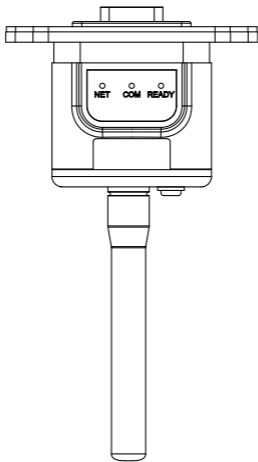


Stick Logger (WiFi)

Model : LSW-3





Warning:

1. Please install and remove logger after power off.
2. Reset button supports direct press. Do not remove waterproof plug.

Notice:

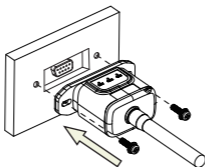
Please read this manual carefully before using products and keep it in the place where O&M providers can easily find.

Due to product upgrade and other factors, the content of this manual might change from time to time. Please take actual product as standard and get latest manual from sales. Unless otherwise agreed herein, this manual will only be used as guidance. Any statement, information or suggestion in this manual will not take any form of responsibility.

Without written permission, any content of this document (partly or entirely) cannot be extracted, copied or transmitted in any form by any company or individual.

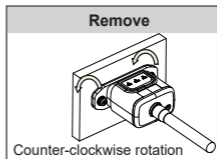
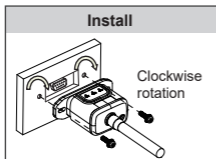
1. Stick logger installation

Step1: Assemble logger to the inverter communication interface as shown in the diagram.



Follow the arrow direction.

Step2: Install/Remove



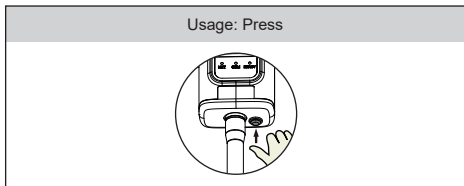
Warning:

Please do not hold the logger body to rotate while install or remove the logger.



2. Operations and notices for Reset button

2.1 Operations and key-press descriptions for Reset button



Key-press	Status Description	Light Status
Long press 5s	Rebooting the stick logger.	All lights are extinguished immediately.
Long press 10s	Resetting the stick logger.	1.All lights are extinguished after 4s. 2.READY light flashes fast for 100ms.

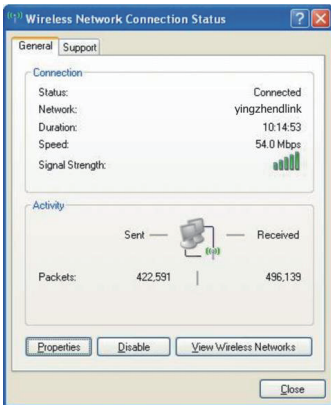
2.2 Notices for Reset button



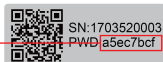
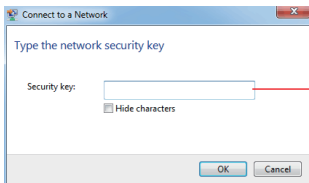
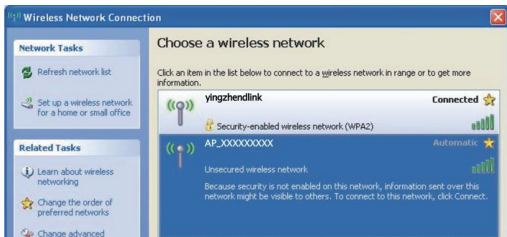
3. Set WiFi connection on PC

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

1. Prepare a computer or device with WiFi, e.g. tablet PC and smartphone with WiFi function.
 2. Obtain an IP address automatically.
 3. Set WiFi connection to the logger
- 3.1 Open wireless network connection and click View Wireless Networks



3.2 Select wireless network of the logger. The network name consists of AP and the serial number of the product. Input the password shown on the logger. Then click Connect.

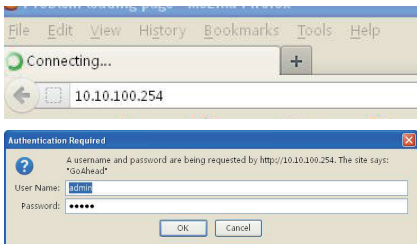


Notice: If AP_(serial number of product) is not available in the wireless network list, there may be problems in the connection or setting of logger. Please wait several minutes to refresh the list or plug in the logger again.

4. Set parameters of logger

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

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



4.2 In the Status page, you can view general information of the logger.

The image shows the "Status" page of the web interface. The page has a navigation menu on the left with options: Status, Wizard, Quick Set, Advanced, Upgrade, Restart, and Reset. The main content area displays a table of system information:

- Inverter information	
Inverter serial number	---
Firmware version (main)	---
Firmware version (slave)	---
Inverter model	---
Rated power	--- W
Current power	--- W
Yield today	--- kWh
Total yield	--- kWh
Alerts	---
Last updated	---

Below the inverter information, there are sections for:

- + Device information
- + Remote server information

On the right side of the page, there is a "Help" dialog box with the following text:

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.

Status of remote server
+Not connected
Connection to server failed last time.
If under such status, please check the issues as follows:
(1) Check the device information to see whether IP address is obtained or not.
(2) Check if the router is connected to internet or

At the bottom of the page, it says "Web Ver 1.0.20".

4.3 Follow the setup wizard to start quick setting.

(a) Click Wizard to start. Select the wireless network you need to connect, then click Next

Status

Wizard

Quick Set

Advanced

Upgrade

Restart

Reset

Please select your current wireless network:

Site Survey	SSID	BSSID
<input type="radio"/>	R&D	A4:99:47:29:67:F0
<input type="radio"/>	HF-2405000501	98:D8:63:F:6F:33
<input type="radio"/>	AP_711241528	98:D8:63:F:6D:67
<input type="radio"/>	BYD_902000501	98:D8:63:F:6D:E3
<input type="radio"/>	IGEN-HILINK	94:77:2B:49:1F:5C
<input type="radio"/>	AP_711161522	98:D8:63:F:6D:CB
<input type="radio"/>	TP-LINK 3	48:7D:2E:62:16:2C
<input type="radio"/>	null	5A:56:5A:10:C:65

★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)

Encryption method

Next

1 2 3 4

Help

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

Notice: If the signal strength (RSSI) of the selected network is <15%, which means unstable connection, please adjust the antenna of the router, or use a repeater to enhance the signal.

The SSID of your selected router network should be less than 30 characters, in which blank space should not be included.

(b) Enter the password for the selected network, select Enable to obtain an IP address automatically, then click Next

中文 | English

Status	<p style="text-align: center;">Please fill in the following information:</p> <p>Password (8-64 bytes) <input type="password" value="*****"/> (Note: case sensitive) <input type="checkbox"/> Show Password</p> <p>Obtain an IP address automatically <input type="button" value="Enable"/> ▾</p> <p>IP address <input type="text"/></p> <p>Subnet mask <input type="text"/></p> <p>Gateway address <input type="text"/></p> <p>DNS server address <input type="text"/></p> <p style="text-align: right;"><input type="button" value="Back"/> <input type="button" value="Next"/></p> <p style="text-align: center;">1 2 3 4</p>	<p style="text-align: center;">Help</p> <p>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.</p>
Wizard		
Quick Set		
Advanced		
Upgrade		
Restart		
Reset		

Web Ver: 1.0.20

Notice: Router password cannot be recognized if it contains any character such as '&', '#', '%', and blank space.

The password is being verified, please wait for a while. If you have entered an invalid password or encryption method, an error notice will pop up.

(c) Enhance security settings of the WiFi logger by selecting any options as listed, then click Next

Status	Enhance Security	Help
Wizard	<p>You can enhance your system security by choosing the following methods</p> <p>Change the encryption mode for AP <input checked="" type="checkbox"/></p> <p>Encryption mode <input type="text" value="WPA2-PSK"/></p> <p>WPA encryption</p> <p>Encryption algorithm <input type="radio"/> TKIP <input checked="" type="radio"/> AES <input type="radio"/> TKIPAES</p> <p>Password (8 to 63 characters) <input type="text" value="12345678"/></p> <p>Change the user name and password for Web server <input checked="" type="checkbox"/></p> <p>Web server</p> <p>Current user name <input type="text" value="admin"/></p> <p>New user name (Max.15 characters) <input type="text"/></p> <p>Re-enter user name <input type="text"/></p> <p>New password (Max.15 characters) <input type="text"/></p> <p>Re-enter password <input type="text"/></p> <p><input type="button" value="Back"/> <input type="button" value="Next"/></p> <p>1 2 3 4</p>	<p>Change the encryption mode for AP</p> <p>If you set password for the AP network, you will need to enter the password to connect to AP.</p> <p>Change the user name and password for Web server</p> <p>If you change the username and password for the web server, you will need to enter the new username and password to get access to the setting page.</p>
Quick Set		
Advanced		
Upgrade		
Restart		
Reset		

(d) If setting is successful, the following page will display. Click OK to restart.

Status	Setting complete!	Help
Wizard	<p>Click OK, the settings will take effect and the system will restart immediately.</p> <p>If you leave this interface without clicking OK, the settings will be ineffective.</p> <p><input type="button" value="Back"/> <input type="button" value="OK"/></p> <p>1 2 3 4</p>	<p>After clicking OK, the system will restart immediately.</p>
Quick Set		
Advanced		
Upgrade		
Restart		
Reset		

(e) If restart is successful, the following page will display. If this page does not display automatically, please refresh your browser.

<ul style="list-style-type: none"> Status <li style="background-color: #0070C0; color: white;">Wizard Quick Set Advanced Upgrade Restart Reset 	<p>Setting complete! Please close this page manually!</p> <p>Please login our management portal to monitor and manage your PV system. (Please register an account if you do not have one.)</p> <p>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.</p>	<p style="text-align: center;">Help</p> <p>*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.</p>
---	--	---

(f) Re- log in this setting page to Status page after the Web server restart, and check the network connection status of the logger.

<ul style="list-style-type: none"> <li style="background-color: #0070C0; color: white;">Status Wizard Wireless Cable Advanced Upgrade Restart Reset 	<p>Device information</p> <table border="1"> <tr><td>Device serial number</td><td>603040574</td></tr> <tr><td>Firmware version</td><td>H4.01.40Y2.0.02W1.0.03</td></tr> <tr><td>Wireless AP mode</td><td>Enable</td></tr> <tr><td>SSID</td><td>AP_603040574</td></tr> <tr><td>IP address</td><td>10.10.100.254</td></tr> <tr><td>MAC address</td><td>AC:CF:23:10:F3:48</td></tr> <tr><td>Wireless STA mode</td><td>Enable</td></tr> <tr><td>Router SSID</td><td>yingzhendlink</td></tr> <tr><td>Signal Quality</td><td>76%</td></tr> <tr><td>IP address</td><td>192.168.1.130</td></tr> <tr><td>MAC address</td><td>AC:CF:23:10:F3:49</td></tr> <tr><td>Cable mode</td><td>Disable</td></tr> <tr><td>IP address</td><td></td></tr> <tr><td>MAC address</td><td></td></tr> </table> <p>Connected Inverter</p> <p>Remote server information</p>	Device serial number	603040574	Firmware version	H4.01.40Y2.0.02W1.0.03	Wireless AP mode	Enable	SSID	AP_603040574	IP address	10.10.100.254	MAC address	AC:CF:23:10:F3:48	Wireless STA mode	Enable	Router SSID	yingzhendlink	Signal Quality	76%	IP address	192.168.1.130	MAC address	AC:CF:23:10:F3:49	Cable mode	Disable	IP address		MAC address		<p style="text-align: center;">Help</p> <p>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.</p>
Device serial number	603040574																													
Firmware version	H4.01.40Y2.0.02W1.0.03																													
Wireless AP mode	Enable																													
SSID	AP_603040574																													
IP address	10.10.100.254																													
MAC address	AC:CF:23:10:F3:48																													
Wireless STA mode	Enable																													
Router SSID	yingzhendlink																													
Signal Quality	76%																													
IP address	192.168.1.130																													
MAC address	AC:CF:23:10:F3:49																													
Cable mode	Disable																													
IP address																														
MAC address																														

Notice: After network setting is complete, the Wireless AP mode should be enabled and relative information of your router will display on the interface automatically. Besides the Remote server A should be connected.

If you meet any problems and need support, please provide the screenshot of the status page as shown below.

Status	- Inverter information		
Wizard	Inverter serial number		---
Quick Set	Firmware version (main)		---
Advanced	Firmware version (slave)		---
Upgrade	Inverter model		---
Restart	Rated power		--- W
Reset	Current power		--- W
	Yield today		--- kWh
	Total yield		--- kWh
	Alerts		---
	Last updated		---
	- Device information		
	Device serial number	515290981	
	Firmware version	LSW3_10_5406_1.16_MW3	
	Wireless AP mode	Enable	
	SSID	AP_515290981	
	IP address	10.10.100.254	
	MAC address	f0.fe.6b:fa:6d:df	
	Wireless STA mode	Disable	
	Router SSID		
	Signal Quality		
	IP address		
	MAC address		
	- Remote server information		
	Remote server A	Not connected	
	Remote server B	Not connected	




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.

Status of remote server

- Not connected: Connection to server failed last time. If under such status, please check the issues as follows: (1) check the device information to see whether IP address is obtained or not; (2) check if the router is connected to internet or not; (3) check if a firewall is set on the router or not;
- Connected: Connection to server successful last time;
- Unknown: No connection to server. Please check again in 5 minutes.

5. Logger Status

5.1 Check Indicator light

Lights	Implication	Status Description(All lights are single green lights.)
	Communication with router	1.Light off: Connection to router failed. 2.On 1s/Off 1s(Slow flash): Connection to router is successful. 3.Light keeps on: Connection to server is successful. 4.On 100ms/Off 100ms(Fast flash): Fast setting network.
	Communication with inverter	1.Light keeps on: Logger connected to inverter. 2.Light off: Connection to inverter failed. 3.On 1s/Off 1s(Slow flash): Communicating with inverter
	Logger running status	1.Light off: Running abnormally. 2.On 1s/Off 1s (Slow flash): Running normally. 3.On 100ms/Off 100ms(Fast flash): Restore factory settings.

Normal operation status of the stick logger is as follows, when router connected to the network normally:

- 1.Connection to server is successful: NET light keeps on after the logger powered on.
- 2.Logger is running normally: READY light flashes.
- 3.Connection to inverter is successful: COM light keeps on.

6. Troubleshooting

If the data on platform is abnormal when the stick logger is running, please check the status of indicator lights according to the table below for simple troubleshooting. If problems still cannot be solved or indicator lights status is different from the table below, please contact Customer Support.

(Note: Please wait for at least 2 minutes after logger is powered on)

NET ● NET	COM ● COM	READY ● READY	Fault Description	Fault Cause	Solution
Any state	OFF	Slow flash	Communication with inverter abnormal	<ol style="list-style-type: none"> 1.Connection between stick logger and inverter is loose. 2.Inverter does not match with stick logger's communication rate. 	<ol style="list-style-type: none"> 1.Check the connection between stick logger and inverter. Remove the stick logger and install again. 2.Check inverter's communication rate to see if it matches with stick logger's. 3.Long press Reset button for 5s, reboot stick logger.
OFF	ON	Slow flash	Connection between logger and router abnormal	<ol style="list-style-type: none"> 1.Stick logger does not connect to network. 2.Antenna abnormal 3.Router's WiFi signal strength is weak. 	<ol style="list-style-type: none"> 1.Check if the wireless network is configured. 2.Check if the antenna is damage or loose. 3.Enhance router's WiFi signal strength. 4.Long press Reset button for 10s, reboot stick logger and networking again.
Slow flash	ON	Slow flash	Connection between logger and router normal, connection between logger and remote server abnormal.	<ol style="list-style-type: none"> 1.Router's networking abnormal. 2.The server point of logger is modified. 3.Network is limited, server cannot be connected. 	<ol style="list-style-type: none"> 1.Check if the router has access to the network. 2.Check the router's setting to see if the connection is limited. 3.Contact our customer service.

NET ● NET	COM ● COM	READY ● READY	Fault Description	Fault Cause	Solution
OFF	OFF	OFF	Power supply abnormal	1.Connection between stick logger and inverter is loose or abnormal. 2.Power supply from inverter is in-sufficient. 3.Stick Logger abnormal.	1.Check the connection, remove the stick logger and install again. 2.Check inverter output power. 3.Contact our customer service.
Any state	Any state	Fast flash	Restore factory settings	Normal	1.Exit automatically after 1mins. 2.Long press Reset button for 5s, reboot stick logger. 3.Long press Reset button for 10s, restore factory settings.



Warning: Please make sure the stick logger is working properly before you leave the site. If there is anything abnormal, please do not leave the site and contact customer service at the first time.

If you have any technical queries about our products, please contact us and provide the following information:

1. Product model and serial number of stick logger.
2. Product model and serial number of connected inverter.