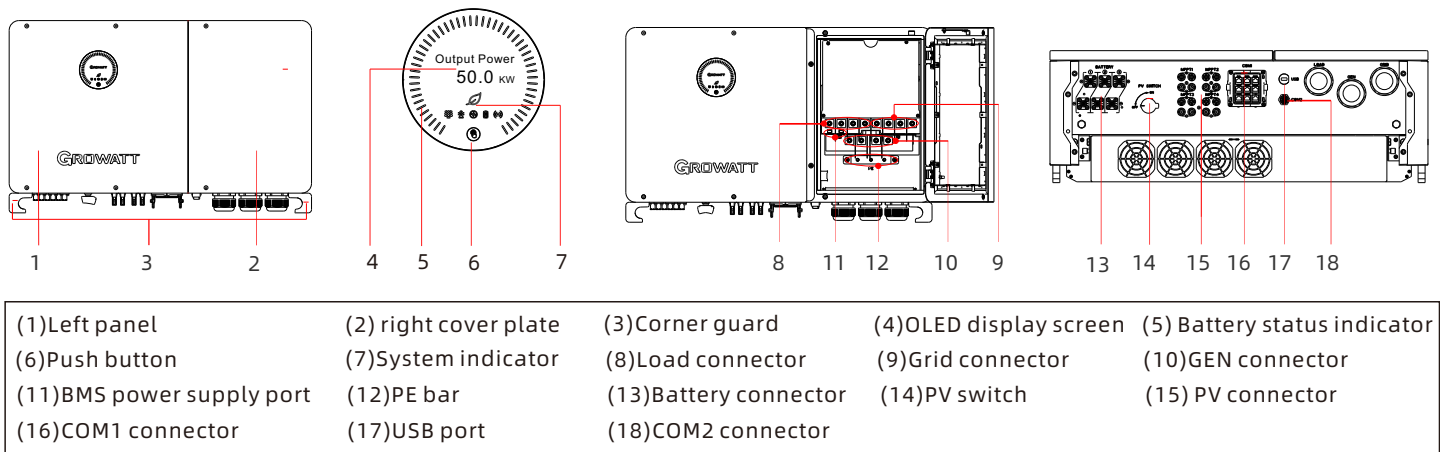


1. Overview

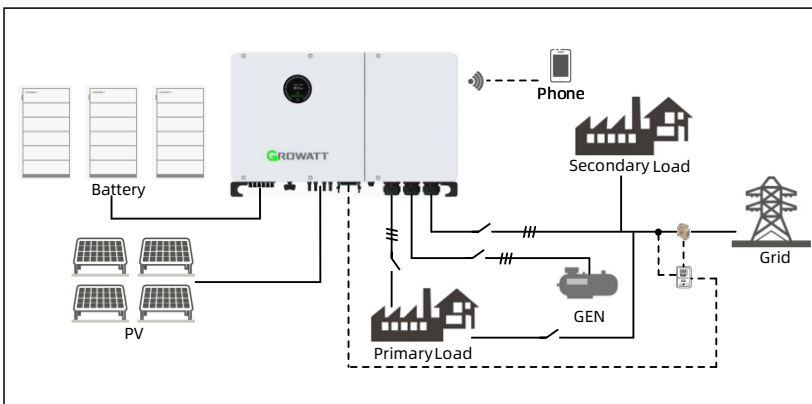


⚠ Note:

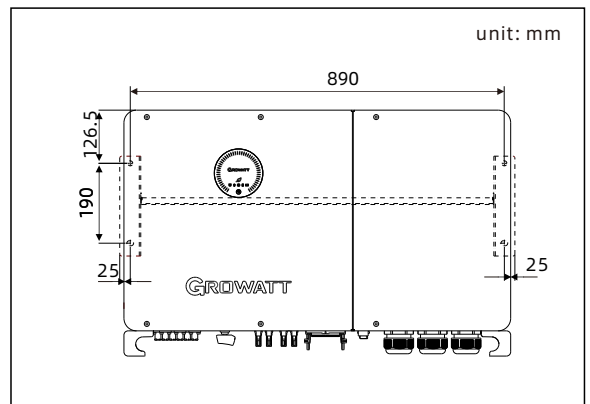
1. The content of this document is continually reviewed and amended, where necessary. Growatt reserves the right to make changes to the material at any time and without notice. Unless otherwise agreed, this document is for quick installation guidance only. All information and suggestions in this document do not constitute a warranty of any kind, express or implied. Growatt reserves all rights for final explanation.
2. This document is for quick installation guidance only. For details, please refer to the User Manual.
3. Machine damage caused by failure to follow the instructions is not covered under any warranty.

2. Installation

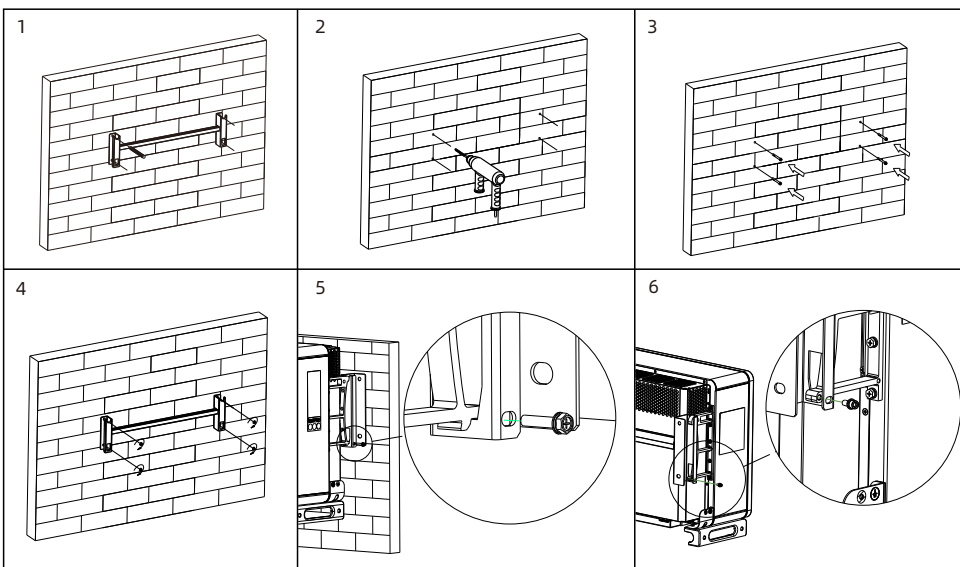
System overview



2.1 Installation requirements



2.2 Wall-mounted installation



⚠ Note:

1. When determining the installation position of the inverter, please consider the position of the batteries and the distribution panel.
2. For export limitation, you are advised to connect an energy meter and the current transformer to the inverter.
3. When drilling holes, avoid the water pipes and power cables buried in the wall.

3. Connecting cables

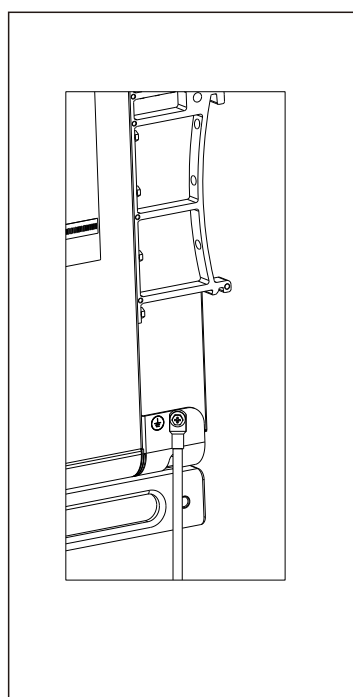
Please prepare the cables listed below before electrical connections.

No.	Cable	Type	Recommended specifications
1	Grounding cable	A multi-core copper cable (yellow and green)	35mm ²
2	GRID/GEN cable	A multi-copper cable	35mm ² -70mm ²
3	LOAD cable	A multi-copper cable	25mm ² -35mm ²
4	PV input cable	Photovoltaic cable	4mm ² -6mm ²
5	Battery power cable	A single-core copper cable (red and black)	16mm ²
6	BMS power supply cable	A multi-core copper cable	0.5mm ² -1.5mm ²
7	Other communication cable	RS485	/

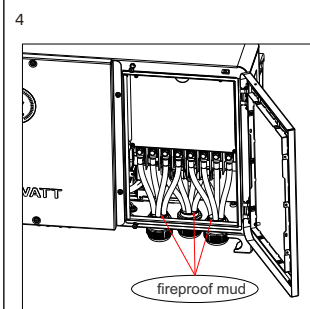
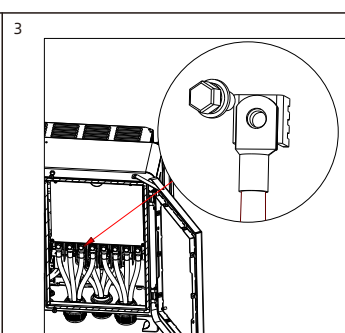
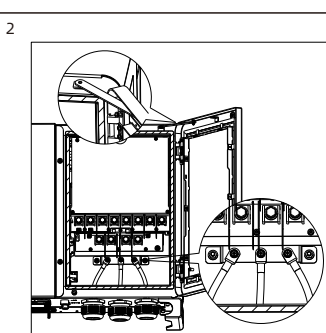
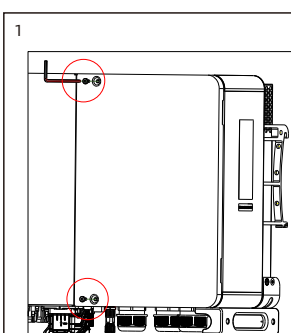
⚠ Note:

1. Make sure all switches are OFF before connecting the cables. For personal safety, do not operate when power-on.
2. If the diameter of the cable does not match the terminal, or the cable is aluminum wire, please contact our after-sales personnel.

3.1 Grounding

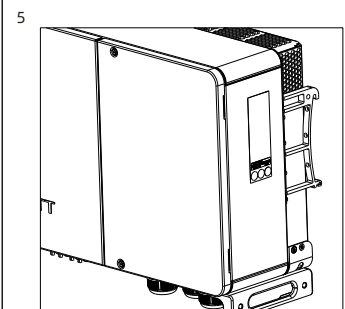


3.2 Connection of AC side



⚠ Note:

After cables are connected, apply fireproof mud to the waterproof silicone pad in the junction box on the right, then secure the right cover plate.



3.3 DC connection

3.3.1 Assembling the PV connector

<p>1</p> <p>Positive metal contact</p> <p>8-10 mm</p> <p>Negative metal contact</p> <p>8-10 mm</p>	<p>2</p> <p>Ensure that the cable cannot be pulled out from the terminal after crimping.</p>	<p>3</p> <p>Positive contact</p> <p>Negative metal contact</p> <p>Pull the PV cables back to check that they are connected securely.</p>
<p>4</p> <p>Ensure secure connection by tightening the locking nut.</p>	<p>5</p> <p>Make sure the cable polarity is correct.</p>	

3.3.2 Connecting the PV cables

1

2

Notes:

1. Before installing the PV terminals, please confirm that the PV input voltage and current do not exceed the MPPT limits.
2. When installing the PV terminals, identify the positive and negative terminals and connect them to the inverter respectively following the color convention
3. A "click" sound will be heard when the terminal is connected. Please gently pull the PV cable back to make sure it is securely connected.

3.4 Connection on the battery side

3.4.1 Connecting the battery power cable

1

2

3

4

Note:

1. Before installing the battery terminals, please ensure that the battery input voltage and current are within the acceptable range.
2. When installing battery terminals, identify the positive and negative terminals and connect them to the inverter according to the color convention.
3. When connecting the terminals, ensure that you hear a "click" sound. Please gently pull back the battery cables to ensure a secure connection.

3.4.2 Connecting the BMS power supply cable

BMS power supply port description	
Label	Definition of signal
CN 4	LOAD R
CN 5	LOAD S

3.5 Installing the communication cable

Pin	BMS3	Pin	RS485_1
1	BAT RS485_B	1	RS485_1B
2	BAT RS485_A	2	GND.S
3	BAT3 DI_1	3	/
4	BAT3 CAN_H	4	Rs485_1B
5	BAT3 CAN_L	5	RS485_1A
6	BAT3 DI_2	6	/
7	BAT3 WAKE	7	RS485_3B
8	BAT3 WAKE+	8	RS485_3A

Pin	RS485_2	Pin	METER
1	RS485_1B	1	RS485_2B
2	GND.S	2	GND.S
3	/	3	/
4	RS485_1B	4	/
5	Rs485_1A	5	RS485_2A
6	/	6	/
7	RS485_3B	7	/
8	RS485_3A	8	/

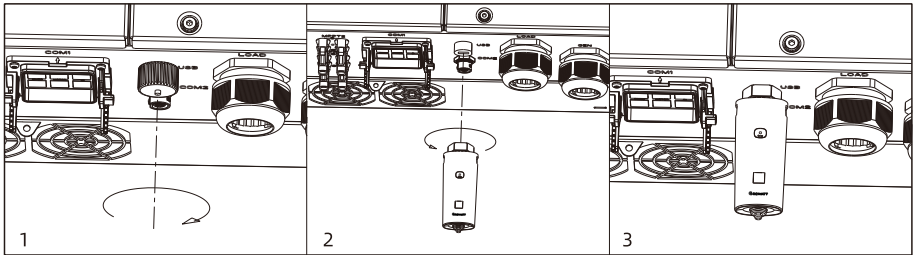
Communication port

Communication port description			
Pin	BMS1	Pin	BMS2
1	BAT RS485_B	9	BAT RS485_B
2	BAT RS485_A	10	BAT RS485_A
3	BAT1 DI_1	11	BAT2 DI_1
4	BAT1 CAN_H	12	BAT2 CAN_H
5	BAT1 CAN_L	13	BAT2 CAN_L
6	BAT1 DI_2	14	BAT2 DI_2
7	BAT1 WAKE-	15	BAT1 WAKE-
8	BAT1 WAKE+	16	BAT1 WAKE+

Pin	DI	Pin	PARA-IN
1	DRM1/5	1	/
2	DRM2/6	2	GND.S
3	DRM3/7	3	Sc_A/H
4	DRM4/8	4	PL_CANH
5	REF	5	PL_CANL
6	COM	6	Sc_B/L
7	/	7	GND.S
8	/	8	Master_CAN

Pin	PARA-OUT	Pin	COM2
1	/	1	emergency stop signal
2	GND.S	2	
3	Sc_A/H	3	generator start up
4	PL_CANH	4	
5	PL_CANL		
6	Sc_B/L		
7	Slave_CAN		
8	GND.S		

3.5.6 Installing the datalogger



- Follow the installation steps:
- 1.Remove the waterproof cover from the USB port.
 - 2.Plug in the datalogger.
 - 3.Secure the datalogger.

4. Post-installation check

Number	Checking item	Number	Checking item
1	The hybrid inverter is installed correctly and reliably.	2	Ground cables are connected securely.
3	All switches are in the OFF position.	4	All cables are connected correctly and securely.
5	The right plate is secured.	6	All the unused connectors are sealed.
7	Put away the unused accessories.	8	The installation position is clean and tidy.

5. Powering on/off the inverter

⚠️ Note:

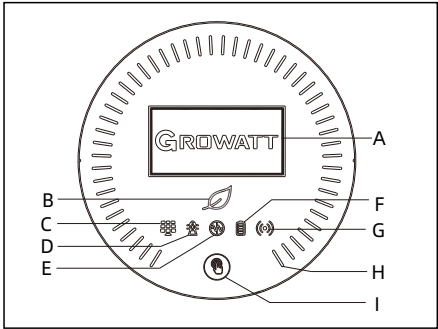
Before power-on, please make sure all components remain within their permitted operating ranges. Otherwise it will cause damage to the hybrid inverter.

Perform the following steps to power on the system:

- 1.Ensure that there is no voltage on the PV side, then turn on the DC switches.
- 2.Turn on the breaker between the grid and the inverter.
- 3.Turn on the breaker between the battery and the inverter, then turn on the switch on the battery.
- 4.The system will be powered on automatically when all the requirements are met.

To shut down the system, you need to send a shutdown command on the APP or website. Wait until the system is completely powered off, then turn off the switches in reverse order.

6. Description of the display panel



Indicator	Function	Indicator	Function
A	OLED display screen	F	Battery connection indicator
B	System indicator	G	Communication/GEN indicator
C	PV indicator	H	Battery status indicator
D	On-grid indicator	I	Push button
E	Off-grid indicator		

7. Service and contact

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