

HYBRID INVERTER

# QUICK INSTALLATION GUIDE

## PrimePower Hybrid Inverter

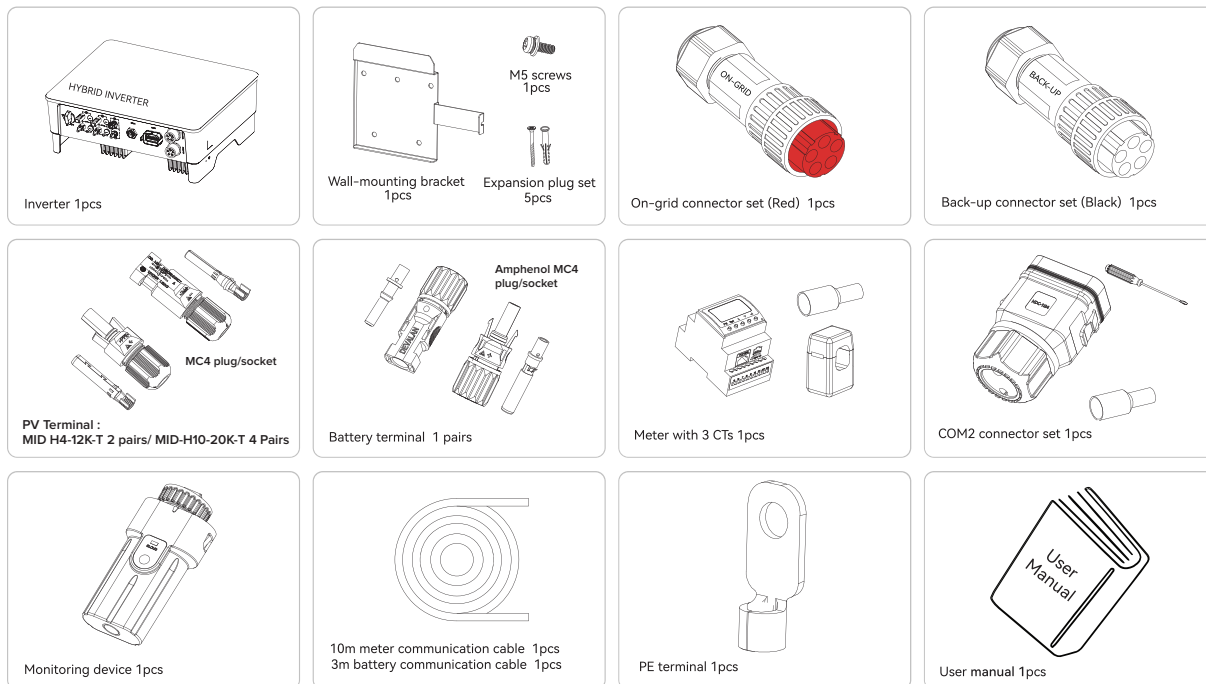
MID-H4/5/6/8/10/12kW – 25A

MID-H 10/12/15/20kW – 40A

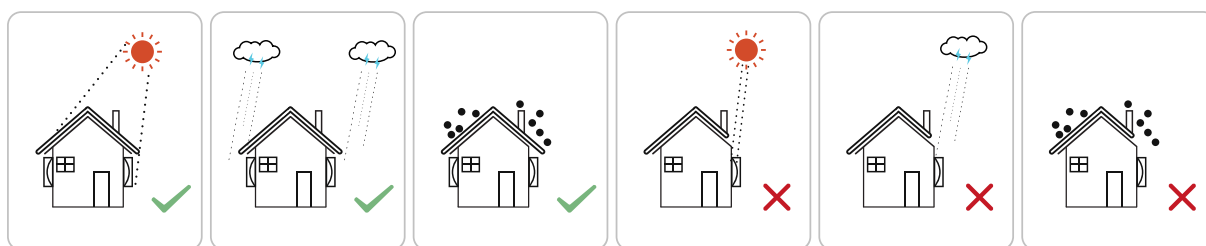


# 1. Installation

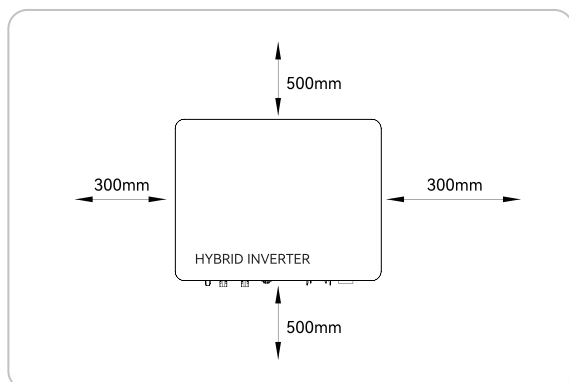
## A. Check Packing List



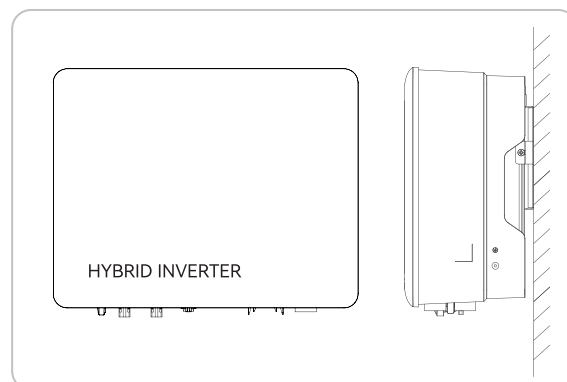
## B. Installation Location



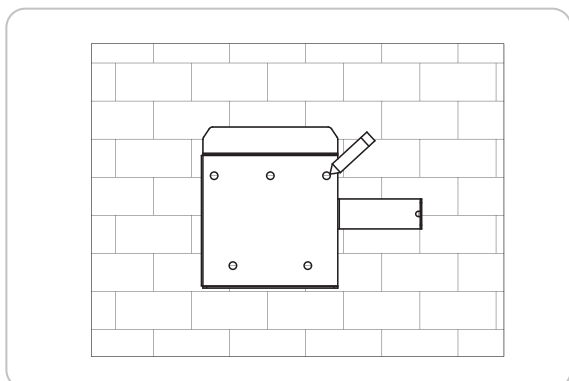
## C. Installation Space



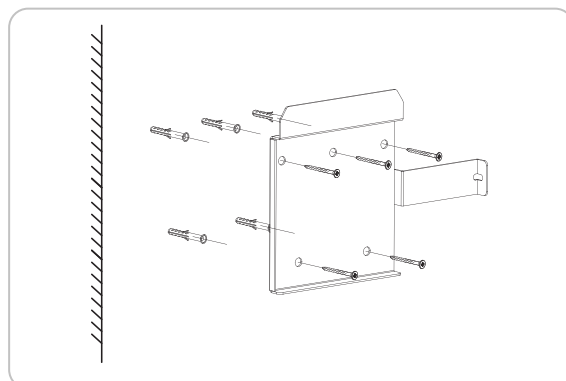
## D. Installation Angle



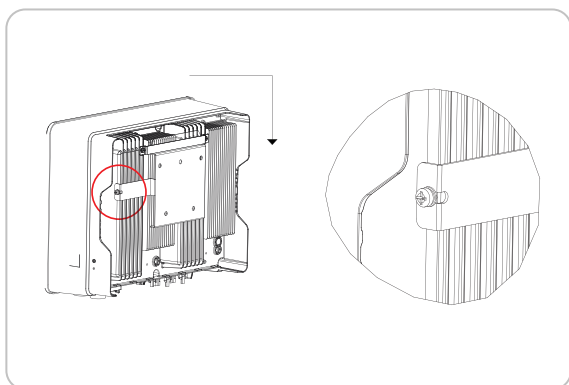
### E. Mark the Position and Drill Holes



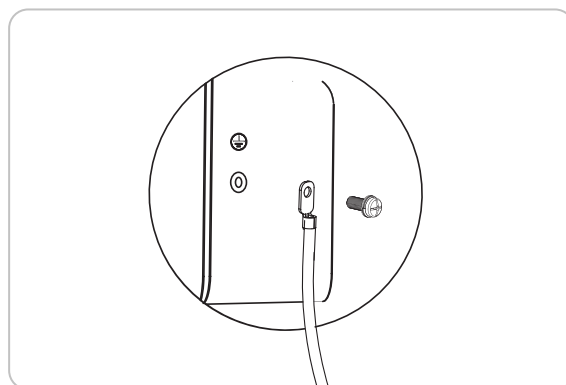
### F. Fix Wall Bracket



### G. Mounting Inverter



### H. Grounding Terminal Connection



## 2. Electrical connection

### A. Cable Requirements

| Cable Types         | Cable Requirements |                          |
|---------------------|--------------------|--------------------------|
|                     | Outside Diameter   | Conductor Core Section   |
| AC cable            | 13.0-18.0 mm       | 2.5-10.0 mm <sup>2</sup> |
| PV cable            | 5.9-8.8 mm         | 2.5-4.0 mm <sup>2</sup>  |
| Battery Power Cable | 5.0-8.0 mm         | 10 mm <sup>2</sup>       |

**AC Cable:** On the grid side, a five-core cable (L1, L2, L3, N, and PE) is used. On the backup side, a four-core cable (L1, L2, L3, N) is used.

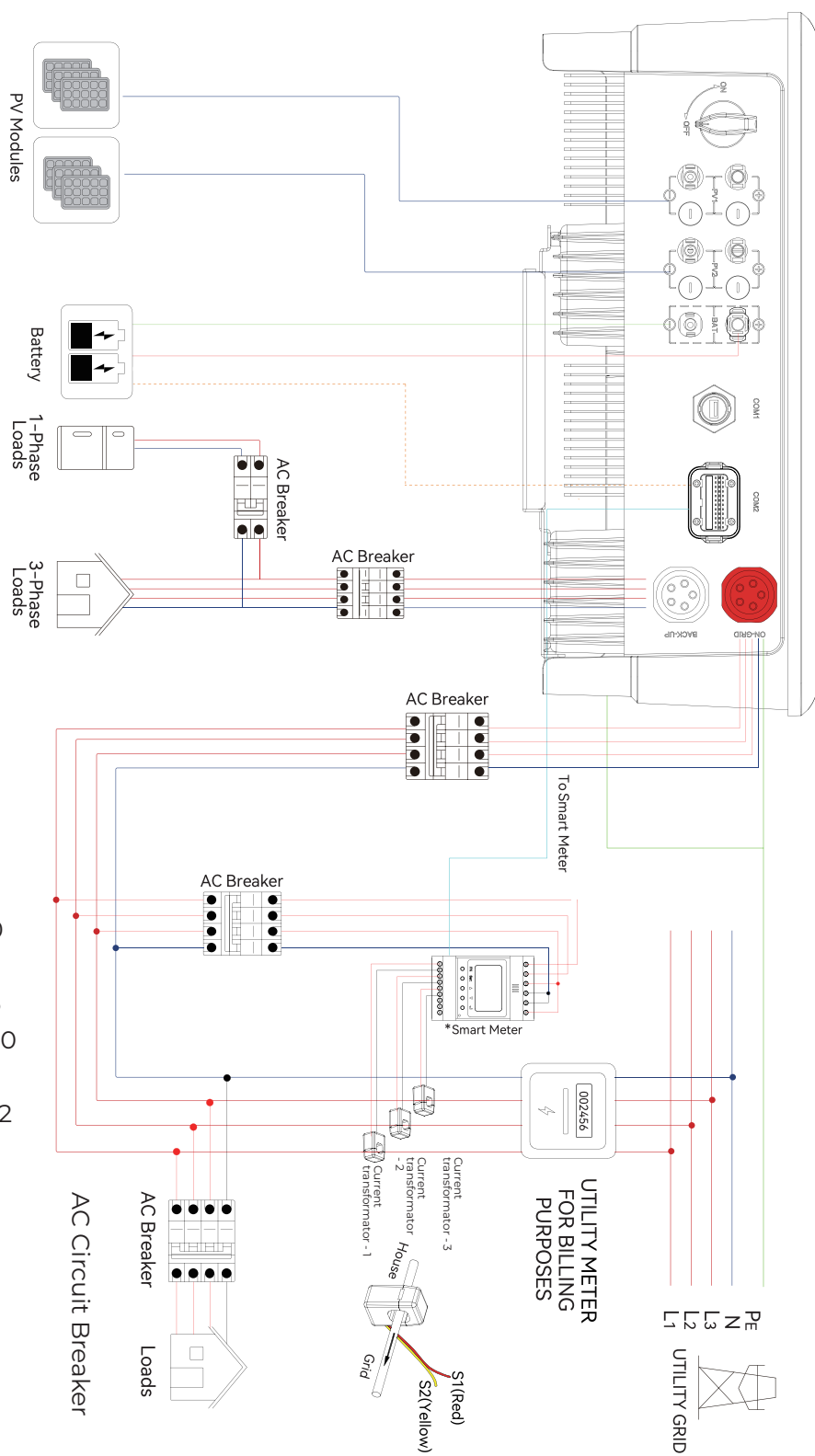
**AC Connector:** Please distinguish the on-grid and back-up connector, On-grid connector is red and Back-up connector is black.

**Battery Power Cable:** If the wire cross-section of the battery cable is too small, which can lead to poor contact between the terminal and the cable, use single-core H07-VK or PV cable H1Z2Z2-K up to a maximum of 6 mm .

## B. Electrical Wiring Diagram

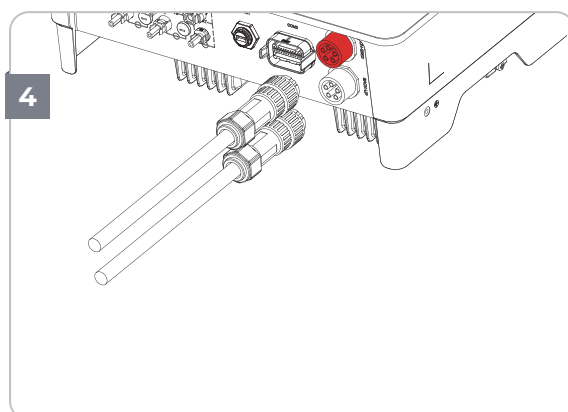
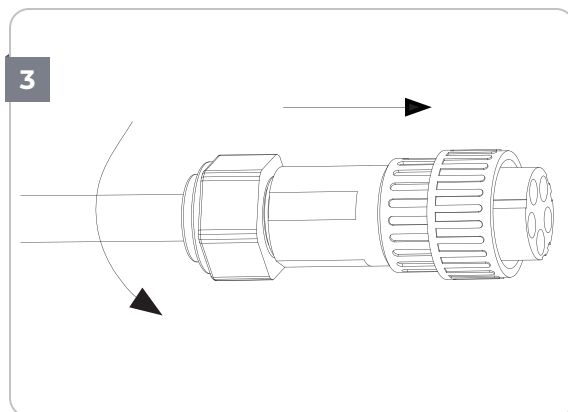
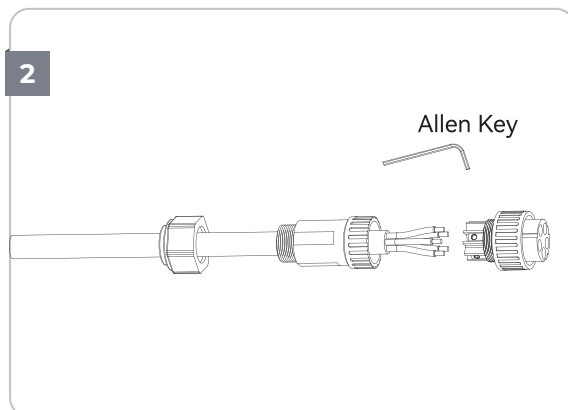
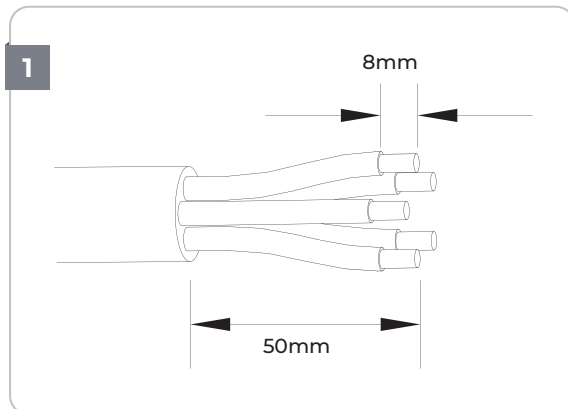
Choose the appropriate upstream protection based on the inverter's power class.

MID H4K-T = C10  
MID H5K-T = C13  
MID H6K-T = C16  
MID H8K-T = C120  
MID H10-T = C25  
MID H12K-T = C32

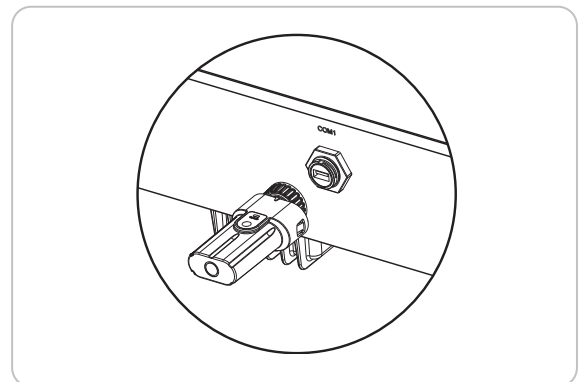


\*Smart Meter consists of ACR10R and SM. Define the cable connections for the meter based on the actual meter model and refer to Meter Terminals Definition. This cable diagram is for reference only.

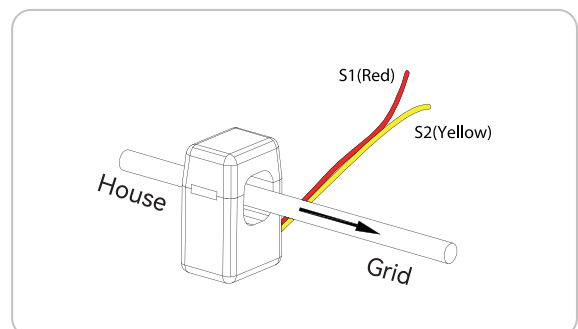
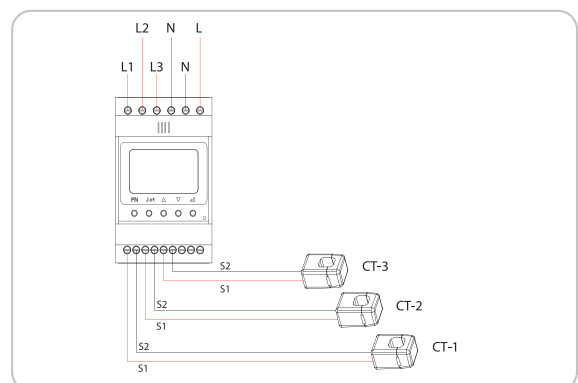
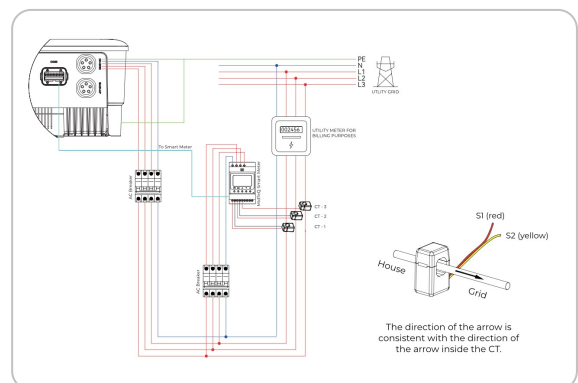
## C. AC Connection



## D. Monitoring Device Installation



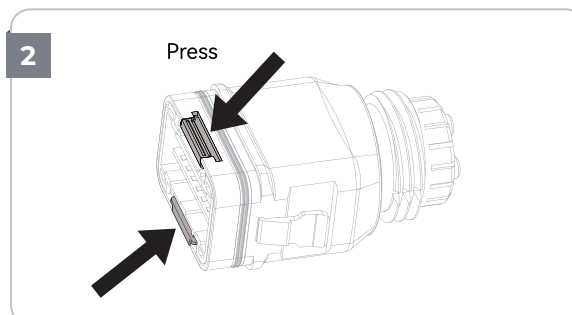
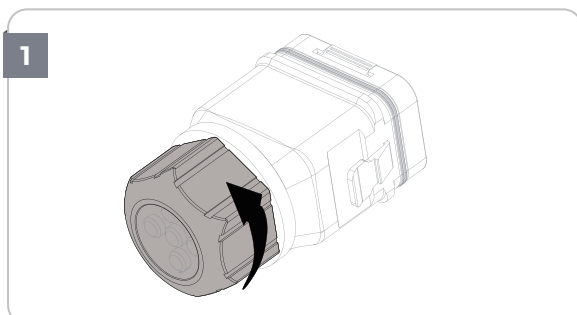
## E. Meter and CT Connection

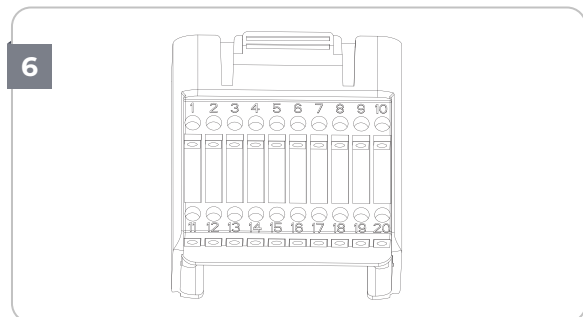
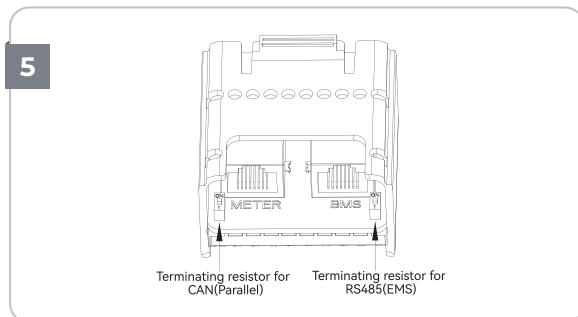
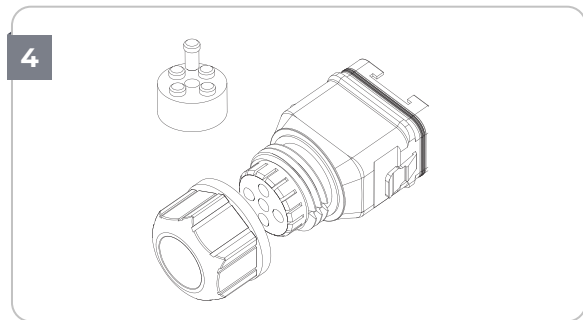
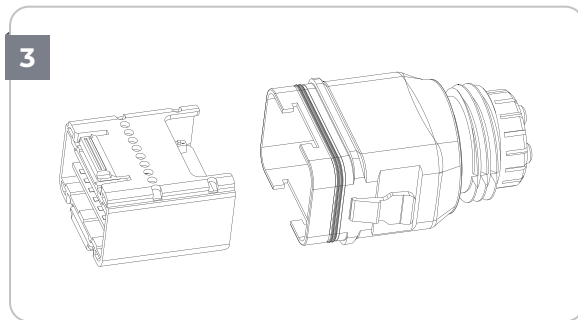


## Meter Terminals Definition

| No.    | Definition |         | Function                                                         |
|--------|------------|---------|------------------------------------------------------------------|
|        | ACR10R     | SM      |                                                                  |
| 1      | L1-S1      |         | To detect the CT current and direction                           |
| 2      | L2-S2      |         |                                                                  |
| 3      | L2-S1      |         |                                                                  |
| 4      | L2-S2      |         |                                                                  |
| 5      | L3-S1      |         |                                                                  |
| 6      | L3-S2      |         |                                                                  |
| 7      | /          | PE      | Ground connection                                                |
| 8      | L          | /       | Power supplied from grid                                         |
| 9      | N          | /       |                                                                  |
| RS485  | /          | Reserve |                                                                  |
|        | RS485      | RS485-2 | Communicate with hybrid Inverter                                 |
| ANT    | /          | Reserve |                                                                  |
| LAN    | /          | Reserve |                                                                  |
| Type-C | /          | Type-C  | Specified debug interface.<br>Do not use it by non-professionals |

## F. Communication Connection

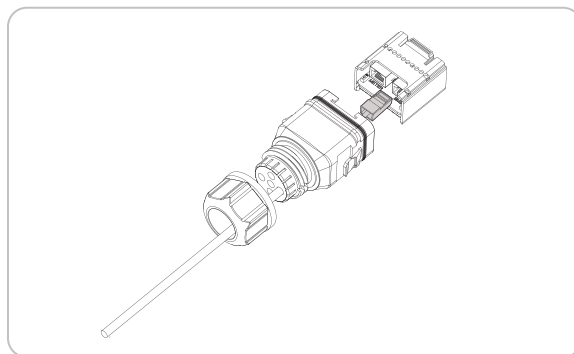
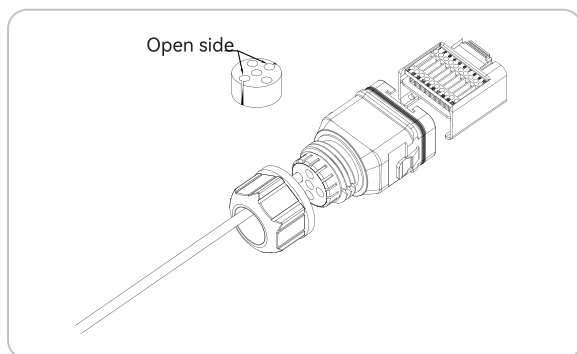




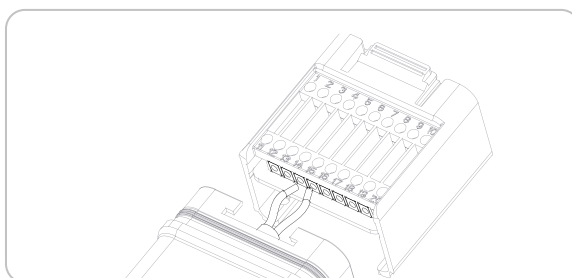
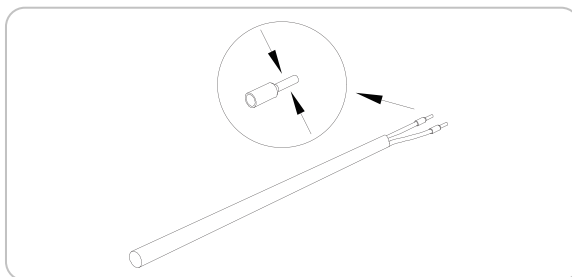
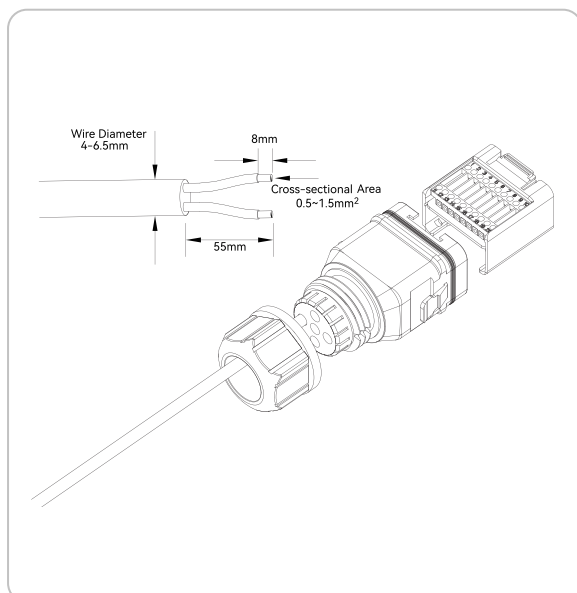
| Pin            | Definition         | Function                                                                                   |
|----------------|--------------------|--------------------------------------------------------------------------------------------|
| Meter (RJ45-1) | RS 485             | Communication with Meter                                                                   |
| BMS (RJ45-1)   | CAN                | Communication with BMS                                                                     |
| 1              | COM                | Multifunction Relay                                                                        |
| 2              | NO (Normally Open) |                                                                                            |
| 3-4            | /                  | Reserved                                                                                   |
| 5              | DRM4/8             | DRED For Australia and<br>New Zealand RCR For Germany and<br>some other European countries |
| 6              | DRM3/7             |                                                                                            |
| 7              | DRM2/6             |                                                                                            |
| 8              | DRM1/5             |                                                                                            |
| 15             | COM D/0            |                                                                                            |
| 16             | REF D/0            |                                                                                            |
| 9-10           | /                  | Reserved                                                                                   |
| 11             | Emergency stop +   | Emergency stop                                                                             |
| 12             | Emergency stop -   |                                                                                            |
| 13             | 485 B1             | EMS                                                                                        |
| 14             | 485 A1             |                                                                                            |
| 17             | CANL_P             | CAN for parallel connection of inverters                                                   |
| 18             | CANH_P             |                                                                                            |
| 19-20          | /                  | Reserved                                                                                   |

**Note:** Abbreviations used in the communication table refer to functions for controlling and monitoring the system. A brief explanation: DRED (Demand Response Enabling Device) enables remote control by the grid operator. DRM4/8 stand for control modes in load management. COM D/0 and REF D/0 are digital output signals for controlling external systems. EMS (Energy Management System) controls energy flows.

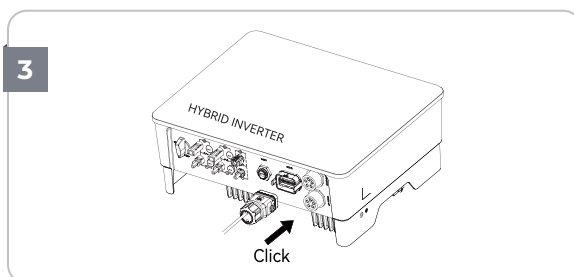
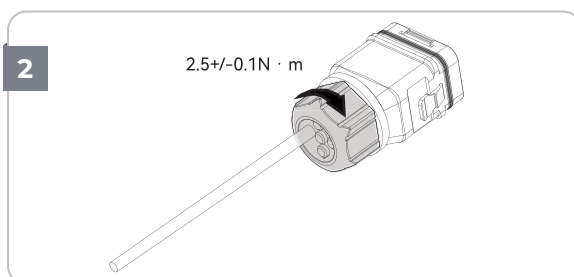
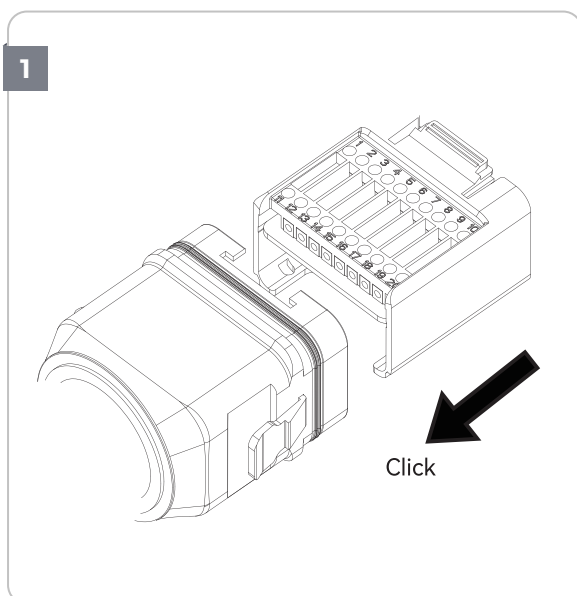
## Connect the Meter and BMS Communication Cables



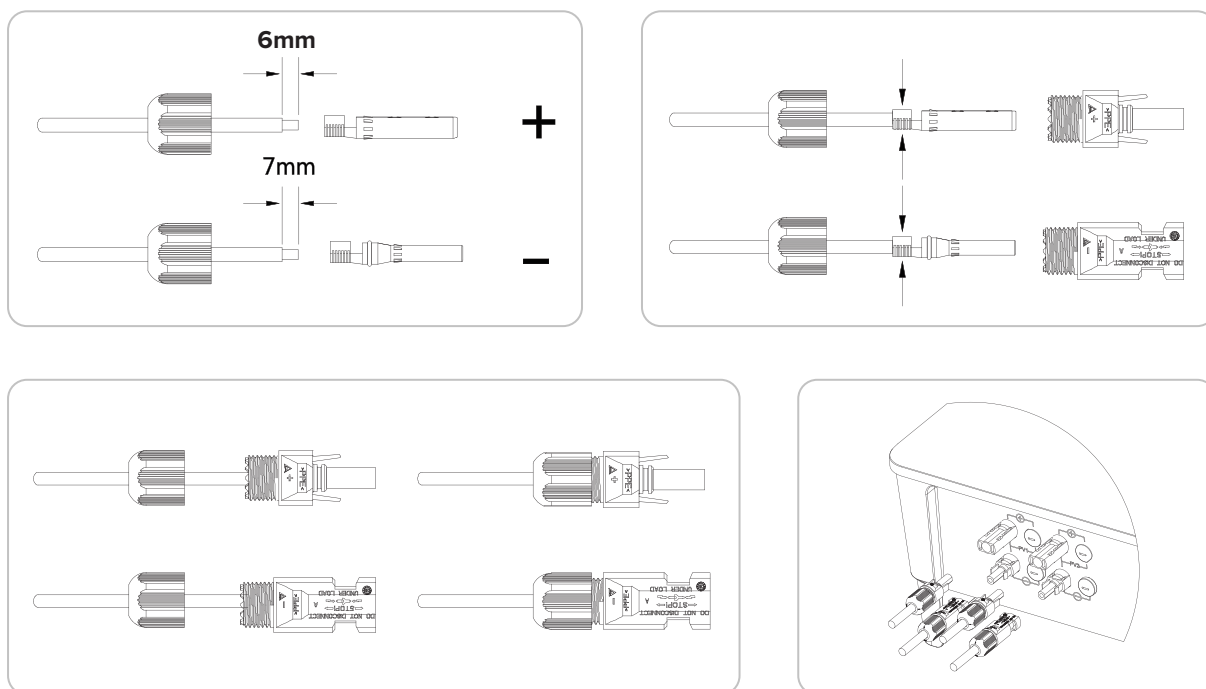
## Connect Other Cables



## Installing the COM Connector

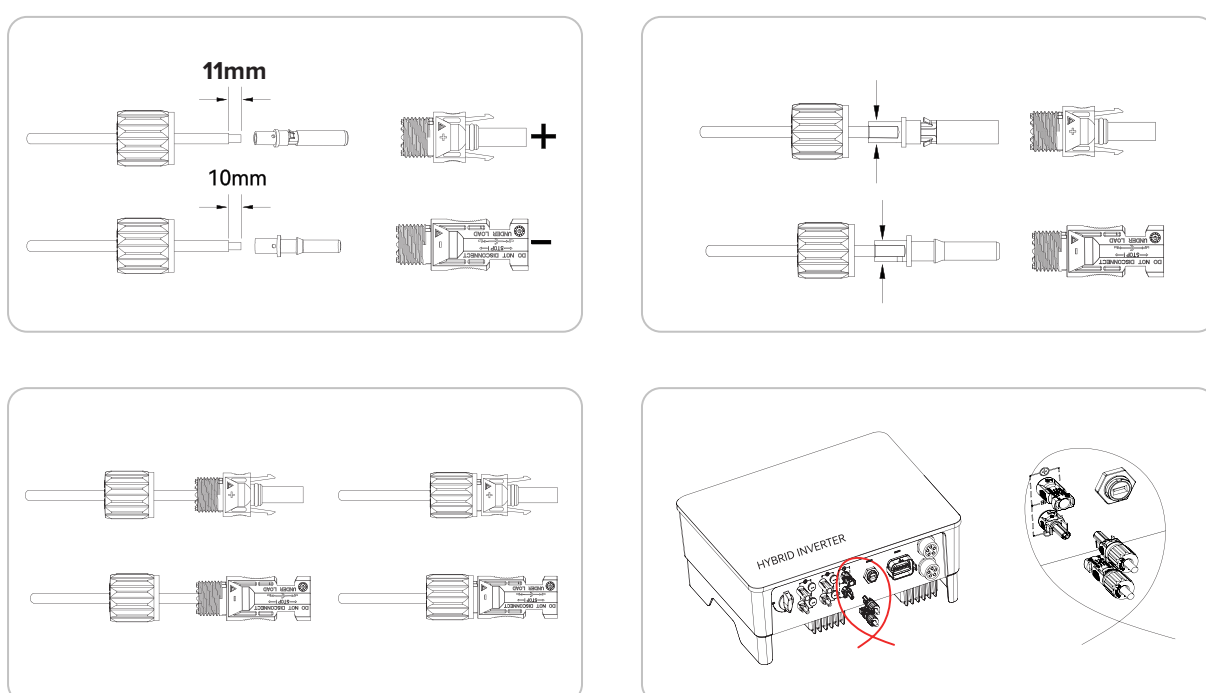


## G. PV String Connection



PV Max. Input voltage is 950V without battery, or 850V with battery, otherwise inverter will be waiting.

## G. PV String Connection

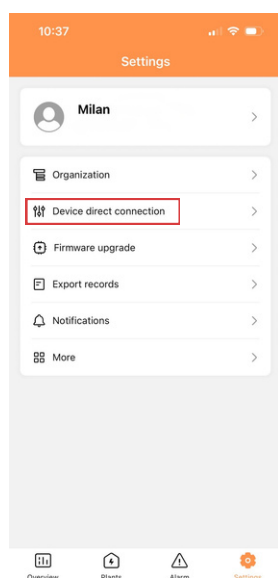




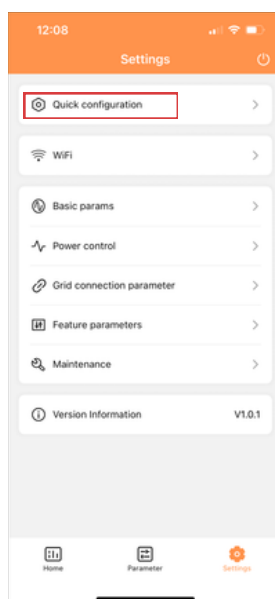
## Quick Inverter Installation via **MidTeQ Solar Link**

Scan the QR code to open the app directly.

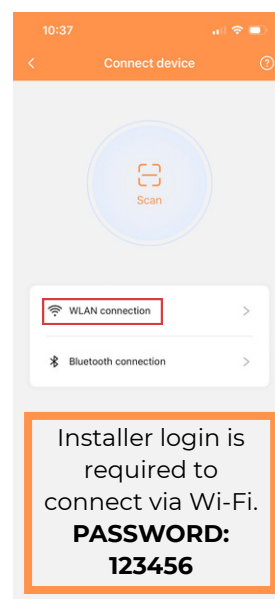
- 1** Direct connection to the device



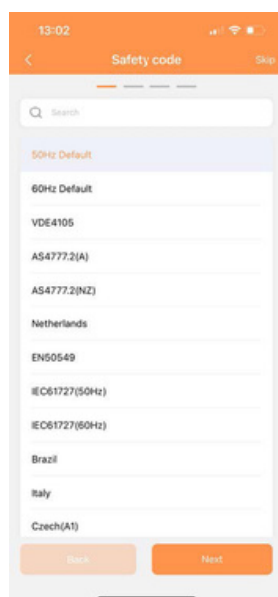
- 2** Quick configuration



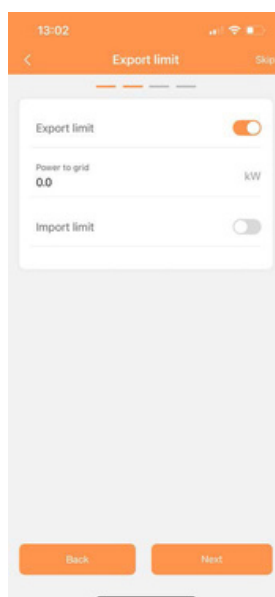
- 3** Direct Wi-Fi connection



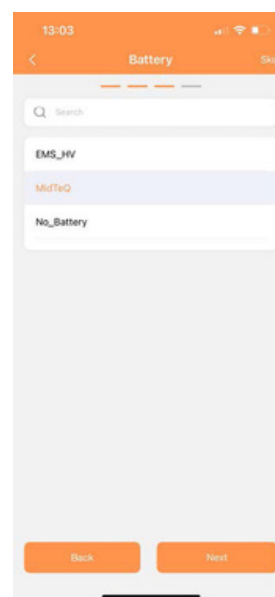
- 4** Select the grid code according to the country



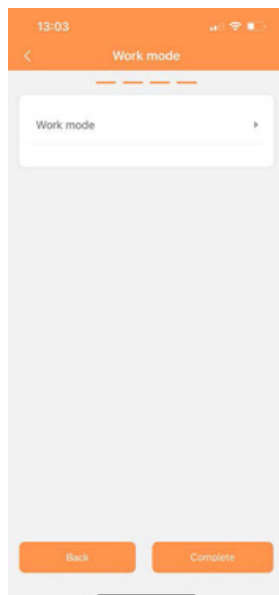
- 5** Adjust grid power feed-in



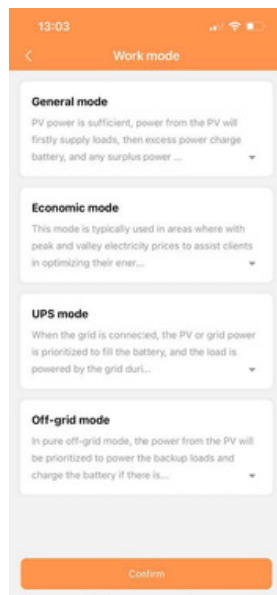
- 6** Select the battery (MidTeQ)



**7** Select the inverter operating mode (Step A)



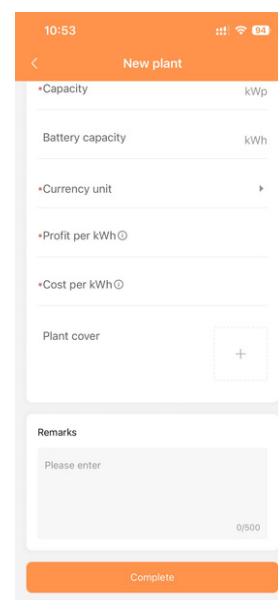
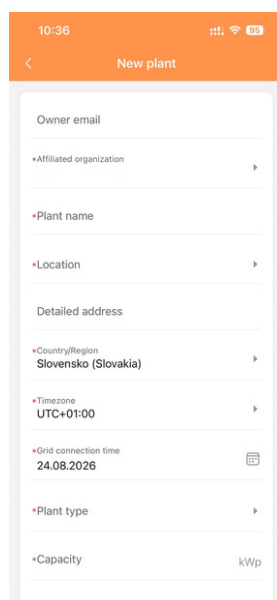
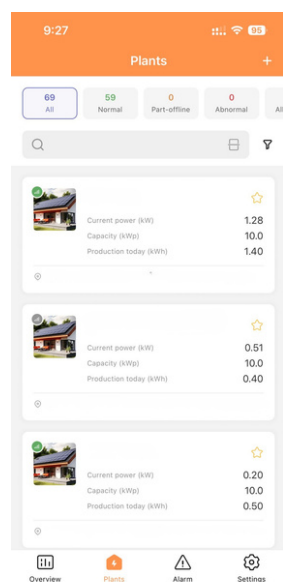
**8** Select the inverter operating mode (Step B)



**9** Complete the quick configuration

After completing the quick configuration, always return to the app and start the firmware update.

**10** Create a power plant in the app



## 3. Indicator

### A. Inverter

| Indicator                 | Status        |                  | Description                                                                        |
|---------------------------|---------------|------------------|------------------------------------------------------------------------------------|
| Power and Alarm Indicator | Off           |                  | No power.                                                                          |
|                           | Green         | Quick flashing   | Inverter entered self-test status.                                                 |
|                           |               | Slow flashing    | Inverter entered waiting status.                                                   |
|                           |               | Breathe flashing | Inverter works normal.                                                             |
|                           | Orange        | Breathe flashing | Low battery warning, the battery power is about to reach the SOC protection value. |
|                           | Red           | Always on        | An alarm or fault is detected, view the fault info on the display.                 |
| Grid Indicator            | Off           |                  | Grid lost.                                                                         |
|                           | Slow flashing |                  | Inverter detected grid but running in on-grid mode.                                |
|                           | Always on     |                  | Inverter works in on-grid mode.                                                    |
| Communication Indicator   | Green         | Always on        | The inverter communication is running normally.                                    |
|                           | Green         | Flashing         | The inverter communication with EMS or Master inverter through RS485 or CAN.       |
|                           | Orange        | Always on        | The inverter isn't communicating with smart meter.                                 |
|                           | Red           | Always on        | The inverter isn't communicating with the BMS.                                     |

## B. Monitoring Device

| Indicator Status | Description                                                                                                        |
|------------------|--------------------------------------------------------------------------------------------------------------------|
| Off              | Connection abnormal                                                                                                |
| Always On        | Communicate with the server normally                                                                               |
| Slow flashing    | The monitoring device is not connected to the router or is not connected to the base station.                      |
| Quick flashing   | The monitoring device is connected to the router or connected to the base station but not connected to the server. |

| Button         | Description                                                                                                                                        |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Press 1 second | Reset device, the indicator goes off for 2 seconds, then flashes normally.                                                                         |
| Press 5 second | Restore factory default settings, the indicator goes off for 2 seconds, then flashes once every 2 seconds, until the factory restore is completed. |

**NOTE:** For the WiFi Module and App Configuration Guide scan the QR code:



**Disclaimer:**

The product warranty does not cover product damage caused by failure to follow the storage, transportation, installation, and usage guidelines specified in this document and the user manual.

You can also download this quick use guide in your language by scanning below QR code:

**SCAN ME**

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