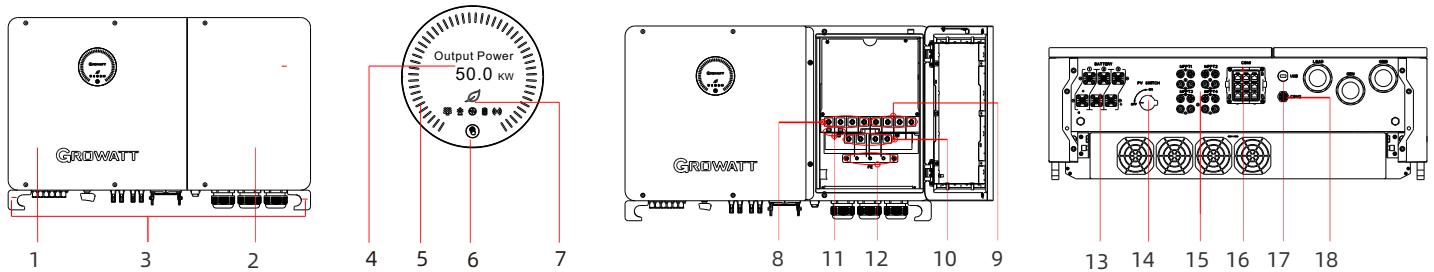


### 1. Overview



|                           |                       |                       |                        |                              |
|---------------------------|-----------------------|-----------------------|------------------------|------------------------------|
| (1)Left panel             | (2) right cover plate | (3)Corner guard       | (4)OLED display screen | (5) Battery status indicator |
| (6)Push button            | (7)System indicator   | (8)Load connector     | (9)Grid connector      | (10)GEN connector            |
| (11)BMS power supply port | (12)PE bar            | (13)Battery connector | (14)PV switch          | (15) PV connector            |
| (16)COM1 connector        | (17)USB port          | (18)COM2 connector    |                        |                              |

**Note:**

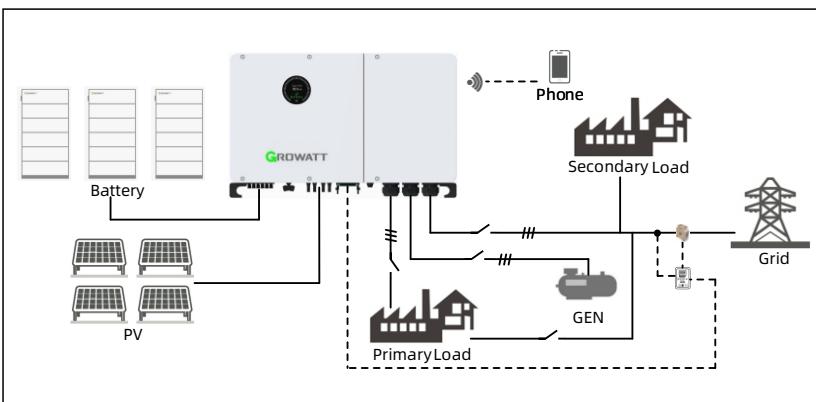
1.The content of this document is continually reviewed and amended, where necessary. Growatt reserves the right to make changes to the material at any time and without notice. Unless otherwise agreed, this document is for quick installation guidance only. All information and suggestions in this document 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.

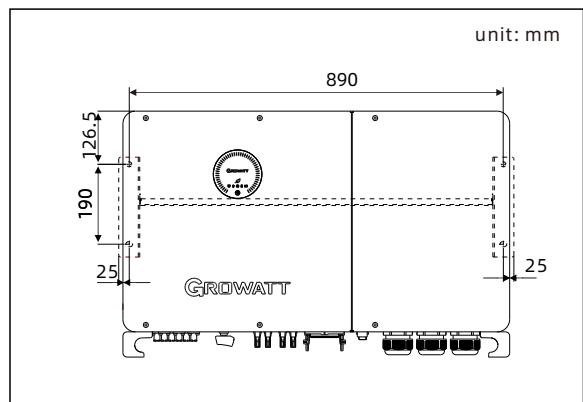
3.Machine damage caused by failure to follow the instructions is not covered under any warranty.

### 2. Installation

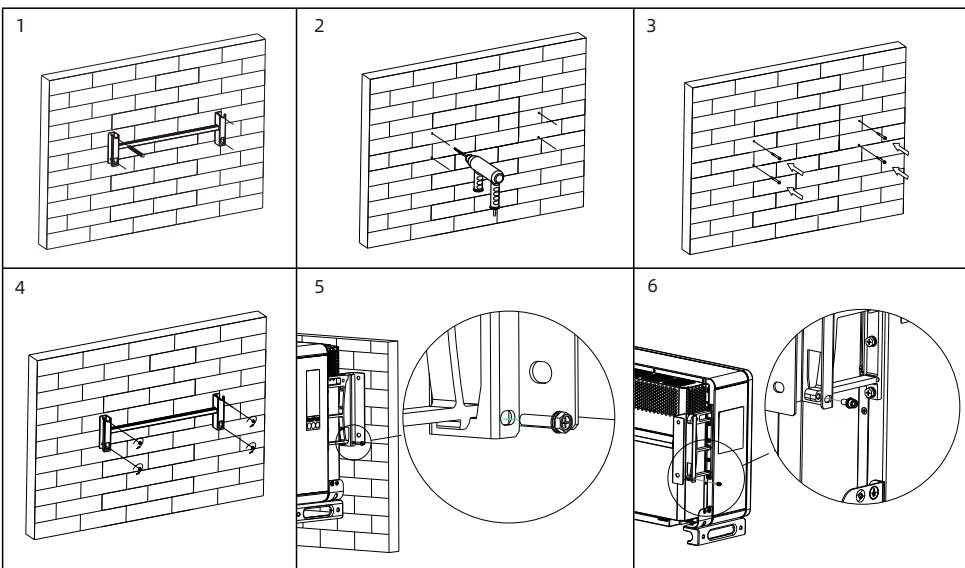
#### System overview



#### 2.1 Installation requirements



#### 2.2 Wall-mounted installation



**Note:**

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

### 3. Connecting cables

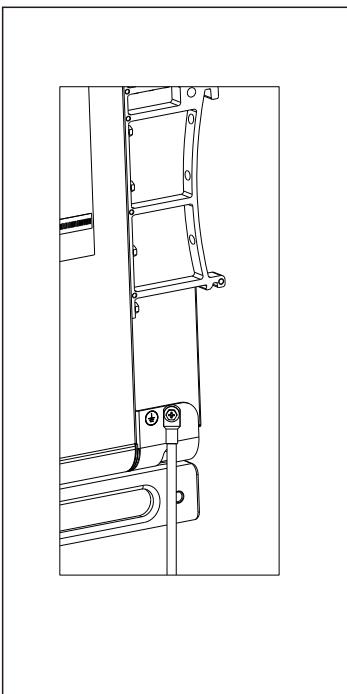
Please prepare the cables listed below before electrical connections.

| No. | Cable                     | Type   | Recommended specifications             |
|-----|---------------------------|--|--|
| 1   | Grounding cable           | A multi-core copper cable (yellow and green) | 25mm <sup>2</sup>                      |
| 2   | GRID/GEN cable            | A multi-copper cable                         | 35mm <sup>2</sup> -50mm <sup>2</sup>   |
| 3   | LOAD cable                | A multi-copper cable                         | 25mm <sup>2</sup> -35mm <sup>2</sup>   |
| 4   | PV input cable            | Photovoltaic cable                           | 4mm <sup>2</sup> -6mm <sup>2</sup>     |
| 5   | Battery power cable       | A single-core copper cable (red and black)   | 16mm <sup>2</sup>                      |
| 6   | BMS power supply cable    | A multi-core copper cable                    | 0.5mm <sup>2</sup> -1.5mm <sup>2</sup> |
| 7   | Other communication cable | RS485  | /                                      |

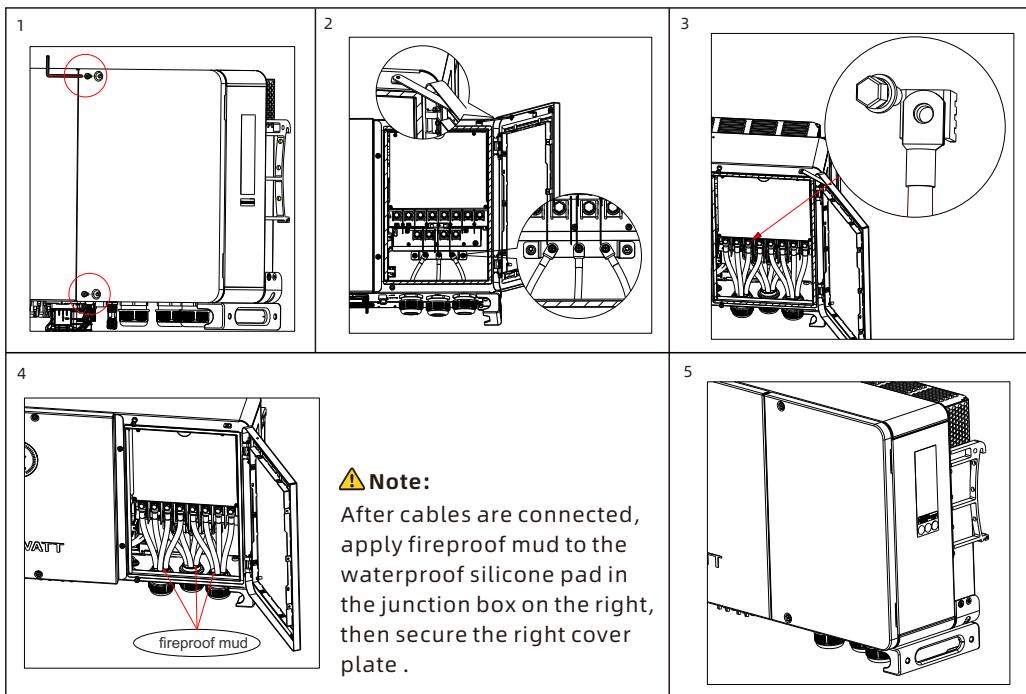
#### ⚠ Note:

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. Battery power cable length should not exceed 10 meters.

#### 3.1 Grounding

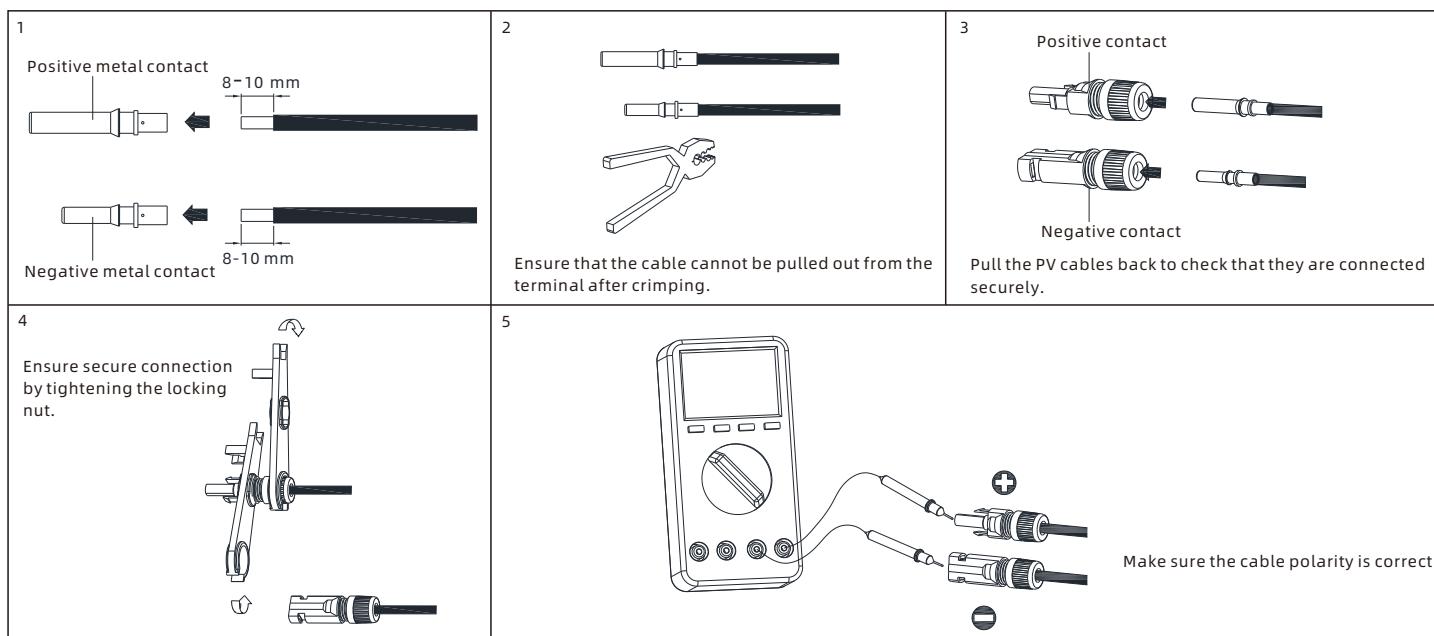


#### 3.2 Connection of AC side

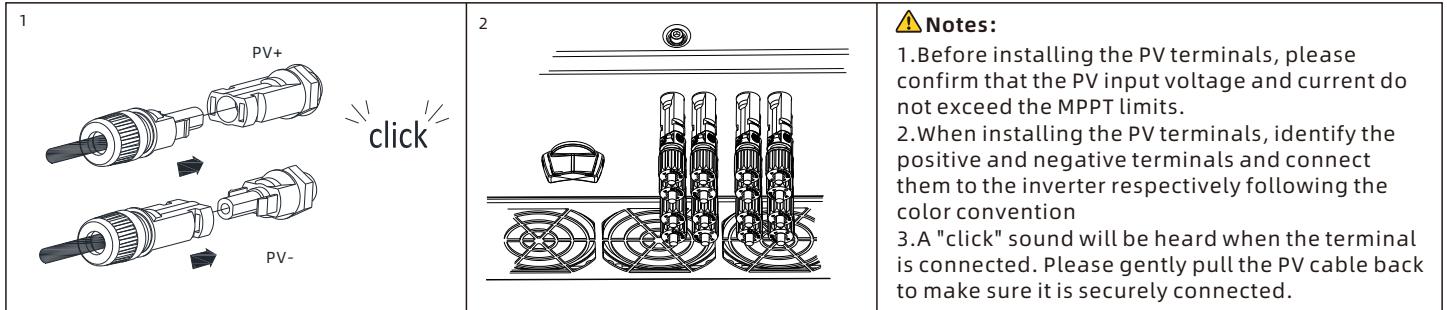


#### 3.3 PV connection

##### 3.3.1 Assembling the PV connector

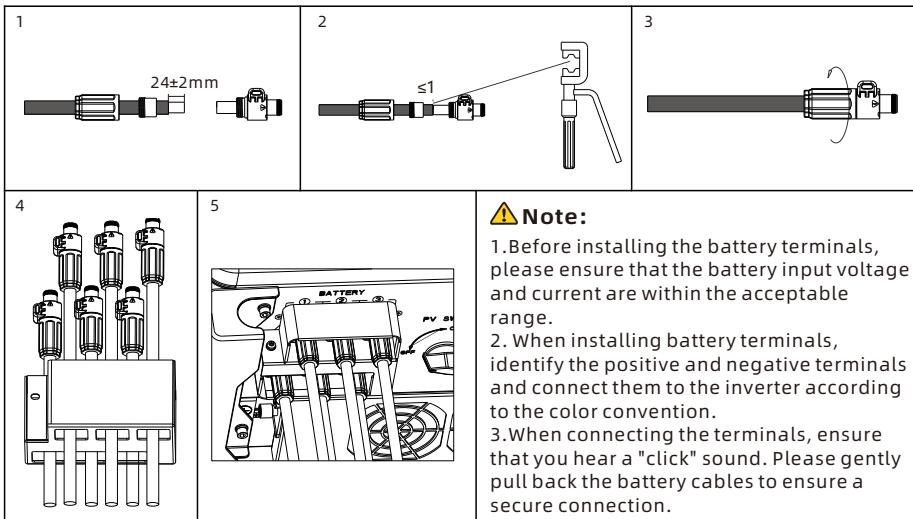


### 3.3.2 Connecting the PV cables

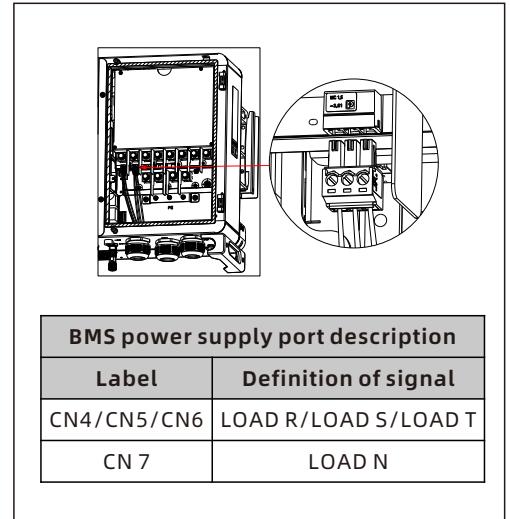


### 3.4 Connection on the battery side

#### 3.4.1 Connecting the battery power cable



#### 3.4.2 Connecting the BMS power supply cable



### 3.5 Installing the communication cable

**Communication port**

| Communication port description |             |     |             |
|--------------------------------|-------------|-----|-------------|
| Pin                            | BMS1        | Pin | BMS2        |
| 1                              | BAT RS485_B | 1   | BAT RS485_B |
| 2                              | BAT RS485_A | 2   | BAT RS485_A |
| 3                              | BAT1 DI_1   | 3   | BAT2 DI_1   |
| 4                              | BAT1 CAN_H  | 4   | BAT2 CAN_H  |
| 5                              | BAT1 CAN_L  | 5   | BAT2 CAN_L  |
| 6                              | BAT1 DI_2   | 6   | BAT2 DI_2   |
| 7                              | BAT1 WAKE-  | 7   | BAT2 WAKE-  |
| 8                              | BAT1 WAKE+  | 8   | BAT2 WAKE+  |

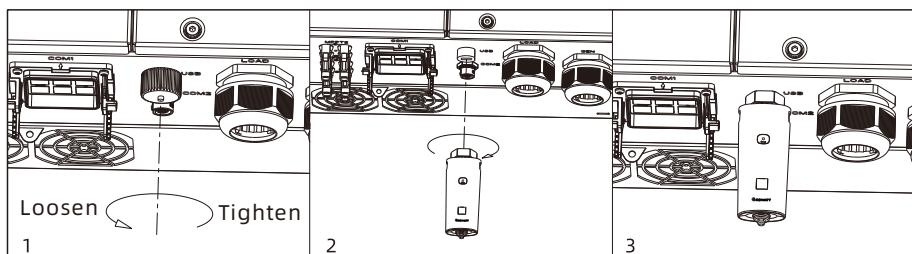
| Pin | BMS3        | Pin | RS485_1  |
|-----|-------------|-----|----------|
| 1   | BAT RS485_B | 1   | RS485_1B |
| 2   | BAT RS485_A | 2   | GND.S    |
| 3   | BAT3 DI_1   | 3   | /        |
| 4   | BAT3 CAN_H  | 4   | Rs485_1B |
| 5   | BAT3 CAN_L  | 5   | RS485_1A |
| 6   | BAT3 DI_2   | 6   | /        |
| 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   | /        |

| 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 PV SWITCH.

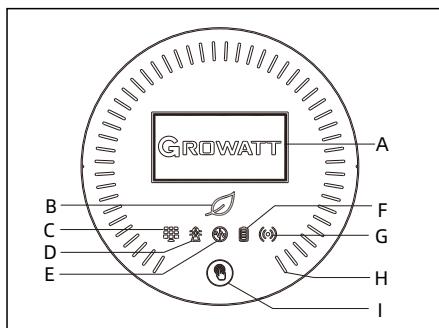
2. Turn on the breaker between the grid and the inverter.

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 indicator       |
| B         | System indicator    | G         | Communication indicator |
| C         | PV indicator        | H         | Running light           |
| D         | Grid indicator      | I         | Push button             |
| E         | Off-grid indicator  |           |                         |

## 7. Service and contact

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Hangcheng Blvd, Bao'an District, Shenzhen, China

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