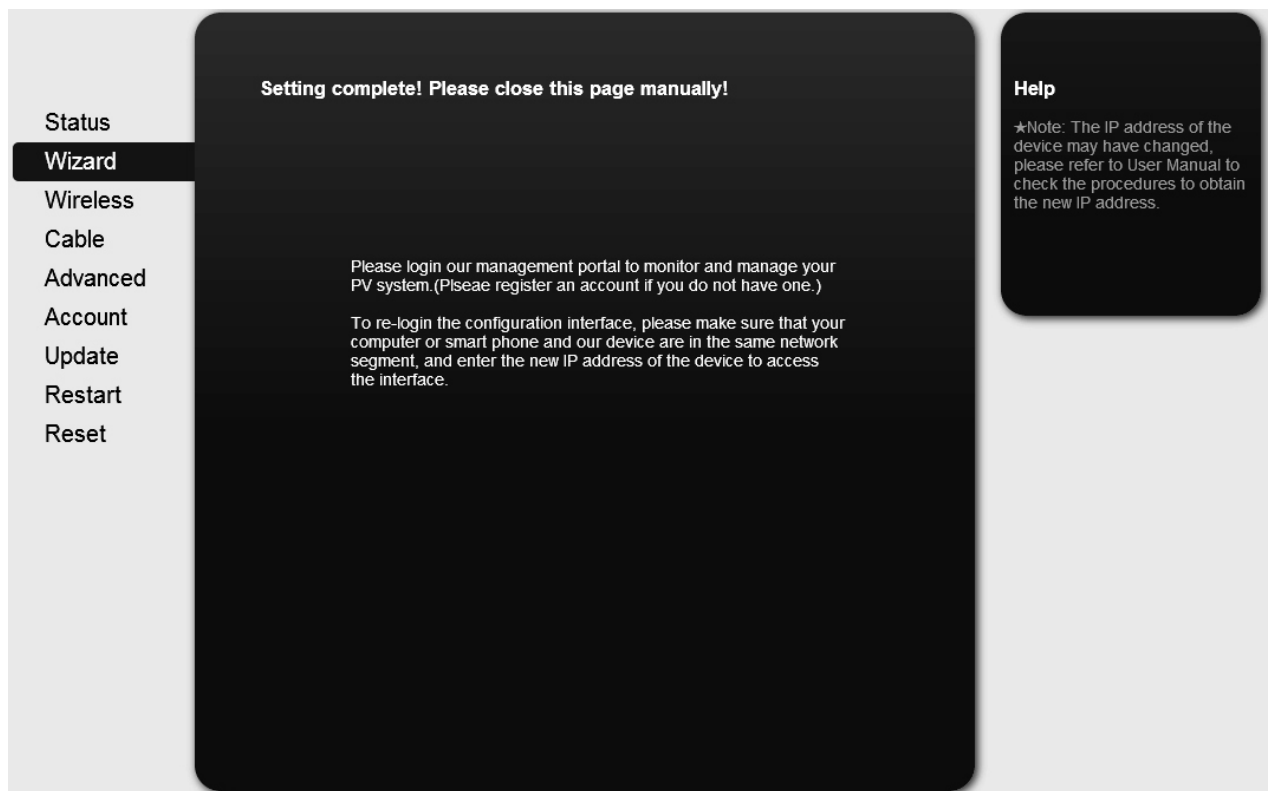
BackOK

123456

Help

After clicking OK, the system will restart immediately.

- 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.

Create Solis Home Account

- Step1: Phone scanning and sending QR code to download registration APP. Or search Solis Home or Solis Pro in the App Store and Google Play Store.

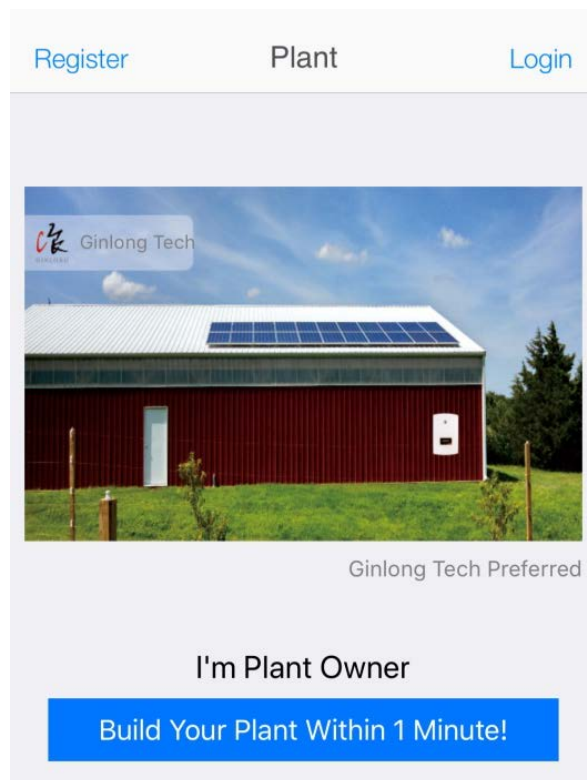


End user, owner use



Installer, distributor use

- Step2: Click to register.



- Step3: Fill in the content as required and click on the register again.

×

Register

Username

Email or Phone Number

Password(min 6 characters)

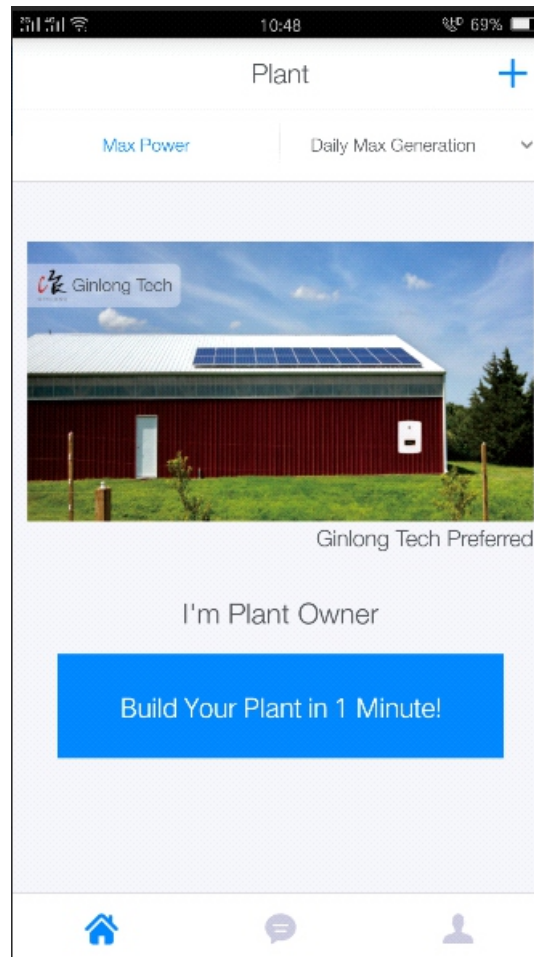
👁

Register

Create Plants

1. In the absence of login, click “1 minute to create the power station” in the center of the screen. Click “+” in the

upper right corner to create the power station.



2. Scan the code

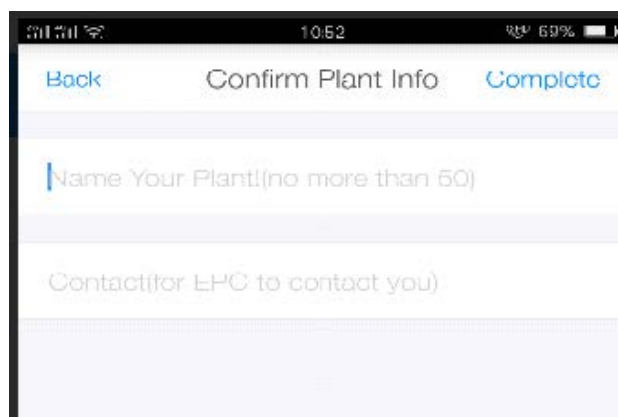
APP only supports the scanning of the bar code/QR code of dataloggers. If there is no datalogger, you can click the “no device” and jump to the next step: input plant information.

3. Input plant information

The system automatically locates the location of the station via the mobile phone GPS. If you are not in the site, you can also click “map” to select on the map.

4. Enter the name of the station and the owner’s contact number

The name of the station is suggested to use your name, and the contact number is recommended to use your mobile phone number so as to have the installer operation in the later period.



Troubleshooting


LED Indication

Power	On	Power supply is normal
	Off	Power supply is abnormal
485\422	On	Connection between data logger and inverter is normal
	Flash	Data is transmitting between data logger and inverter
	Off	Connection between data logger and inverter is abnormal
LINK	On	Connection between data logger and server is normal
	Flash	1. Data logger is under AP mode with cable connection or wireless connection 2. No network available
	Off	Connection between data logger and server is abnormal
STATUS	On	Data logger works normally
	Off	Data logger works abnormally

Troubleshooting

Phenomenon	Possible Reason	Solutions
Power off	No power supply	Connect power supply and ensure good contact.
RS485/422 off	Connection with inverter is abnormal	Check the wiring, and ensure that the line order comply with T568B
		Ensure the stability of RJ-45.
		Ensure normal working status of inverter
LINK flash	Wireless In STA mode	No network. Please set network first. Please configure internet connection according to Quick Guide.
LINK off	Data logger works abnormally	Check logger working mode (Wireless mode/Cable mode)
		Check if the antenna is loose or falls off. If so, please screw to tighten.
		Check if the device is covered by the range of the router.
		Please refer to User Manual for further information or have the data logger tested with our diagnosis tool.
Status off	Data logger works abnormally	Reset. If the problem still exists, please contact our customer service.
WiFi signal strength weak		Check the connection of antenna
		Add WiFi repeater
		Connect via Ethernet interface

Documents / Resources

	solis GL-WE01 Wifi Data Logging Box [pdf] User Guide GL-WE01, Wifi Data Logging Box
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