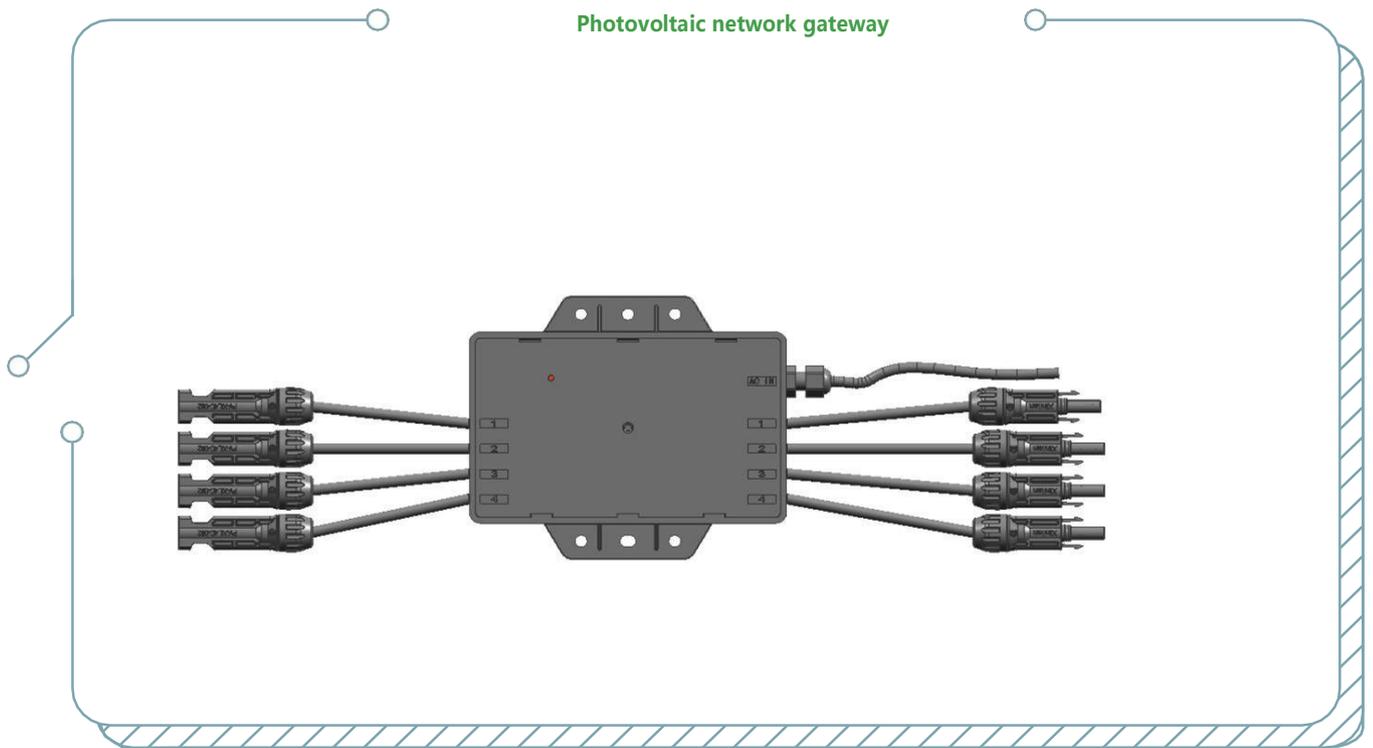


Foshan Sunpv Technology Co., LTD

Photovoltaic Gateway Installation Manual



Installation must read



This installation manual is instructions for the installation and use of component-level shutdown system Transmitter;



It is strictly prohibited to open the shell, remove, and repair the products to ensure personnel safety. For service, please find a trained or qualified professional;



Before installing and using the off system, please understand all the tips and warnings on the product, as well as the safety tips in the inverter instructions and photovoltaic module installation instructions and other applicable safety guidelines;



To reduce the risk of fire and electric shock, install this device to strictly comply with the local electrical standards and specifications;



Installation must be performed by a trained professional. The company shall not be liable for any loss or injury caused by improper operation, improper installation or misuse of the product;



Before installing the communication link switch-off system products, please take off the portable metal accessories to reduce the risk of contact with the live circuit. It is strictly prohibited to install and debug in bad weather;



Before service, check that the cable is correct and reliable;



Do not connect or break the system under load. If you need to connect or break the switch system, please stop the inverter or disconnect the load first;

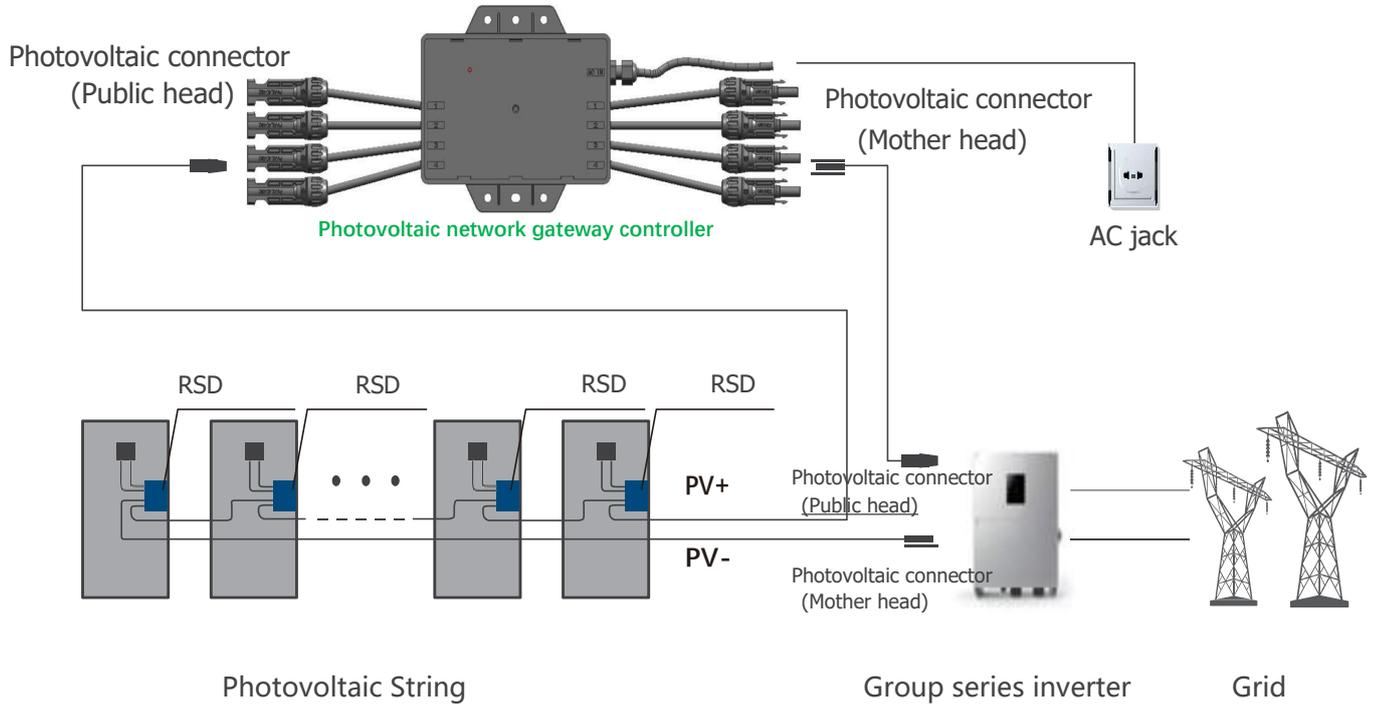


If the shut-off system products have been actually damaged, do not operate;



If you need other help, you can call the company for consultation.

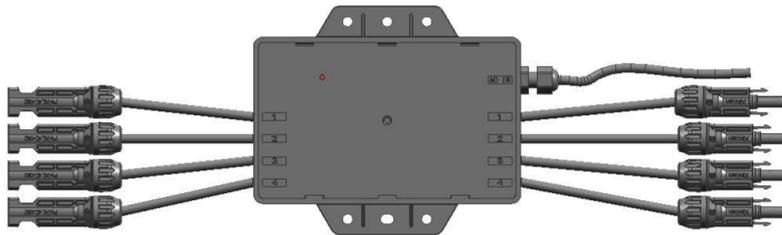
1.system architecture



- The component level off, meet NEC2020 690.12 standard and SunSpec standard (optional);
- Easy for installation and operation.

2.product presentation

2.1 Pv gateway controller



- Can realize the component-level cut-off and meet the NEC2020 690.12 standard;
- Meet the SunSpec criteria (optional);
- Easy for installation and operation;
- Up to 4 strings of photovoltaic modules can be controlled simultaneously.

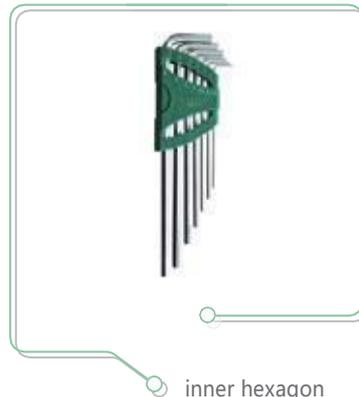
3. Installation instructions

3.1 Prepare tools

The following tools are required for installation, inspection and replacement:



Phillips screwdriver
(Phillips type-M4)



inner hexagon



multimet



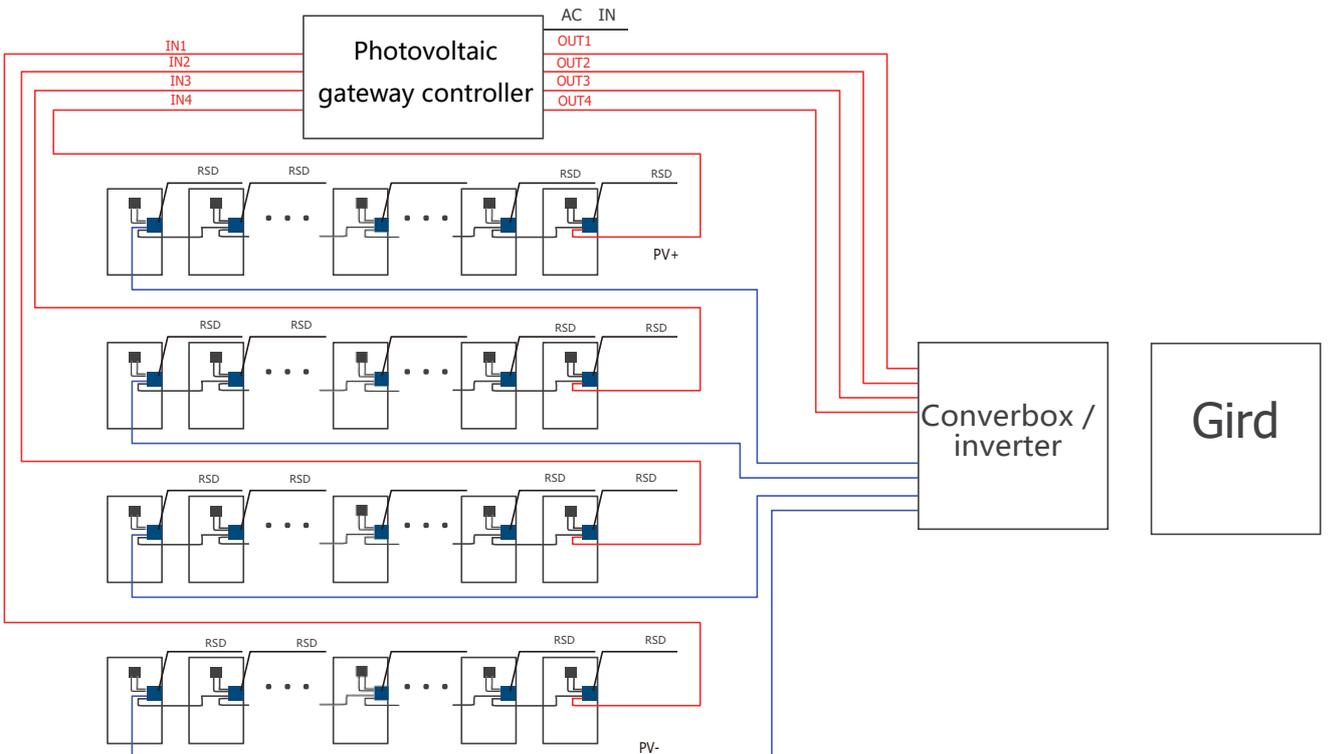
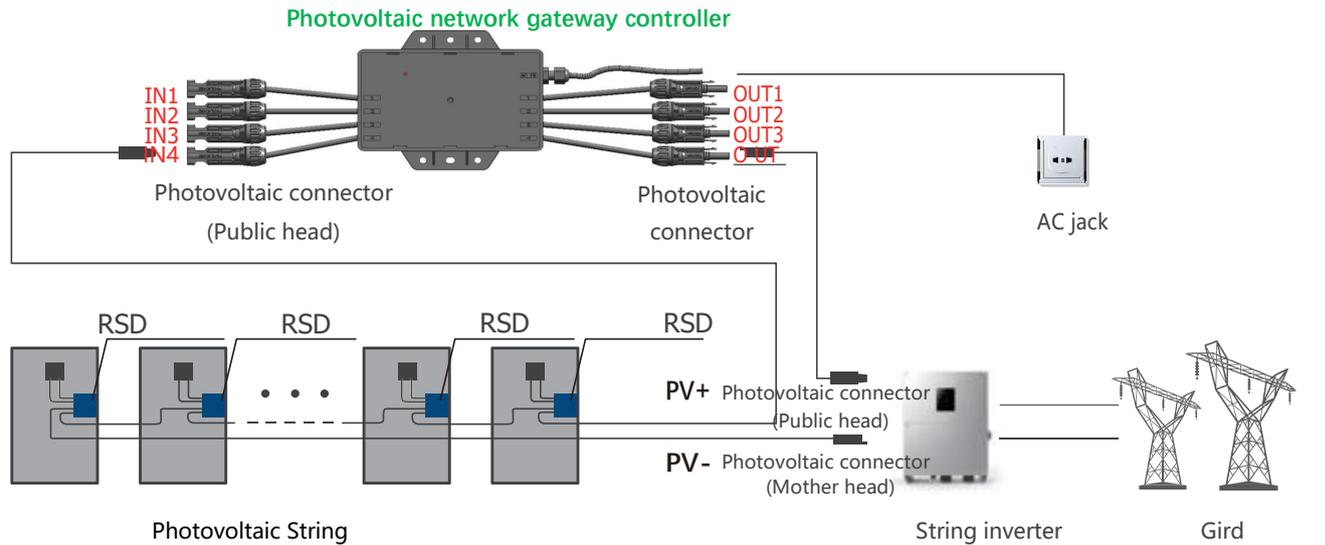
Clip flow

3.2 Installation steps

Step 1. Installation, photovoltaic gateway controller

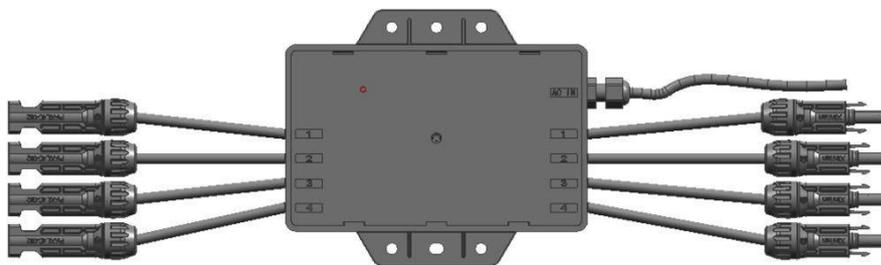
- Open holes in the wall or board to install expansion screws;
- Attach the controller, and tighten the screws.

Step 2. Controller wiring



- The input connector of the controller (IN 1, IN 2, IN 3 and IN 4) are connected with the components and the breaker in series to form the positive electrode connector of the string;
- The output connector of the controller (OUT 1, OUT 2, OUT 3, OUT 4) replaces the positive electrode connector of the original group string, connects the rear inverter or junction box, etc.;
- The negative terminals of the components and the controller are connected to the rear inverter or the junction box, etc. The "A C IN" of the controller passes through the AC extension line and merges into the grid-connected end of the inverter (single-phase access);
- The relevant extension line shall be made on site according to the actual installation distance, and the required connector shall be in the accessory package attached to the controller.

3.3 Operation instructions



Pilot lamp	State	Explain
Power indicator Power	Often bright	Indicates that the component is turned on and is in a high-voltage state
	Often destroyed	Indicates that the component is off and in a low voltage state

Initial status

The photovoltaic gateway controller is initially in the off state. After the system installation and connection, it needs to be opened manually.

Opening steps

- The initial state is off, the controller Power indicator often out;
- The controller is connected to the AC power supply, the Power indicator light is often on, and the components enter the open state;
- In the state of emergency, the AC power supply of the switch controller is broken. At this time, the Power indicator light is often off, and the component is in the off state for 15s.

The way to shut down

- Disconnect the AC power supply, the Power indicator will often out, and the component enters the off state within 15s.

4. Product specification

Photovoltaic gateway controller		
Enter the output parameter		unit
AC input voltage	85~264	Vac
Maximum system voltage	DC 1500	Vac
Maximum current per channel	20	A
Symbol standard		
Electromagnetic Compatibility (EMS)	IEC61000-6-2 IEC61000-6-3 IEC61000-3-11 IEC61000-3-13 FCC Part15 ClassB	/
Safety regulations (Safety)	IEC-62109-1-2	/
RoHs	yes	/
Installation specifications		
Long * wide * high	109*146*35	(mm)
levels of protection	IP67	/
Scope of work temperature	- 20 ~ +65	°C
cooling-down method	natural cooling	/
Installation form	Hang the wall / hold	/