



GEP

5.0-11.4kW G3(US)

Single Phase

Quick Installation Guide

V1.3

Grid-Tied PV Inverter

www.gesolarinverter.com

General Disclaimer

- The information in this quick installation guide is subject to change due to product updates or other reasons. This guide cannot replace the product labels or the safety precautions in the user manual unless otherwise specified. All descriptions here are for guidance only.
- Before installations, read through the quick installation guide. For additional information, please see the user manual.
- All operations should be performed by trained and knowledgeable technicians who are familiar with local standards and safety regulations.
- Check the deliverables for correct model, complete contents, and intact appearance. Contact the manufacturer if any damage is found or any component is missing.
- Use insulating tools and wear personal protective equipment when operating the equipment to ensure personal safety. Wear anti-static gloves, clothes, and wrist strip when touching electronic components to protect the inverter from damage. The manufacturer shall not be liable for any damage caused by static electricity.
- Strictly follow the installation, operation, and configuration instructions in this guide and user manual. The manufacturer shall not be liable for equipment damage or personal injury if you do not follow the instructions. For more warranty details, please visit <https://www.gesolarinverter.com/warranty.html>.

Safety Disclaimer



Warning

DC Side:










1. Ensure the component frames and the bracket system are securely grounded.
2. Connect the DC cables using the delivered PV connectors. The manufacturer shall not be liable for equipment damage if other connectors are used.
3. Ensure the DC cables are connected tightly, securely, and correctly. Inappropriate wiring may cause poor contacts or high impedances, and damage the inverter.
4. Measure the DC cable using the multimeter to avoid reverse polarity connection. Also, the voltage should be under the max DC input voltage. The manufacturer shall not be liable for the damage caused by reverse connection and extremely high voltage.
5. The PV modules used with the inverter must have an IEC61730 class A rating.

AC Side:

1. The voltage and frequency at the connecting point should meet the on-grid requirements.
2. Additional protective devices like circuit breakers or fuses are recommended on the AC side. Specification of the protective device should be at least 1.25 times the rated AC output rated current.
3. Make sure that all the groundings are tightly connected. When there are multiple inverters, make sure that all the grounding points on the enclosures are equipotential bonding.
4. You are recommended to use copper cables as AC output cables. If you prefer aluminum cables, remember to use copper to aluminum adapter terminals.

Product:



















1. Do not apply mechanical load to the terminals, otherwise the terminals can be damaged.
2. All labels and warning marks should be visible after the installation. Do not scrawl, damage, or cover any label on the device.
3. Unauthorized dismantling or modification may damage the equipment, the damage is not covered under the warranty.
4. Install the inverter away from high magnetic field to avoid electromagnetic interference. If there is any radio or wireless communication equipment below 30MHz near the inverter, you have to:
 - Install the inverter at least 30m(98.43ft) far away from the wireless equipment.
 - Add a low pass EMI filter or a multi winding ferrite core to the DC input cable or AC output cable of the inverter.
5. Warning labels on the inverter are as follows.

	HIGH VOLTAGE HAZARD. Disconnect all incoming power and turn off the product before working on it.		Delayed discharge. Wait 5 minutes after power off until the components are completely discharged.
	Read through the guide before working on this device.		Potential risks exist. Wear proper PPE before any operations.
	High-temperature hazard. Do not touch the product under operation to avoid being burnt.		Grounding point. Indicates the position for connecting the PE cable.
	SGS marking for the United States of America and Canada.		Do not dispose of the inverter as household waste. Discard the product in compliance with local laws and regulations, or send it back to the manufacturer.
	Type 1 Arc-Fault Circuit interrupter in PV side.		

Check before Power-on

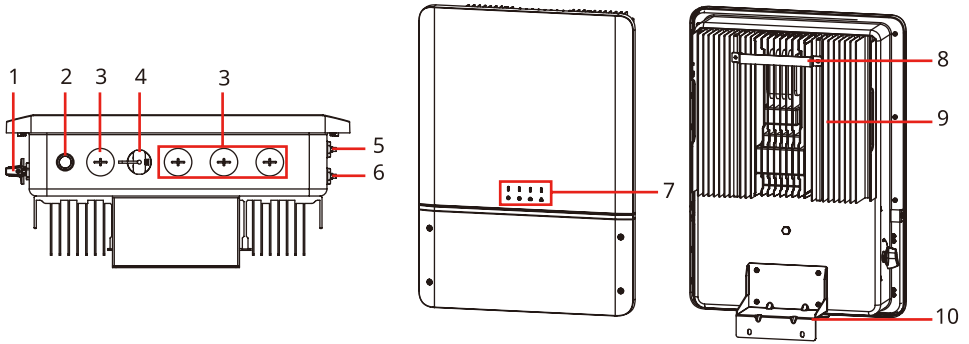
No.	Check Item
1	The product is firmly installed at a clean place that is well-ventilated and easy-to-operate.
2	The PE, DC input, AC output, and communication cables are connected correctly and securely.
3	Cable ties are intact, routed properly and evenly.
4	Unused ports and terminals are sealed.
5	The voltage and frequency at the connection point meet the inverter grid connection requirements.

LED Indicators

Indicator	Status	Description
		ON = Equipment power on
		OFF = Equipment power off
		ON = The inverter is feeding power
		OFF = The inverter is not feeding power
		Single slow flash = self check before connecting to the grid
		Single flash = connecting to the grid
		ON = Wireless is connected/active
		BLINK 1 = Wireless system is resetting
		BLINK 2 = Wireless router not connected
		BLINK 4 = Wireless server problem
		BLINK = RS485 is connected
		OFF = Wireless is not active
		ON = Fault occurred
		OFF = No fault

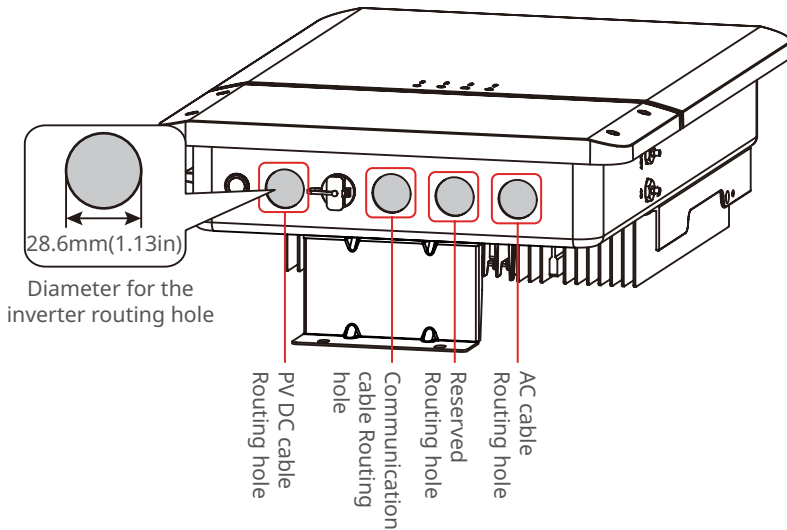
02 Product Introductions

Parts Introduction

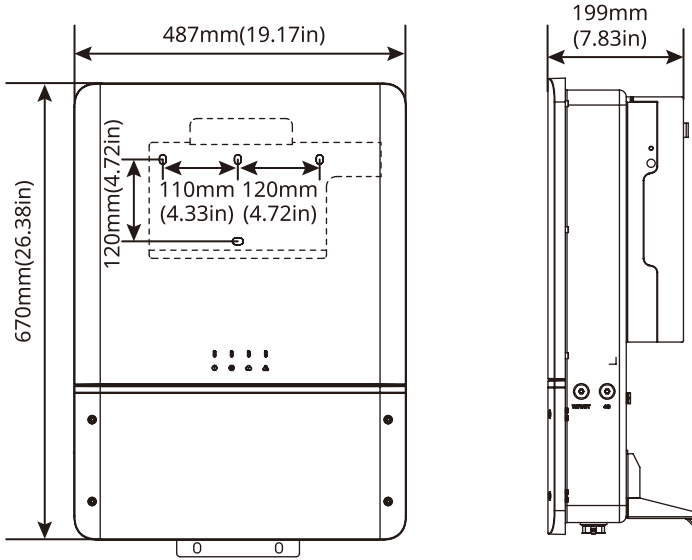


- | | | |
|------------------------------------|--|---------------------------------------|
| 1. DC Switch | 2. Button For Ezlink Reset ^[1] | 3. Wiring Conduit Hole |
| 4. WiFi Module Port ^[1] | 5. WiFi / BT Antenna Terminal ^[1] | 6. 4G Antenna Terminal ^[1] |
| 7. LED | 8. Mounting Bracket | 9. Heat Sink |
| 10. Mounting Plate | | |

[1]: Optional.

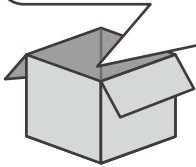
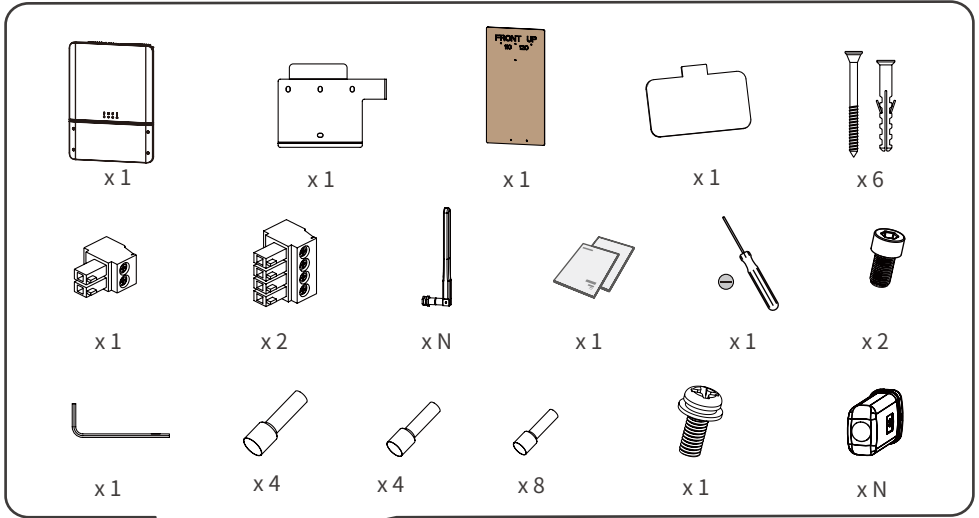


Dimensions



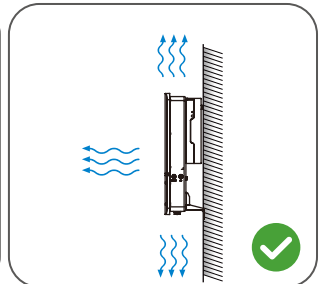
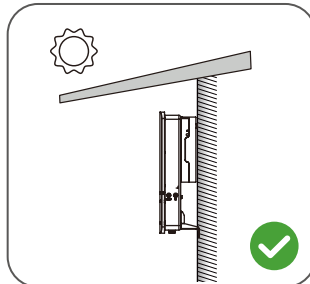
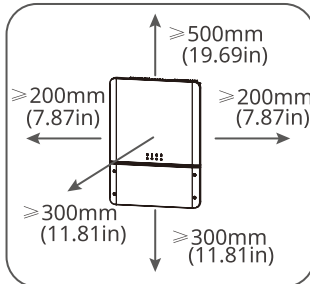
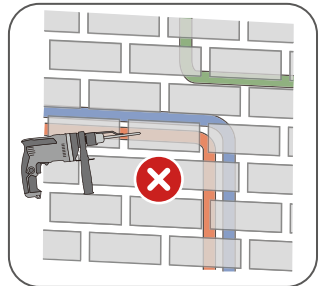
03 Inverter Installation


Packing List



N = Quantity depends on the inverter model.

Space Requirements

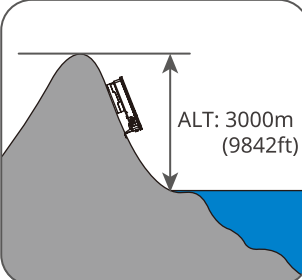




-25°C~60°C
(-13°F~140°F)

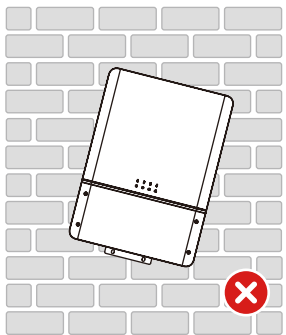
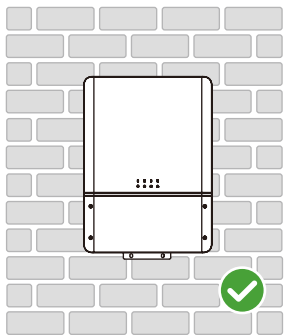
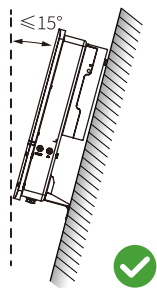
0%~95%RH

**Type 4X
(IP66)**

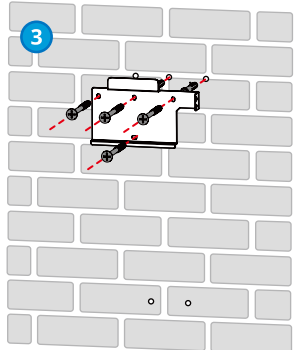
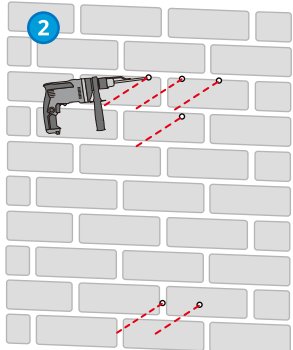
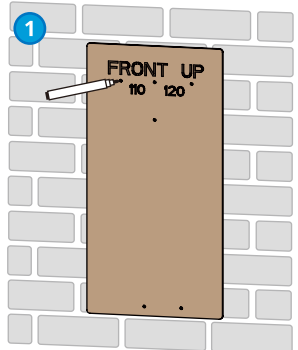


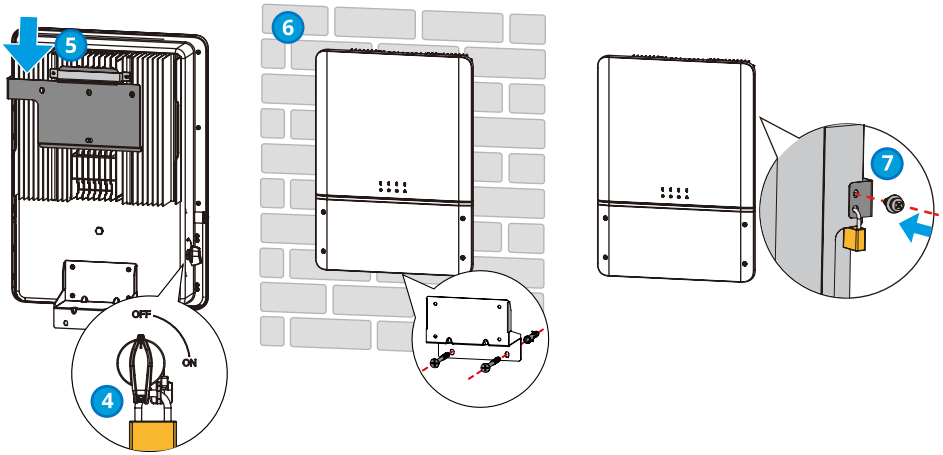
ALT: 3000m
(9842ft)

Angle Requirements



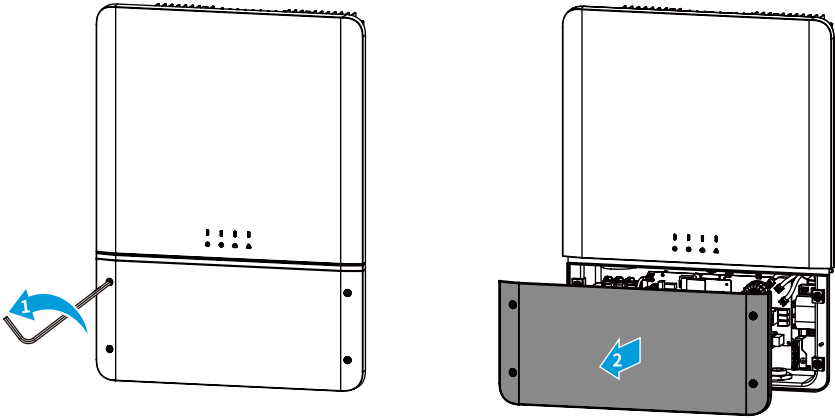
Installing the Inverter



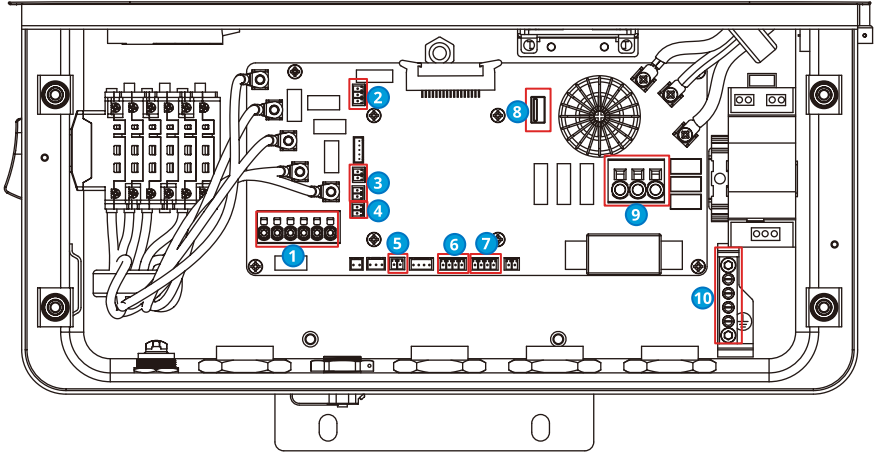


04 Electrical Connection

Removing the Cover

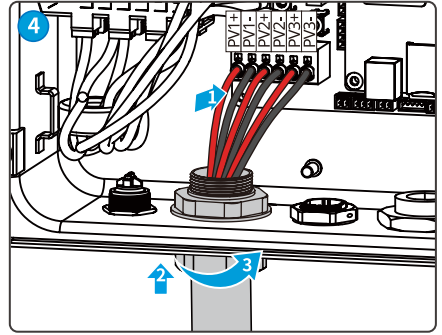
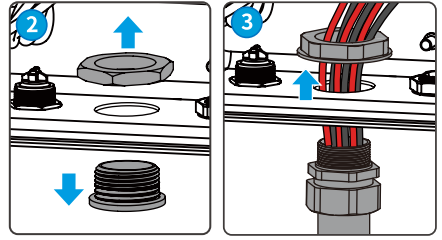
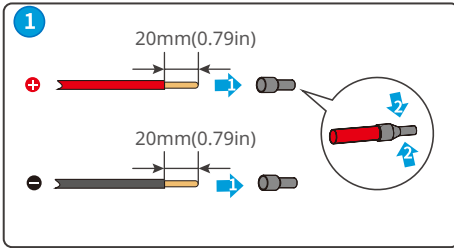
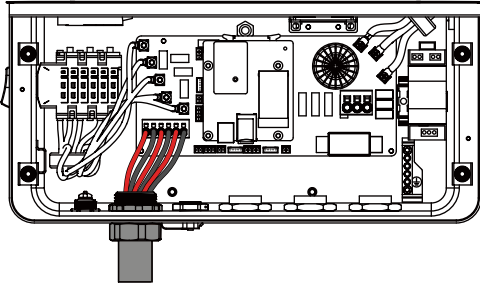


Cable Specifications

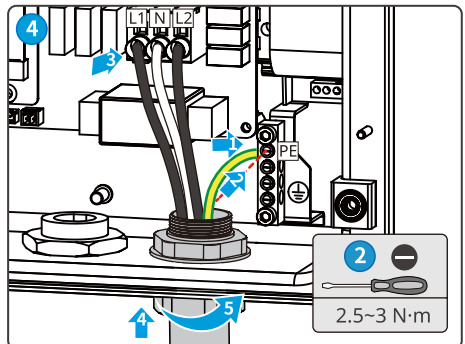
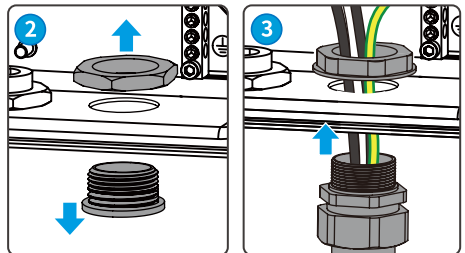
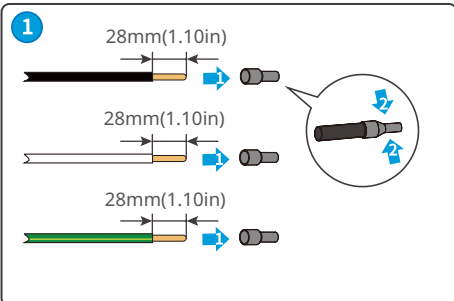
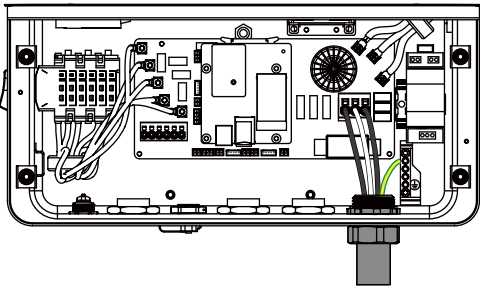


No.	Terminal/Port	Silkscreen	Recommended Cable Specifications
1	PV input terminal	PV1+ PV1- PV2+ PV2- PV3+ PV3- (Only for GEP7.7-1-US30, GEP9.6-1-US30, GEP11.4-1-US30)	90°C(194°F) copper cables, 12AWG.
2	Dry contact communication terminal	DRY-OUT	-
3	CT communication terminal	CT2 CT1	-
4	Remote Shutdown communication terminal	DRM0	Outdoors communication cables that meet UL2919, CM/CMG(NEC type), or CMH(CSA type) requirements, 24-16AWG.
5	Power supply terminal for RSD module	RSD-12V	Outdoors communication cables that meet UL2919, CM/CMG(NEC type), or CMH(CSA type) requirements, 24-16AWG.
6	Meter communication terminal	METER	Outdoors communication cables that meet UL2919, CM/CMG(NEC type), or CMH(CSA type) requirements, 24-16AWG.
7	Communication terminal for multi inverter parallel connection	485-1 485-2	Outdoors communication cables that meet UL2919, CM/CMG(NEC type), or CMH(CSA type) requirements, 24-16AWG.
8	USB port	USB	-
9	AC cable terminal	GRID-L1 GRLD-N GRID-L2	90°C(194°F) copper cables, 6AWG.
10	Grounding busbar	-	90°C(194°F) copper cables, 10-6AWG.

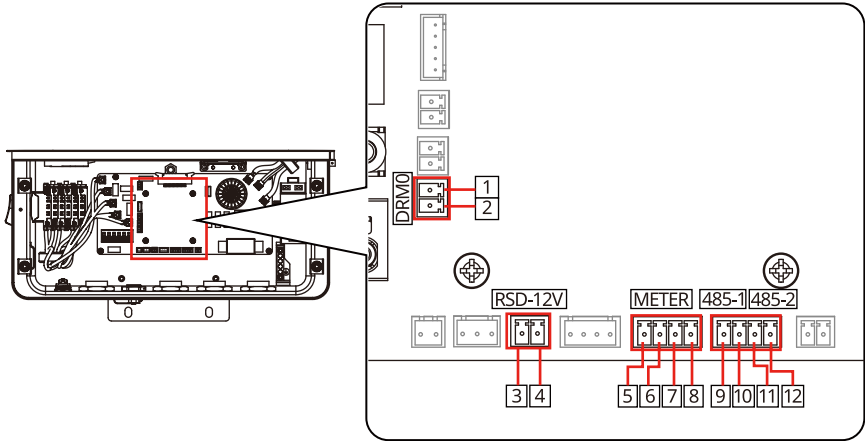
DC Cable



AC Cable



Communication Connection

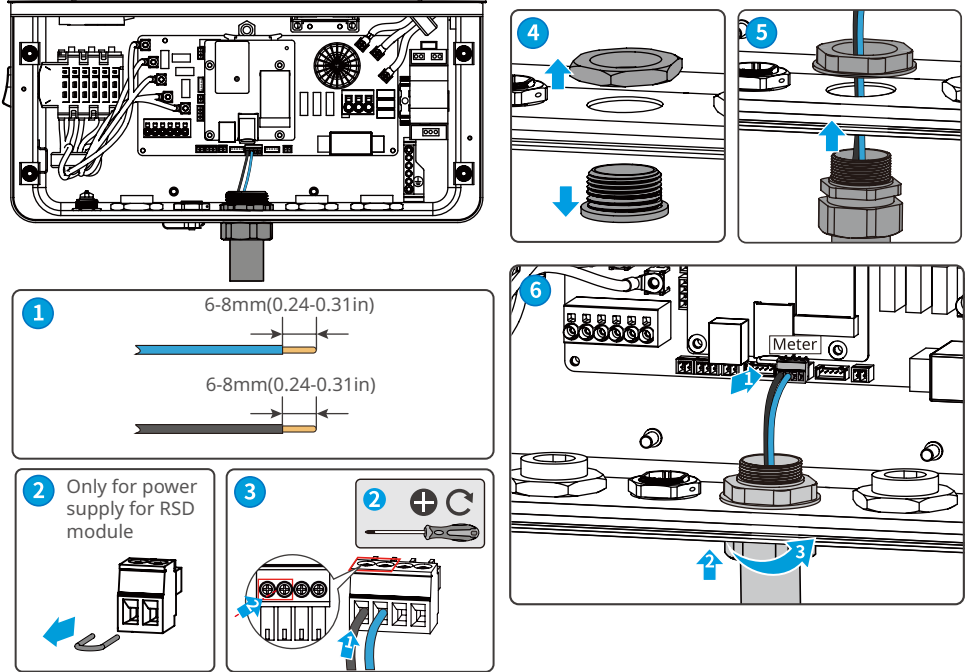


PIN	Function	Definition
1	Remote shutdown	COM/DRM0
2		REFGEN
3	power supply for RSD module	12V-AC_SPS
4		RSD-12V
5	Meter	Meter+
6		Meter-
7		12V+
8		GND
9	parallel connection	RS485-A
10		RS485-B
11		RS485-A
12		RS485-B

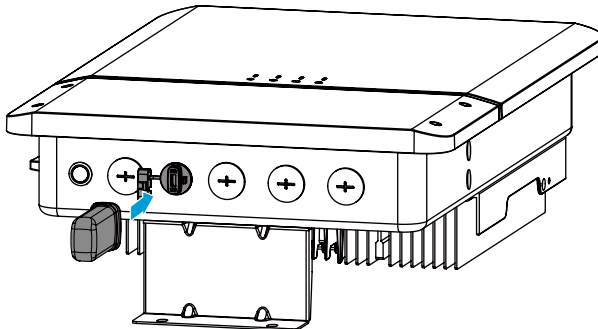
⚠ WARNING

- The communication terminal connected to the power supply port of the RSD switch is equipped with a resistor. When using the RSD function, the resistor needs to be removed and properly stored.
- Do not remove the resistor when the RSD function is not required. Otherwise, the inverter may fail to connect to the power grid.

The cables for remote shutdown, smart meter, parallel connection, and power supply for RSD module are connected in the same way. The following illustration shows an example of connecting smart meter communication cable.

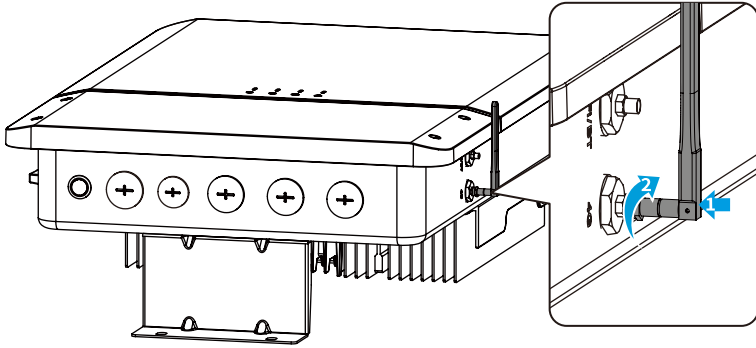


WiFi Kit (Optional)

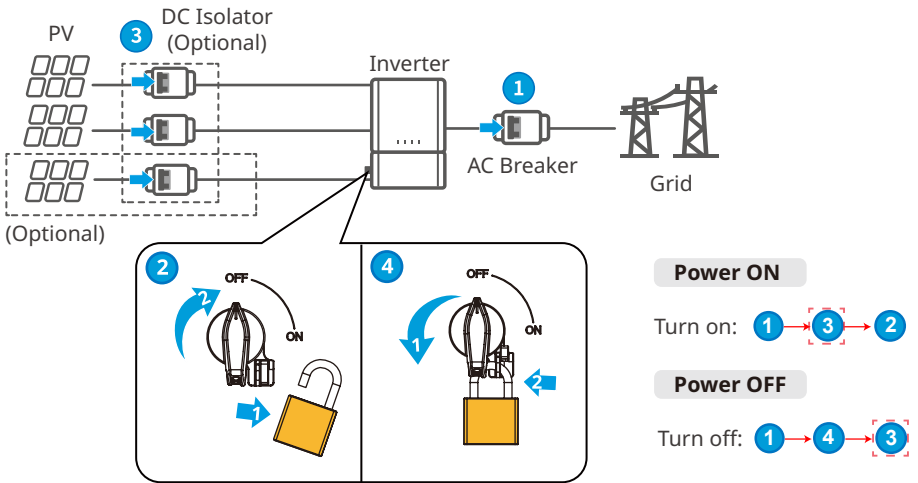


Antenna(Optional)

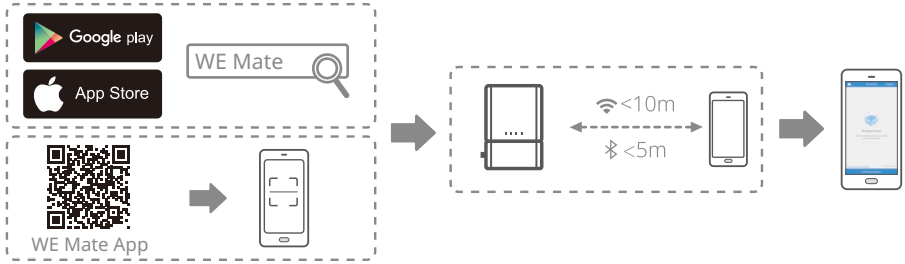
The 4G, WiFi, and bluetooth antenna are connected in the same way. The following illustration shows an example of installing the 4G antenna.



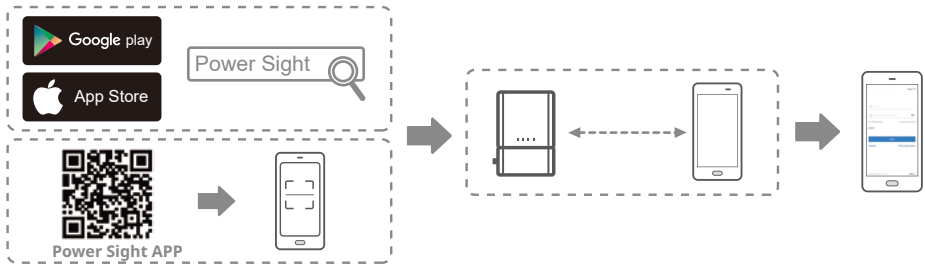
05 Power On and Off



Commissioning via WE Mate APP



Monitoring via Power Sight App



For more detailed instructions, scan the QR codes below.







Intelligence Switched On


Global Sales & Service Network

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