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

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No. 57 Jintong Road, Binhai Industrial Park
Xiangshan, Ningbo, Zhejiang, 315712, P.R.China
Tel: +86 (0)574 6578 1806
Fax: +86 (0)574 6578 1606
Email: info@ginlong.com
Web: www.ginlong.com

Please record the serial number of your monitor and quote this when you contact us.

Quick Guide
Data Logging Box WiFi GL-WE01
Version: 1.2

From this page
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.

This Quick Guide is intended to assist users in quick installation and start of Data Logging Box WiFi. If any problem, please refer to corresponding chapters of WiFi Box User Manual for details.

A: Unpack

1. Checklist

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

A: Unpack
B: Install data logger
C: Connect data logger and inverters
D: Network setting
E: Register on Ginlongmonitoring website
F: Log in Ginlongmonitoring website to manage power station
G: Trouble shootings
2. Interface and connection

B: Install data logger

WiFi Box can be either wall-mounted or flatwise.

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 485 cable, and connect data logger and power supply with power adapter.
2. Connection with multiple inverters

1. Parallel connect multiple inverters with 485 cables.
2. Connect all inverters to data logger with 485 cables.
3. Set a different address for each inverter. For example, when connecting three inverters, the address of the 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.

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

WiFi Box 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

⑦ 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.

2. Click **Start** to continue.

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

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

Please select your current wireless network:

- **Site Survey**
  - **SSID**: 1234567890
  - **BSSID**: 12:34:56:89:01:23
  - **Channel**: 5

Add wireless network manually:

- **Network name (SSID)**: MySSID
- **Network key (password)**: MyPassword
- **Encryption method**: WPA2-PSK
- **Encryption algorithm**: TKIP

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

Please enter the wireless network password:

- **Password**: ********

Select **Enable** to obtain an IP address automatically, then click **Next**.
If setting is successful, the following page will display. Click **OK** to restart.

<table>
<thead>
<tr>
<th>Status</th>
<th>Wizard</th>
<th>Wireless</th>
<th>Cable</th>
<th>Advanced</th>
<th>Account</th>
<th>Update</th>
<th>Restart</th>
<th>Reset</th>
</tr>
</thead>
</table>

**Setting complete!**

Click **OK**, the settings will take effect and the system will restart immediately.

If you lose this interface without clicking **OK**, the settings will be ineffective.

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+

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.
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.

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**.

If restart is successful, the following page will display.

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

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 Ginlongmonitoring

Open a web browser and visit the Ginlongmonitoring website:
http://www.ginlongmonitoring.com

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.
F: Log in Ginlong monitoring website to manage power station

After successful registration, open the login page of Ginlong monitoring 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.

G: Trouble shootings

I. LED indication

<table>
<thead>
<tr>
<th>LEDs</th>
<th>Status</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>POWER</td>
<td>On</td>
<td>Power is normal</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>Power is abnormal</td>
</tr>
<tr>
<td>485/422</td>
<td>On</td>
<td>Connection between data logger and inverter is normal</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>Data is transmitting between data logger and inverter</td>
</tr>
<tr>
<td>STATUS Off</td>
<td>FLASHING</td>
<td>Connection between data logger and inverter is abnormal</td>
</tr>
<tr>
<td>STATUS On</td>
<td>FLASHING</td>
<td>Data is transmitting via WiFi</td>
</tr>
<tr>
<td></td>
<td>On</td>
<td>Connection of data logger is normal</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>Connection of data logger is abnormal</td>
</tr>
<tr>
<td>STATUS Flashing</td>
<td>FLASHING</td>
<td>Data is transmitting via port</td>
</tr>
<tr>
<td></td>
<td>On</td>
<td>WIFI in AP mode, a terminal connected</td>
</tr>
<tr>
<td></td>
<td>Off</td>
<td>WIFI in AP mode, no terminal connected</td>
</tr>
</tbody>
</table>
## II. Trouble shooting

<table>
<thead>
<tr>
<th>Phenomenon</th>
<th>Meaning</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off Off Off Off</td>
<td>No power supply</td>
<td>Connect power supply and ensure good contacts.</td>
</tr>
<tr>
<td>On Off X X</td>
<td>Connection with inverter is abnormal</td>
<td>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.</td>
</tr>
<tr>
<td>On X X Flashing</td>
<td>In AP mode</td>
<td>Set network.</td>
</tr>
<tr>
<td>On X Flashing Off</td>
<td>No WIFI connected to data logger</td>
<td>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.</td>
</tr>
<tr>
<td>On On Off On</td>
<td>Connection to remote server failed</td>
<td>Check if WIFI can connect to Internet</td>
</tr>
<tr>
<td>On Off Off Off</td>
<td>System under initialization</td>
<td>Wait for 2 minutes. If no changes occur, reset data logger.</td>
</tr>
<tr>
<td>Weak WIFI</td>
<td></td>
<td>Check the connection of antenna Add WIFI repeater Connect via Ethernet</td>
</tr>
</tbody>
</table>