

SUN-MI-RELAY-01

Ningbo Deye Inverter Technology Co., Ltd



**Network and System
Protection Device**
For SUN(600-1000)G3-EU-230



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SAFETY

IMPORTANT SAFETY INSTRUCTIONS. SAVE THIS INFORMATION.

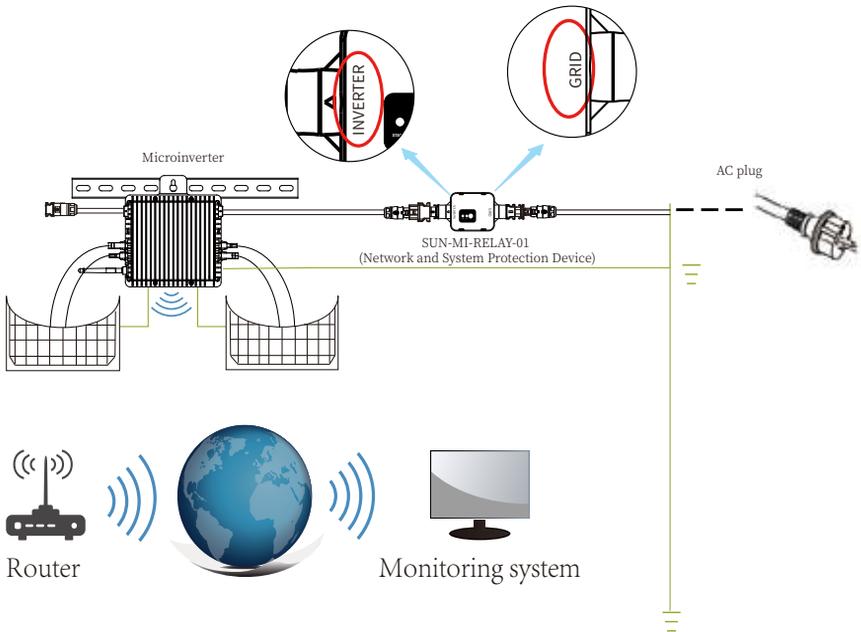
Follow all safety and assembly instructions when installing the SUN-MI-RELAY-01 (Network and System Protection Device).

Safety Instructions

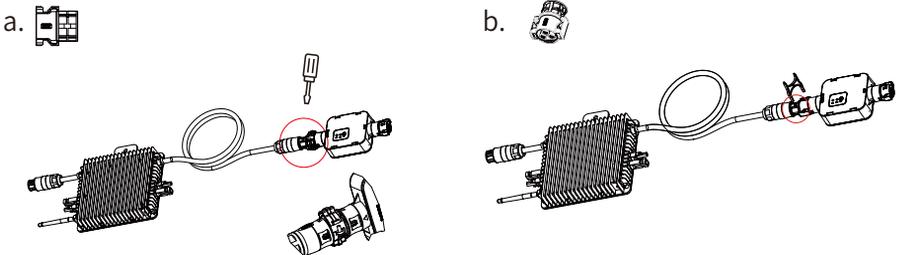
Can be OEM	Trademark.
	Caution, risk of electric shock.
	Caution, risk of burn - Do not touch.
	Caution, hot surface.
	Symbol for the marking of electrical and electronics devices according to Directive 2002/96/EC. Indicates that the device, accessories and the packaging must not be disposed as unsorted municipal waste and must be collected separately at the end of the usage. Please follow Local Ordinances or Regulations for disposal or contact an authorized representative of the manufacturer for information concerning the decommissioning of equipment.
	CE mark is attached to the solar inverter to verify that the unit follows the provisions of the European Low Voltage and EMC Directives.
	Refer to the operating instructions.
<p>Qualified personnel</p>	<p>Person adequately advised or supervised by an electrically skilled person to enable him or her to perceive risks and to avoid hazards which electricity can create. For the purpose of the safety information of this manual, a "qualified person" is someone who is familiar with requirements for safety, refrigeration system and EMC and is authorized to energize, ground, and tag equipment, systems, and circuits in accordance with established safety procedures. The inverter and endues system may only be commissioned and operated by qualified personnel.</p>

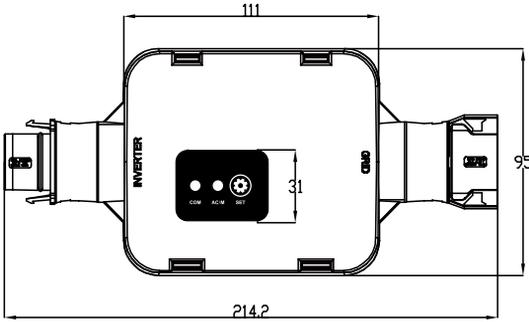
INTRODUCTION

SUN-MI-RELAY-01 (Network and System Protection Device) : it is used to monitoring and disconnect the grid when sensing the grid voltage/frequency is out of the allowed range. The relay kit also is able to reconnect grid when the grid conditions resume. It must communicate with the built-in wifi module of the microinverter, the microinverter can work normally, otherwise the microinverter can not work. The localhost of this relay kit is 10.10.101.254.



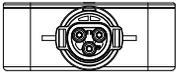
This device package contains two types of Female connectors and one type of Male connector. Please choose the appropriate connector for connection according to the actual situation.





Name	Functions
● COM	Show the wireless connection Status
● AC/M	Show the Grid Statue.
⚙️ SET	All you set parameters and test the device

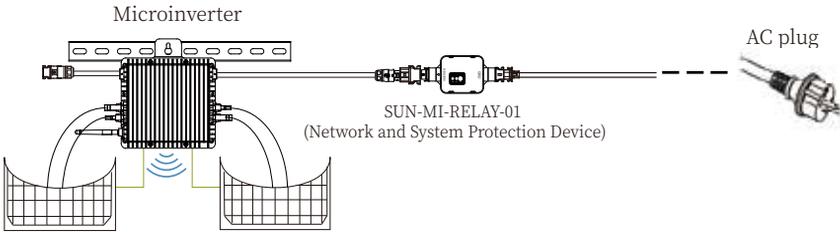
Male connector



Female connector



INSTALLATION



WIRING DIAGRAM

Before the installation, please turn off the the DC and AC of the microinverter and wait for 5mins then start to operate.

The SUN-MI-Relay-01 (Network and System Protection Device) supports fast plug connection. It is equipped with quick plug terminals which is compatible with all Deye microinverters(for the G3 series, it needs install another adapter). Firstly, Plug the male connector of SUN-MI-RELAY-01 to the female connector of Microinverter. then plug the female connector of SUN-MI-RELAY-01 to the male connector of AC plug. At last, connect the AC plug go the plug board of household.

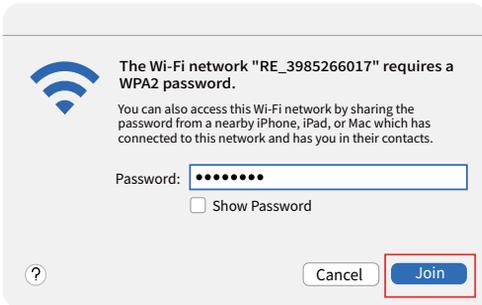
Note: For the connection between SUN-MI-Relay-01(Network and System Protection Device) and microinverter, the tool is needed.

Technical Data

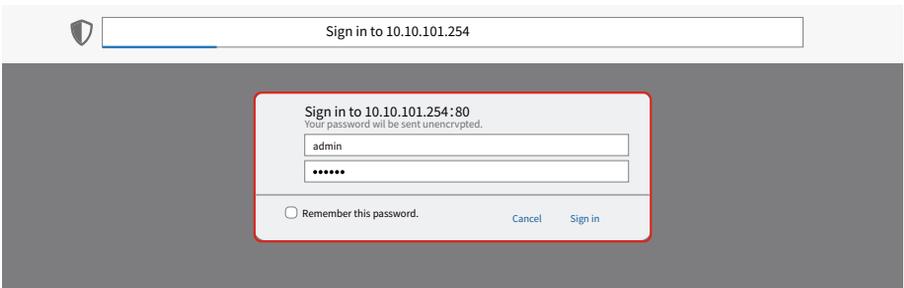
Model	Network and System Protection Device
AC Input Data(Inverter)	
Nominal Voltage	220V/230V
Nominal Frequency	50/60Hz
Max AC Current	12A
Nominal AC Current	12A
Matching Inverter	MicroInverter
AC Output Data(Grid)	
Nominal Voltage	220V/230V
Nominal Frequency	50/60Hz
Max AC Current	12A
Nominal AC Current	12A
General Data	
Ambient Temperature Range	-40-65°C, >45°C derating
Humidity	0%-100% RH
Cabinet Size (WxHxD)	111mm*95mm*37.7mm (Excluding Connectors and Brackets)
Weight	340g
Enclosure Environmental Rating	IP67
Communication	Wireless/Wifi
Safety EMC / Standard	IEC/EN 6100-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2,VDE-AR-N 4105
WiFi information:	
Frequency range	2.412~2.472GHz
WiFi maximum transmitting power	17dBm ± 1.5dBm
Antenna	External Antenna
Antenna Gain	3dBi

How to connect the SUN-MI-RELAY-01 to the microinverter via web

1. Turn on the wireless network of your PC or smartphone.
2. Select network of SUN-MI-RELAY-01 (network name: RE_3985266017) and the default password of the network is listed on the nameplate of PWD:“5c4db8d6”.



3. Open a browser and enter 10.10.101.254. Both username and password are "admin". (Recommended browser: IE 8+, Chrome 15+, Firefox 10 +).



4. Browser jumps to “ Status ” page, the basic information is listed there.

- Status
- Wizard
- Quick Set
- Advanced
- Upgrade
- Restart
- Reset

- Inverter information

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

• Device information

• Remote server information

中文 | English

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.

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;

Web Ver:1.0.24

5. Click to enter the "Quick Set" page and click the "Search" button to start searching for network hotspots near the NS protection device.

- Status
- Wizard
- Quick Set
- Advanced
- Upgrade
- Restart
- Reset

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

Encryption method WPA2PSK

Encryption algorithm AES

Password (8-64 bytes)
(Note: case sensitive)

Obtain an IP address automatically Enable

IP address 10.10.100.150

Subnet mask 255.255.255.0

Gateway address 10.10.100.254

DNS server address

* Note: After clicking Save, the system will restart immediately.

Save

Help

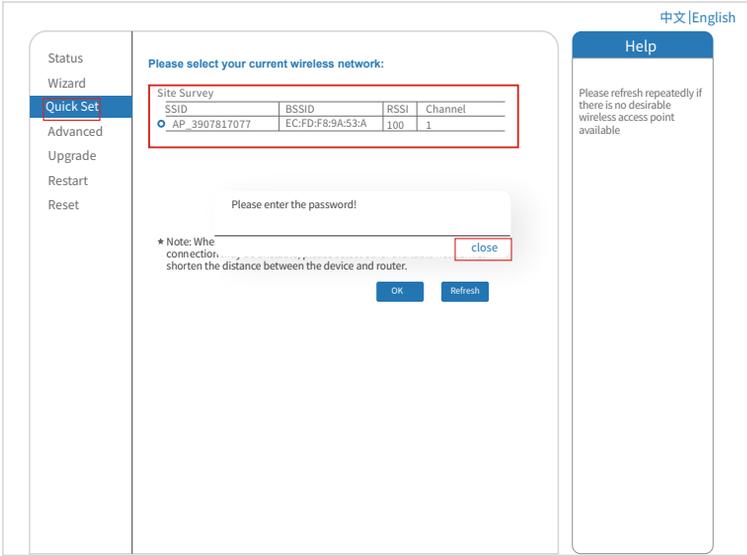
In this page, you can click the "Search" button to automatically search for nearby wireless access point, and connect your device to it by setting the network parameters.

*Note: If you haven't set this kind of device before, please follow the setup wizard.

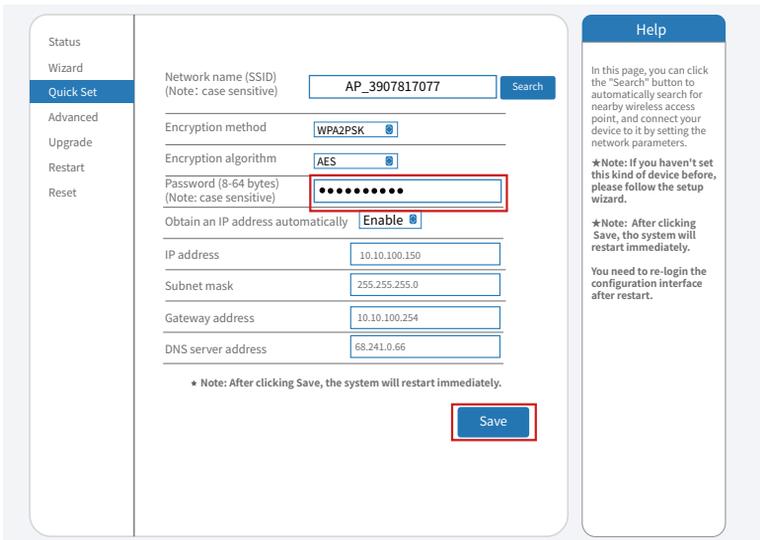
*Note: After clicking Save, the system will restart immediately.

You need to re-login the configuration interface after restart.

6. Click to select your micro-inverter's WLAN hotspot and enter the inverter hotspot password.



7. The initial WLAN network name and password of the inverter are both affixed to the inverter nameplate. Click SAVE the communication connection will be completed.



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<ul style="list-style-type: none"> Status Wizard <li style="background-color: #0070C0; color: white;">Quick Set Advanced Upgrade Restart Reset 	<p style="text-align: center;">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> <ul style="list-style-type: none"> ★ 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.
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Web Ver:1.0.24

8. Click to enter the Status page, You can view the current connection information on the Device information page. If you need help, please contact Deye's official after-sales service or authorized service provider.

中文 | English

<ul style="list-style-type: none"> <li style="background-color: #0070C0; color: white;">Status Wizard Quick Set Advanced Upgrade Restart Reset 	<p>- Inverter information</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Inverter serial number</td><td style="text-align: right;">---</td></tr> <tr><td>Firmware version(main)</td><td style="text-align: right;">---</td></tr> <tr><td>Firmware version(slave)</td><td style="text-align: right;">---</td></tr> <tr><td>Inverter model</td><td style="text-align: right;">---</td></tr> <tr><td>Rated power</td><td style="text-align: right;">--- W</td></tr> <tr><td>Current power</td><td style="text-align: right;">--- W</td></tr> <tr><td>Yield today</td><td style="text-align: right;">--- kWh</td></tr> <tr><td>Current power</td><td style="text-align: right;">--- kWh</td></tr> <tr><td>Alerts</td><td style="text-align: right;">---</td></tr> <tr><td>Last updated</td><td style="text-align: right;">---</td></tr> </table> <p>- Device information</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Device serial number</td><td style="text-align: right;">3985266017</td></tr> <tr><td>Firmware version</td><td style="text-align: right;">LWS5BLE_MW17_5406_RELAY_2701.00-DD</td></tr> <tr><td>Wireless AP mode</td><td style="text-align: right;">Enable</td></tr> <tr><td>SSID</td><td style="text-align: right;">RE_3985266017</td></tr> <tr><td>IP address</td><td style="text-align: right;">10.10.101.254</td></tr> <tr><td>MAC address</td><td style="text-align: right;">40:2A:8F:B1:07:5F</td></tr> <tr><td>Wireless STA mode</td><td style="text-align: right;">Enable</td></tr> <tr><td>Router SSID</td><td style="text-align: right;">AP_3907817077</td></tr> <tr><td>Signal Quality</td><td style="text-align: right;">100%</td></tr> <tr><td>IP address</td><td style="text-align: right;">10.10.100.150</td></tr> <tr><td>MAC address</td><td style="text-align: right;">40:2A:8F:B1:07:5F</td></tr> </table> <p>Remote server information</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Remote server A</td><td style="text-align: right;">Not connected</td></tr> <tr><td>Remote server B</td><td style="text-align: right;">Not connected</td></tr> </table>	Inverter serial number	---	Firmware version(main)	---	Firmware version(slave)	---	Inverter model	---	Rated power	--- W	Current power	--- W	Yield today	--- kWh	Current power	--- kWh	Alerts	---	Last updated	---	Device serial number	3985266017	Firmware version	LWS5BLE_MW17_5406_RELAY_2701.00-DD	Wireless AP mode	Enable	SSID	RE_3985266017	IP address	10.10.101.254	MAC address	40:2A:8F:B1:07:5F	Wireless STA mode	Enable	Router SSID	AP_3907817077	Signal Quality	100%	IP address	10.10.100.150	MAC address	40:2A:8F:B1:07:5F	Remote server A	Not connected	Remote server B	Not connected	<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> <p>Status of remote server</p> <ul style="list-style-type: none"> ★ Not connected: Connection to server failed last time. <p>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;</p> <ul style="list-style-type: none"> ★ Connected: connection to server successful last time; ★ Unknown: No connection to server. Please check again in 5 minutes.
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