

Quick Guide for DIN-Rail Logger (WiFi)

Product Model: LDW-1

I Instruction

By collecting the data from inverter, meter and other devices, DIN-Rail logger (WiFi) can run a long-term and efficient monitoring of PV system.

Logger sends the data to the monitoring platform via WiFi. The real-time status and historical data can be displayed with graphs, enabling intuitive and clear understanding of PV system.

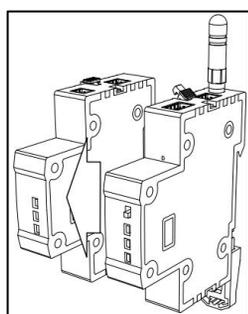
II Installation

2.1 Step 1: Plug the power module into the logger.

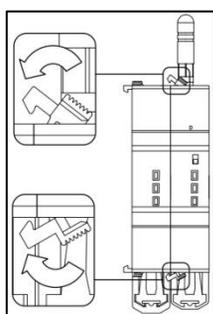
Step 2: Lock the yellow snap-fit

Step 3: Mount the device on the rail

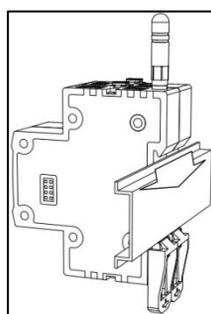
Step 4: Push the black snap-fit



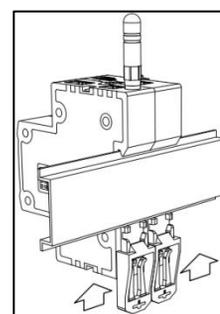
Step 1



Step 2



Step 3



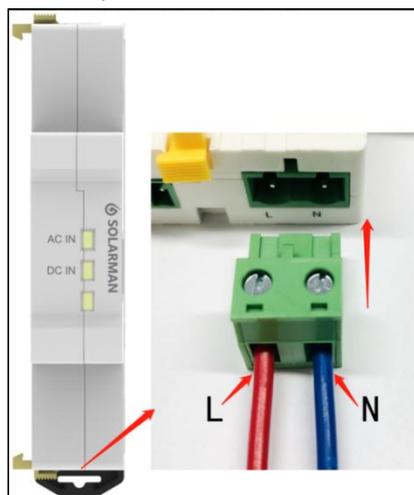
Step 4

2.2 a. Plug L-line/N-line into the terminal(220V) and insert into the power module.

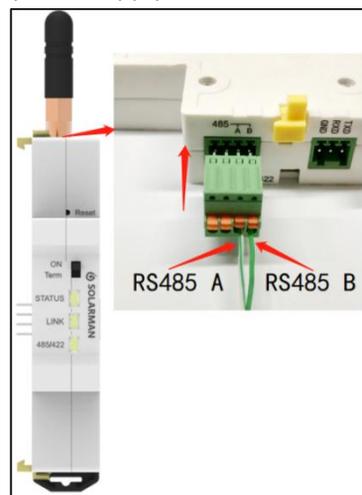
b. Connect the COM line to RS485 terminal and insert into the logger.

c. Connect the COM line to inverter RS485 port. (Please refer to inverter instructions.)

Notice: All installation steps must be carried out under no power supply.



2.2.a



2.2.b

2.3 Please check the installation again and power on the device. After power-on for 1 min, users can check the logger running status and the data on SOLARMAN platform.

III LED Indicator Lights Instructions

Lights	Status	Instruction
Status	Flash	Module normal
	ON/OFF	Module abnormal
Link	Flash	Connecting to server
	ON	Normal connection to server
	OFF	Fail to connect to server
485/422	Flash	Communicating with inverter
	ON	Normal communication with inverter
	OFF	Fail to communicate with inverter

IV Abnormal Status Processing

Lights	Status	Fault Description	Fault Cause	Solution
Link	OFF	Fail to connect to server	Router has no network/Router has no DHCP function or DHCP function is off	Check router status
			Logger network not configured	Configure the network again
			WiFi signal strength weak	Improve the network environment
			Server abnormal/Server direction abnormal	Contact the customer service
485/422	OFF	Fail to communicate with inverter	Firmware protocol incorrect	Contact the customer service
			Wiring error	Check the wiring again
			Inverter com settings error	Check the com address and protocol type
Status	OFF	Logger abnormal	Module abnormal	Contact the customer service

Notice: If it still can't be resolved or indicator lights status do not show in the table below, please contact our customer service.

Information need to be provided:

a: Product Model

b: Logger SN

c: Inverter brand, type, number

V Networking Setup

5.1 DIN-Rail Logger Configuration Page

5.1.1 Prepare a computer/smart phone that can connect to wireless network.

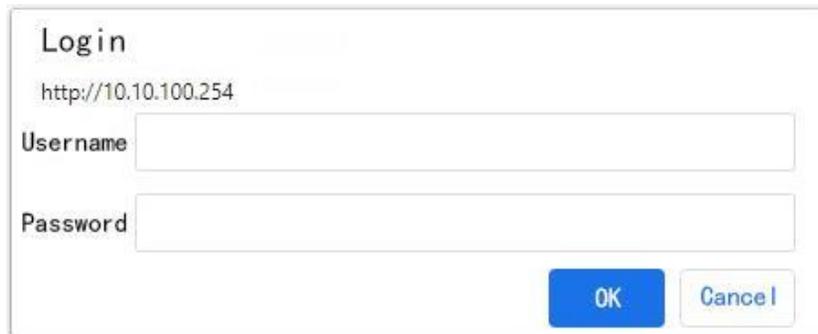
5.1.2 Connect to logger AP (Please do Not connect the cable when configuring the logger.)

Select and connect AP XXXXXXXXX in the network list (XXXXXXXXX means logger SN) .

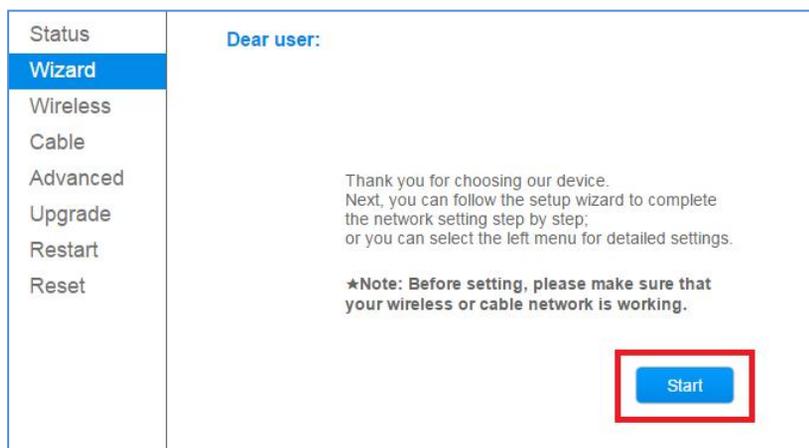


5.1.3 Log in to logger WEB page

Open a browser and enter 10.10.100.254. Username: admin Password: admin



5.1.4 Go to “Setup Guide” and click “Start” .



5.2 WiFi Configuration (If Ethernet is selected, please skip this step.)

Notice: 1.Router name and password cannot have special characters, e.g. \ ; , = ' " .

2.5G WiFi is not supported.

5.2.1 Select “Wireless connection” .

Status
Wizard
Wireless
Cable
Advanced
Upgrade
Restart
Reset

Connection Settings:

Wireless connection
 Cable connection

Wireless: Enabled

Back Next

1 2 3 4 5 6 7

5.2.2 Select WiFi router name.

Status
Wizard
Wireless
Cable
Advanced
Upgrade
Restart
Reset

Please select your current wireless network:

NETGEAR47 2c:30:33:d6:3f:fc 100% 10

*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) NETGEAR47
Encryption method WPA2PSK
Encryption algorithm AES

Back Next

5.2.3 Enter router password.

Status
Wizard
Wireless
Cable
Advanced
Upgrade
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 7

5.2.4 Modify AP password to enhance safety.

Status	<h3>Enhance Security</h3> <p>You can enhance your system security by choosing the following methods</p> <p>Hide AP <input type="checkbox"/></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 checked="" type="radio"/> TKIP <input 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 type="checkbox"/></p> <p><input type="button" value="Back"/> <input type="button" value="Next"/></p> <p>1 2 3 4 5 6 7</p>
Wizard	
Wireless	
Cable	
Advanced	
Upgrade	
Restart	
Reset	

5.2.5 WiFi configuration is done.

Status	<h3>Configuration completed!</h3> <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>
Wizard	
Wireless	
Cable	
Advanced	
Upgrade	
Restart	
Reset	

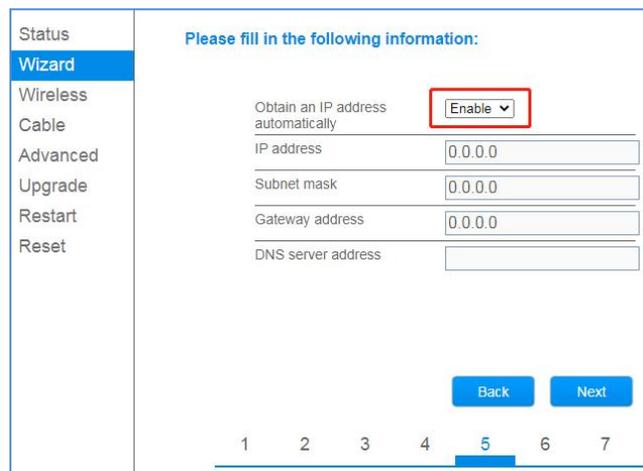
Notice: Click “Done” to reboot system, which might take 1 minute.

5.3 Ethernet Configuration (If WiFi is selected, please skip this step.)

5.3.1 Select “Cable connection”, and set Wireless: Disable.

Status	<h3>Connection Settings:</h3> <p><input type="radio"/> Wireless connection</p> <p><input checked="" type="radio"/> Cable connection <input type="text" value="Wireless Disabled"/></p> <p><input type="button" value="Back"/> <input type="button" value="Next"/></p> <p>1 2 3 4 5 6 7</p>
Wizard	
Wireless	
Cable	
Advanced	
Upgrade	
Restart	
Reset	

5.3.2 Network Setup (Obtain an IP address automatically: Enable)

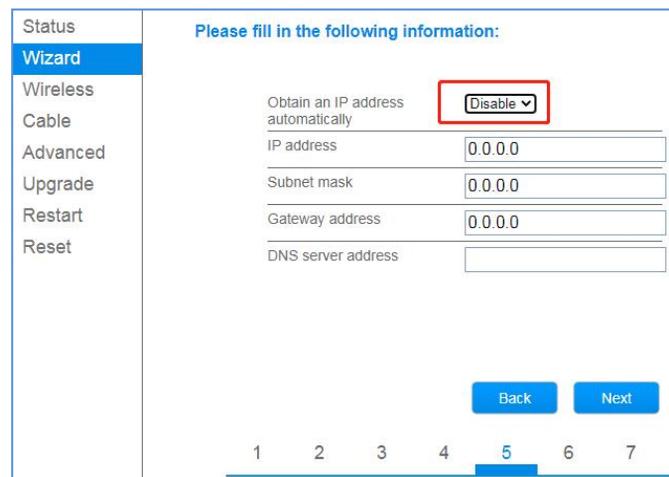


The screenshot shows a configuration wizard with a sidebar on the left containing 'Status', 'Wizard', 'Wireless', 'Cable', 'Advanced', 'Upgrade', 'Restart', and 'Reset'. The main area is titled 'Please fill in the following information:' and contains a dropdown menu for 'Obtain an IP address automatically' set to 'Enable', and input fields for 'IP address', 'Subnet mask', 'Gateway address', and 'DNS server address', all with '0.0.0.0' as the default value. 'Back' and 'Next' buttons are at the bottom right, and a progress bar at the bottom shows step 5 of 7.

Notice:

Most routers support DHCP function to obtain IP address automatically. (Set DHCP function: ON)

If the router restricts IP connection, please select “Disable” and modify the parameter according to router.



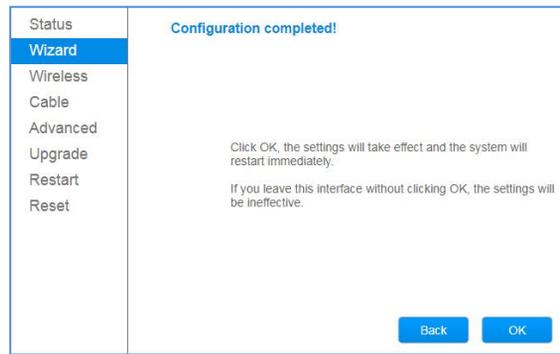
This screenshot is identical to the one above, but the 'Obtain an IP address automatically' dropdown menu is set to 'Disable'.

5.3.3 Modify AP password to enhance safety.



The screenshot shows the 'Enhance Security' configuration page. It includes a sidebar with 'Status', 'Wizard', 'Wireless', 'Cable', 'Advanced', 'Upgrade', 'Restart', and 'Reset'. The main area contains several options: 'Hide AP' (checkbox), 'Change the encryption mode for AP' (checkbox checked), 'Encryption mode' (dropdown set to 'WPA2-PSK'), 'WPA encryption' section with 'Encryption algorithm' (radio buttons for TKIP, AES, TKIP/AES), and 'Password (8 to 63 characters)' (input field with '12345678'). There is also an unchecked option for 'Change the user name and password for Web server'. 'Back' and 'Next' buttons are at the bottom right, and a progress bar at the bottom shows step 6 of 7.

5.3.4 Ethernet configuration is done.



5.3.5 Connect logger and router via cable.

Notice:



1. If the signal strength is <15, it means Unstable. Please adjust router location.
2. SSID of router network can not exceed 30 characters. "Space" is excluded.
3. When WiFi logger is at STA mode, supported router channel range: 1-11.
4. WiFi router name and password does not support special characters, e.g. \ ; , = ' ". It is recommended to choose a-z, A-Z, 0-9 as router SSID and password.
5. Some router might restrict WiFi connection. It is recommended to turn off Qos function.
6. WiFi supports standard encryption method (WEP/WPA2PSK/WPA2PSK), mixed encryption method is not supported.
7. Turn on router DHCP function, or WiFi cannot connect to router.
8. If you have problem during signal searching or router connection, you can reboot the router or restore factory settings. If the problem still exists, you can contact customer service for help.

VI SOLARMAN Monitoring

6.1 SOLARMAN Smart

6.1.1) If you are an household user, please scan QR code below to download SOLARMAN Smart APP.

6.1.2) Or you can log in to <https://home.solarmanpv.com>



SOLARMAN Smart

6.2 SOLARMAN Business

6.2.1) If you are an installer/service provider/manufacturer, please scan QR code below to download SOLARMAN Business APP.

6.2.2) Or you can log in to <https://pro.solarmanpv.com>



SOLARMAN Business

VII Contact

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