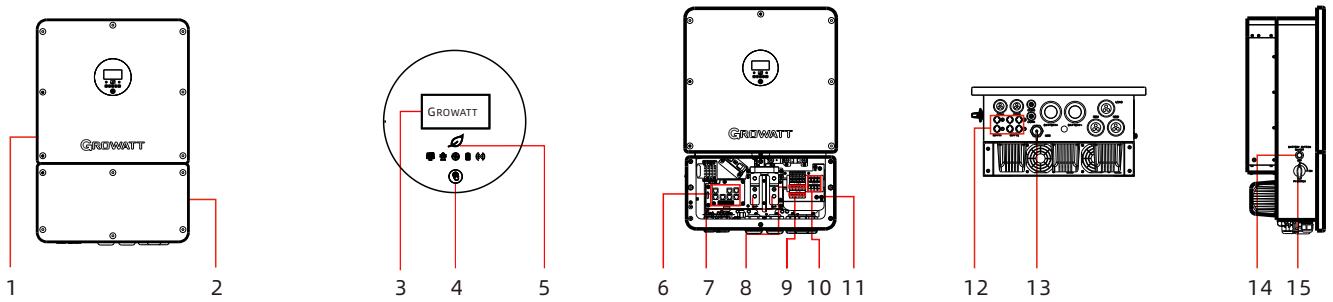


### 1. Overview



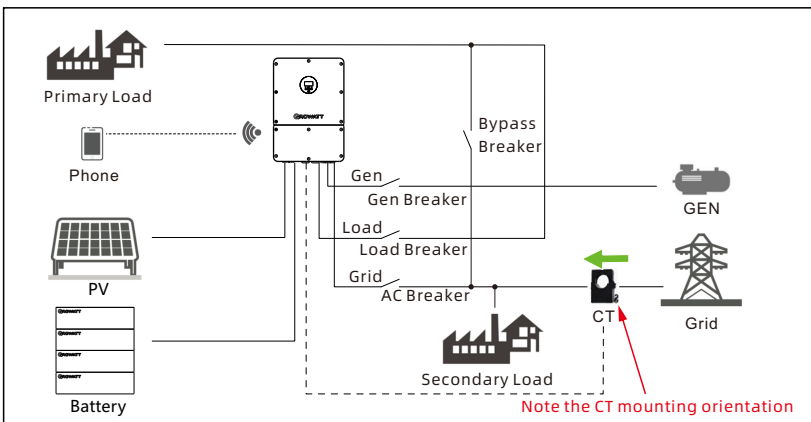
- |                               |                            |                             |                          |
|-------------------------------|----------------------------|-----------------------------|--------------------------|
| (1) Top cover plate           | (2) Bottom cover plate     | (3) OLED Display screen     | (4) Push button          |
| (5) System indicator          | (6) Communication terminal | (7) Battery wiring terminal | (8) Load wiring terminal |
| (9) Generator wiring terminal | (10) Grid wiring terminal  | (11) PE wiring terminal     | (12) PV wiring terminal  |
| (13) USB port                 | (14) Battery button        | (15) PV switch              |                          |

#### ⚠ Note:

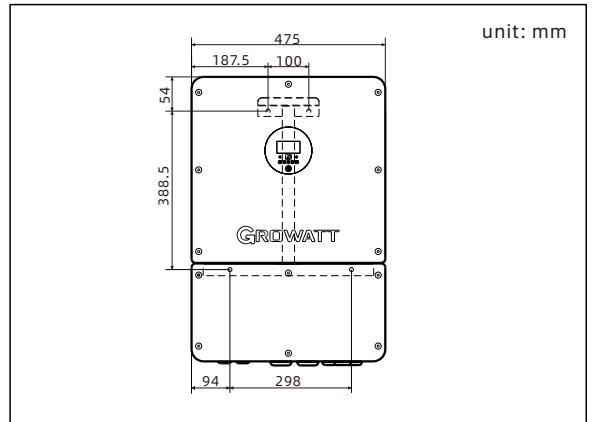
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- This document is for quick installation guidance only. For details, please refer to the User Manual.
- Machine damage caused by failure to follow the instructions is not covered under any warranty.

### 2. Installation

#### System overview



#### 2.1 Installation requirements



#### 2.2 Wall-mounted installation

|                                                             |                                                                   |                                                        |                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1 Mark the hole positions</b><br>                        | <b>2 Drill: Depth 70mm<br/>Diameter <math>\phi</math>10mm</b><br> | <b>3 Install the expansion screws</b><br>              | <b>⚠ Note:</b><br>1. When determining the installation position of the inverter, please consider the position of the batteries and the distribution panel.<br>2. When drilling holes, avoid the water pipes and power cables buried in the wall. |
| <b>4 Install the wall mount</b><br><p>Torque: 396kgf·cm</p> | <b>5 Install the machine</b><br>                                  | <b>6 Stationary machine</b><br><p>Torque: 50kgf·cm</p> |                                                                                                                                                                                                                                                  |

### 3. Connecting cables

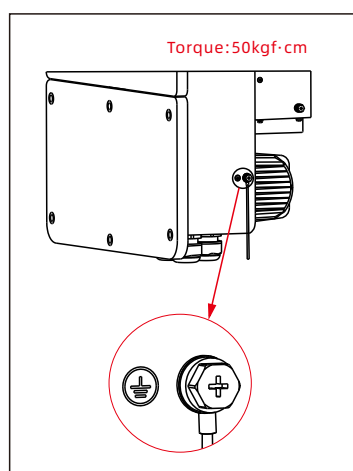
Please prepare the cables listed below before electrical connections.

| No. | Cable                         | Type                                       | Recommended specifications                   |
|-----|-------------------------------|--------------------------------------------|----------------------------------------------|
| 1   | PE cable                      | Multi-core copper cable (yellow-green)     | 6mm <sup>2</sup>                             |
| 2   | Grid/Generator/Load cable     | Multi-core copper cable                    | 10mm <sup>2</sup>                            |
| 3   | PV input cable                | PV cable                                   | 4mm <sup>2</sup> -6mm <sup>2</sup>           |
| 4   | Battery input cable           | Multi-core copper cable (orange and black) | 120mm <sup>2</sup> ×1 / 50mm <sup>2</sup> ×2 |
| 5   | COM1/COM2 communication cable | Standard network cable-568B                | /                                            |
| 6   | COM3 communication cable      | Multi-core copper cable                    | 22AWG                                        |
| 7   | COM4 communication cable      | Multi-core copper cable                    | 22AWG                                        |

#### ⚠ 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

① Remove the lower cover

② Connect the PE cable

③ Connect the AC cable

**⚠ Note:**

1. After connecting the cables, tighten the PG cable glands to ensure reliable protection
2. Do not install the bottom cover plate at this step; it should be installed after all internal cables are connected.

#### 3.3 Connection on the PV side

##### 3.3.1 Assembling the PV connector

① Positive metal contact

Negative metal contact

②

Ensure that the cable cannot be pulled out from the terminal after crimping.

③

Pull the PV cables back to check that they are connected securely.

④ Ensure secure connection by tightening the locking nut.

⑤

Make sure the cable polarity is correct.

##### 3.3.2 Connecting the PV cables

①

②

**⚠ Note:**

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.
4. Models 4K, 5K, and 6K only use ports ② and ③, and port ① does not.
5. Models 8K and 10K only use ports ① and ③, and port ② does not.

### 3.4 Connection on the battery side

Select 3.4.1 or 3.4.2 based on requirements

#### 3.4.1 Single-cluster battery wiring

**1**

Single-hole stoppers

**2**

unit:mm

1.1 22

1.2

1.3

Heat shrink tubing

**3**

Torque:198kgf-cm

**Note:**

- Before installing the battery terminals, please ensure that the battery input voltage and current are within the acceptable range.
- When installing battery terminals, ensure the correct polarity.
- When securing the OT terminal, ensure that the fixing screws are tightened. Please gently pull back the battery cable to ensure a secure connection.

#### 3.4.2 Dual-cluster battery wiring

**1**

Double-hole rubber stopper

**2**

unit:mm

1.1 16

1.2

1.3

Heat shrink tubing

**3**

Torque:198kgf-cm

**Note:**

- Before installing the battery terminals, please ensure that the battery input voltage and current are within the acceptable range.
- When installing battery terminals, ensure the correct polarity.
- When securing the OT terminal, ensure that the fixing screws are tightened. Please gently pull back the battery cable to ensure a secure connection.
- The rubber plug needs to be replaced with a double-hole rubber plug of 2-φ14 for the wiring of the double group battery.

### 3.5 Installing the communication cable

Please refer to the user manual for details on PIN and meter wiring

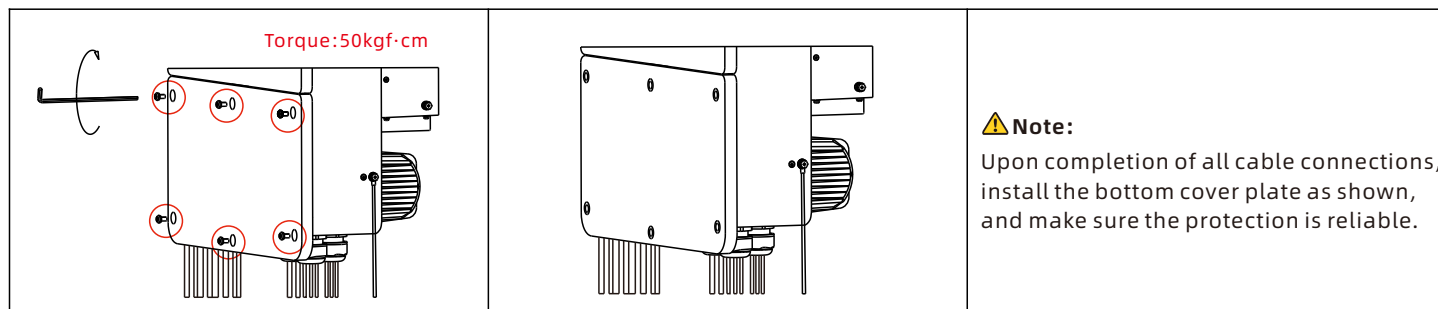
COM1、COM2 terminal wiring

COM3、COM4 terminal wiring

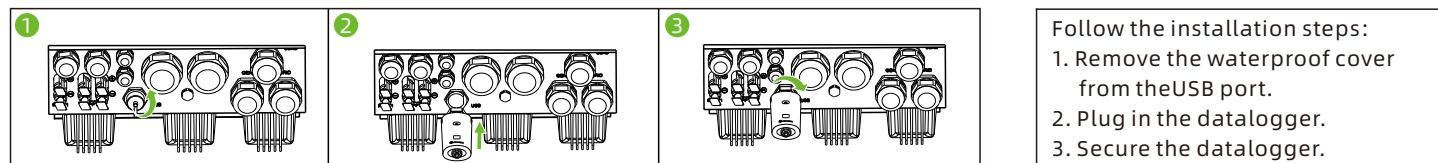
| Pin | COM3           | Pin | COM4          |
|-----|----------------|-----|---------------|
| 1   | REPO.WIT       | 7   | \             |
| 2   | GND.S          | 8   | \             |
| 3   | DG_START+      | 9   | CT_L1+(White) |
| 4   | DG_START-      | 10  | CT_L1-(Black) |
| 5   | NTC.BAT1 OUT   | 11  | CT_L2+(White) |
| 6   | NTC.BAT1 OUT.G | 12  | CT_L2-(Black) |
|     |                | 13  | CT_L3+(White) |
|     |                | 14  | CT_L3-(Black) |

| Communication port description |             |          |           |          |        |         |          |
|--------------------------------|-------------|----------|-----------|----------|--------|---------|----------|
| Pin                            | BMS1        | RS485_IN | RS485_OUT | METER    | DI     | PARA-IN | PARA-OUT |
| 1                              | BAT RS485_B | RS485_1B | RS485_1B  | RS485_2B | DRM1/5 | \       | \        |
| 2                              | BAT RS485_A | GND.S    | GND.S     | GND.S    | DRM2/6 | \       | \        |
| 3                              | BAT1 DI_1   | \        | \         | \        | DRM3/7 | \       | \        |
| 4                              | BAT1 CAN_H  | RS485_1B | RS485_1B  | \        | DRM4/8 | \       | \        |
| 5                              | BAT1 CAN_L  | RS485_1A | RS485_1A  | RS485_2A | REF    | \       | \        |
| 6                              | BAT1 DI_2   | \        | \         | \        | COM    | \       | \        |
| 7                              | BAT1 WAKE-  | RS485_3B | RS485_3B  | \        | \      | \       | \        |
| 8                              | BAT1 WAKE+  | RS485_3A | RS485_3A  | \        | \      | \       | \        |

### 3.6 Fixed lower cover plate



### 3.7 Installing 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 lower cover 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

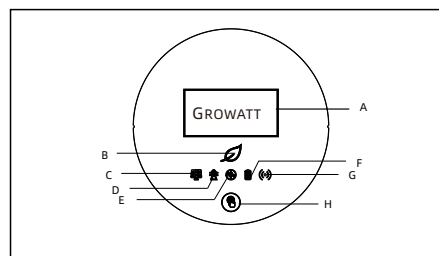
#### ⚠ Note:

Before turning the inverter on, please make sure the PV input voltage and current are within the MPPT limits .

Perform the following steps to power on the system:

1. Connect the PV cable , 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 of the battery. Wait for 30 seconds, and turn on the battery switch of the inverter.
  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 | E         | Off-grid indicator           |
| B         | System indicator    | F         | Battery connection indicator |
| C         | PV indicator        | G         | Communication/GEN indicator  |
| D         | On-grid indicator   | H         | Push button                  |

## 7. Service and contact

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For local customer support, please visit <https://en.growatt.com/support/contact>



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