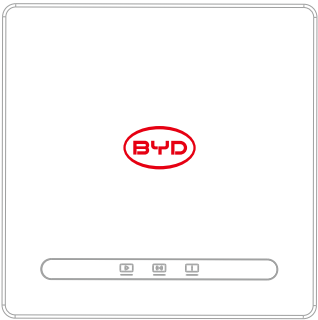




# Single Phase Hybrid Inverter

Power-Box SH3K  
Power-Box SH3.7K  
Power-Box SH4.6K  
Power-Box SH5K  
Power-Box SH6K

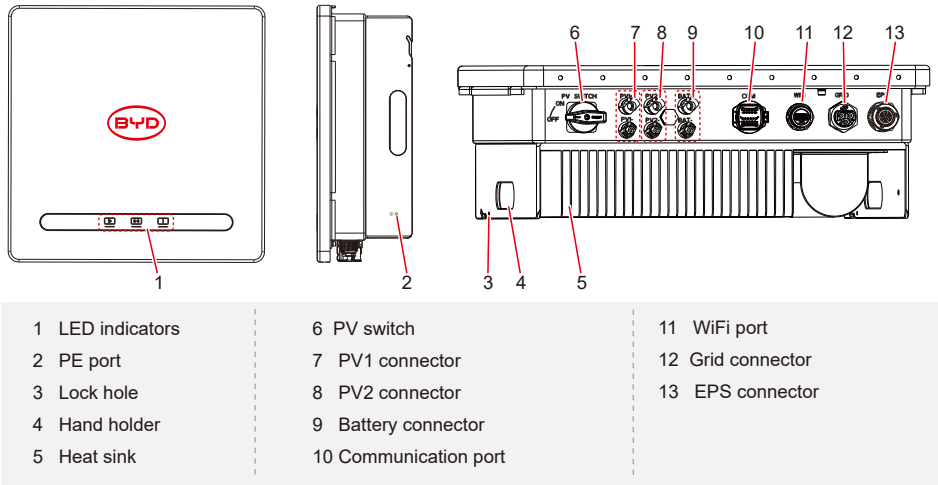


## Quick Start Guide

### NOTICE

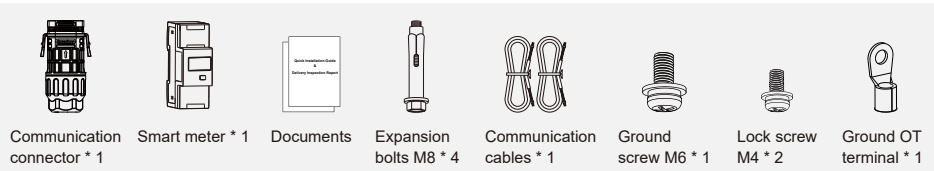
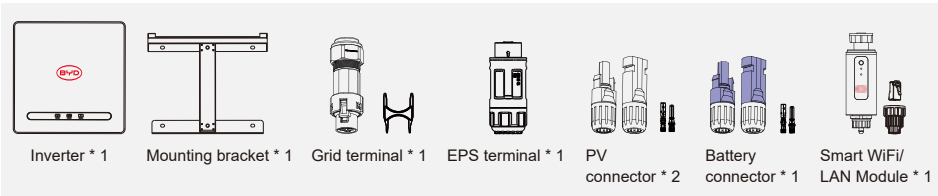
- The information contained in this document is subject to change without prior notice. While every effort has been made to ensure the accuracy of its contents, all statements, information, and recommendations herein do not constitute any form of warranty, either expressed or implied. This document is for quick guidance installation only. For details, please refer to the User Manual.
  - Prior to installing the device, please read the user manual thoroughly to familiarize yourself with the product information and safety precautions.
  - Only certified electricians are permitted to operate the device. Personnel must wear appropriate personal protective equipment (PPE) at all times.
  - Before installation, verify that the package contents are complete and undamaged, as per the packing list. Should you discover any damage or missing components, please contact your dealer immediately.
  - Any damage to the device resulting from non-compliance with the instructions provided in this document will not be covered under warranty.
  - The cable colors referenced in this document are for illustrative purposes only. Please select cables in accordance with local electrical standards and regulations.
- The hybrid inverter supports multiple inverters in parallel. For details, please refer to the User Manual.

## 1 Overview

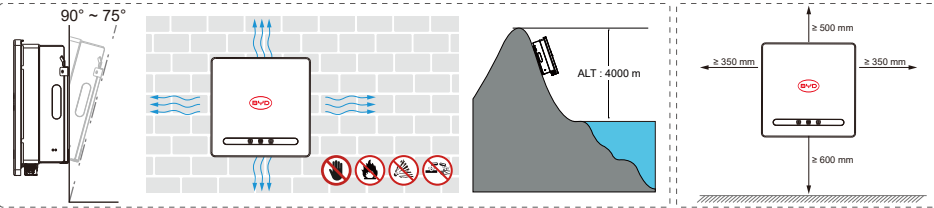


## 2 Installation

### 2.1 Unboxing

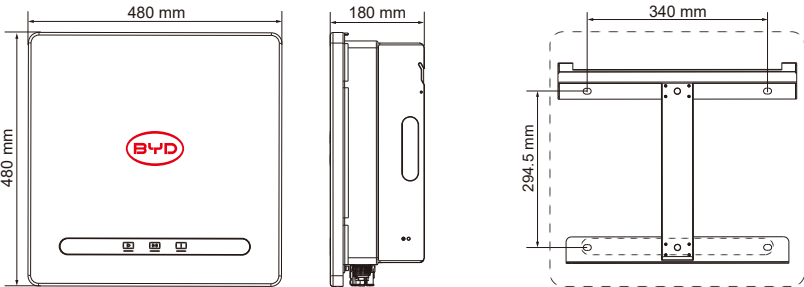


### 2.2 Installation requirements

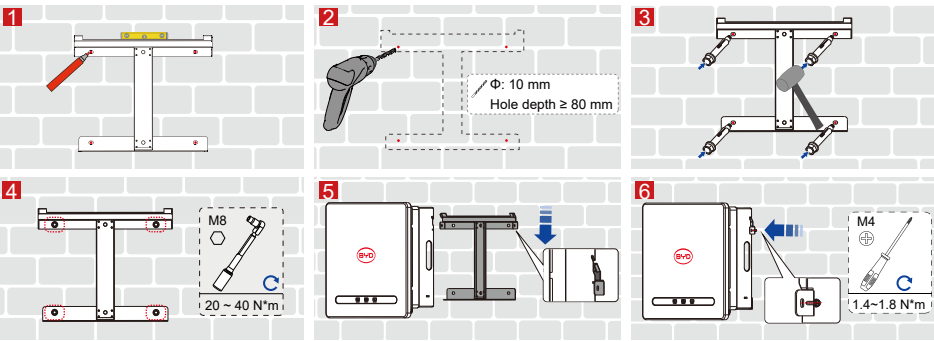


### 2.3 Installation

#### 2.3.1 Mounting hole



#### 2.3.2 Install the mounting bracket

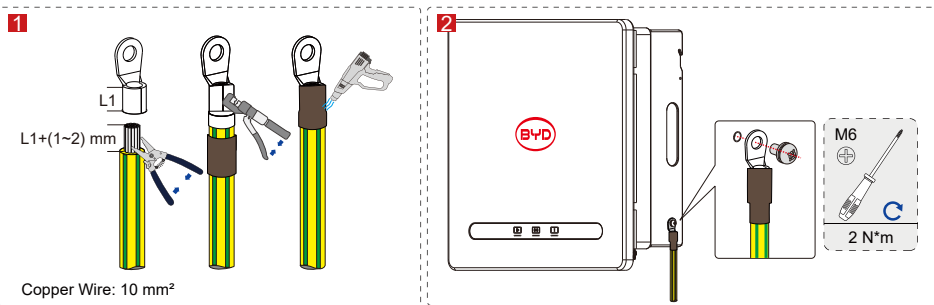


## 3 Electrical Connection

### 3.1 Cables preparation

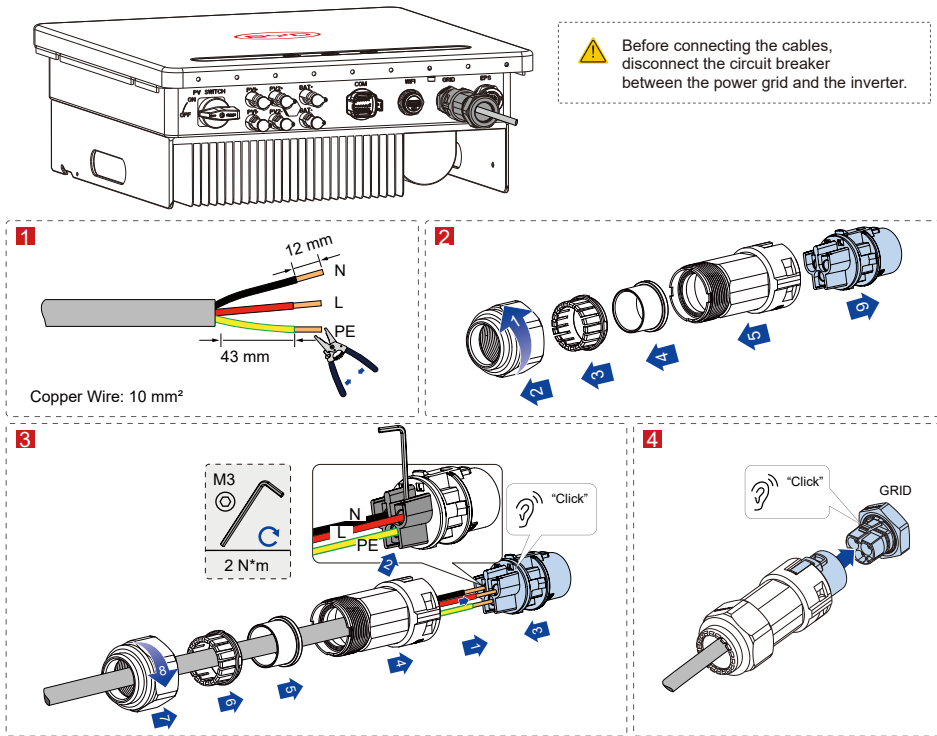
| No. | Cable             | Type                                                                                     | Conductor          |
|-----|-------------------|------------------------------------------------------------------------------------------|--------------------|
| 1   | Grounding cable   | Single multi-core yellow-green copper cable                                              | 10 mm <sup>2</sup> |
| 2   | Grid output cable | Two-core (L and N) or three-core (L / N and PE) different color multi-core copper cables | 10 mm <sup>2</sup> |
| 3   | EPS output cable  | Two-core (L and N) or three-core (L / N and PE) different color multi-core copper cables | 4 mm <sup>2</sup>  |
| 4   | PV input cable    | Photovoltaic dedicated cable (such as PV1-F)                                             | 4 mm <sup>2</sup>  |
| 5   | Battery cable     | Red and black multi-core copper                                                          | 6 mm <sup>2</sup>  |

### 3.2 PE cable

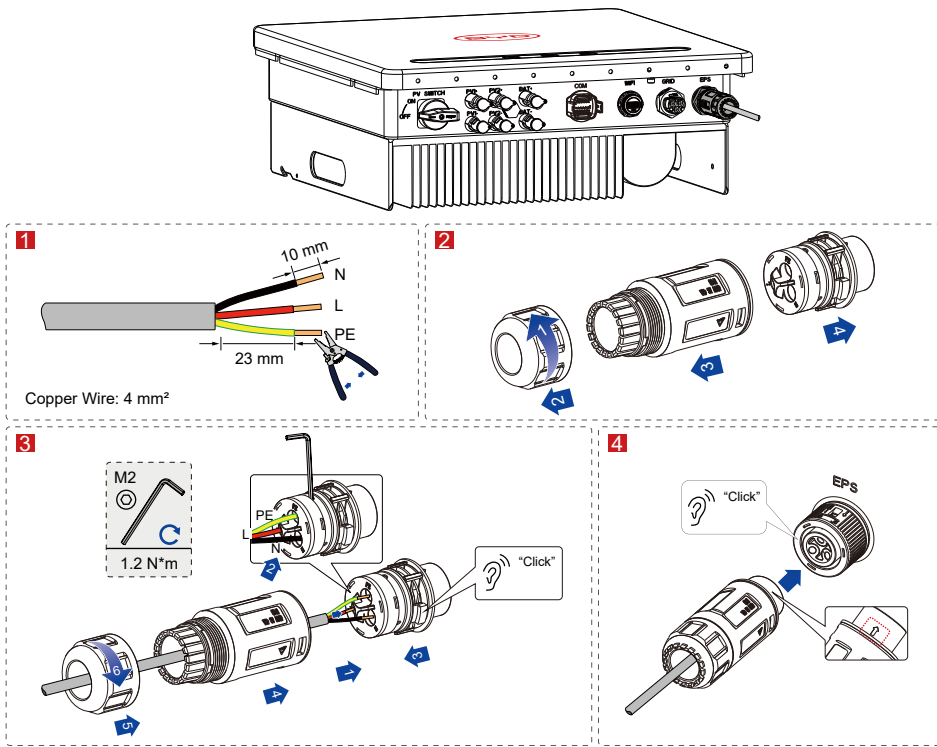


### 3.3 AC Cable

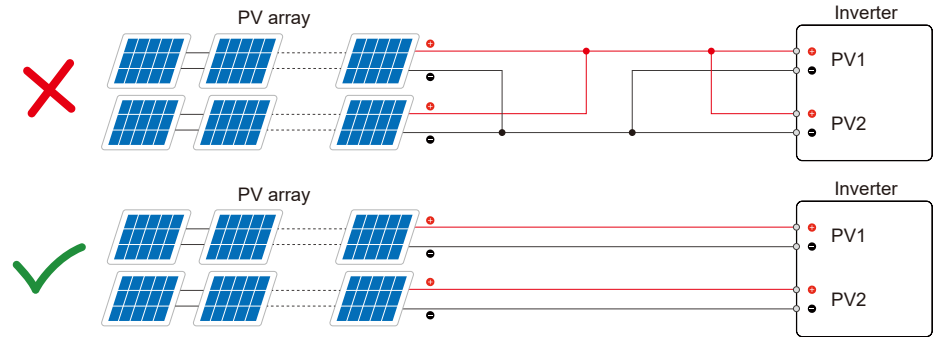
#### 3.3.1 Grid cable

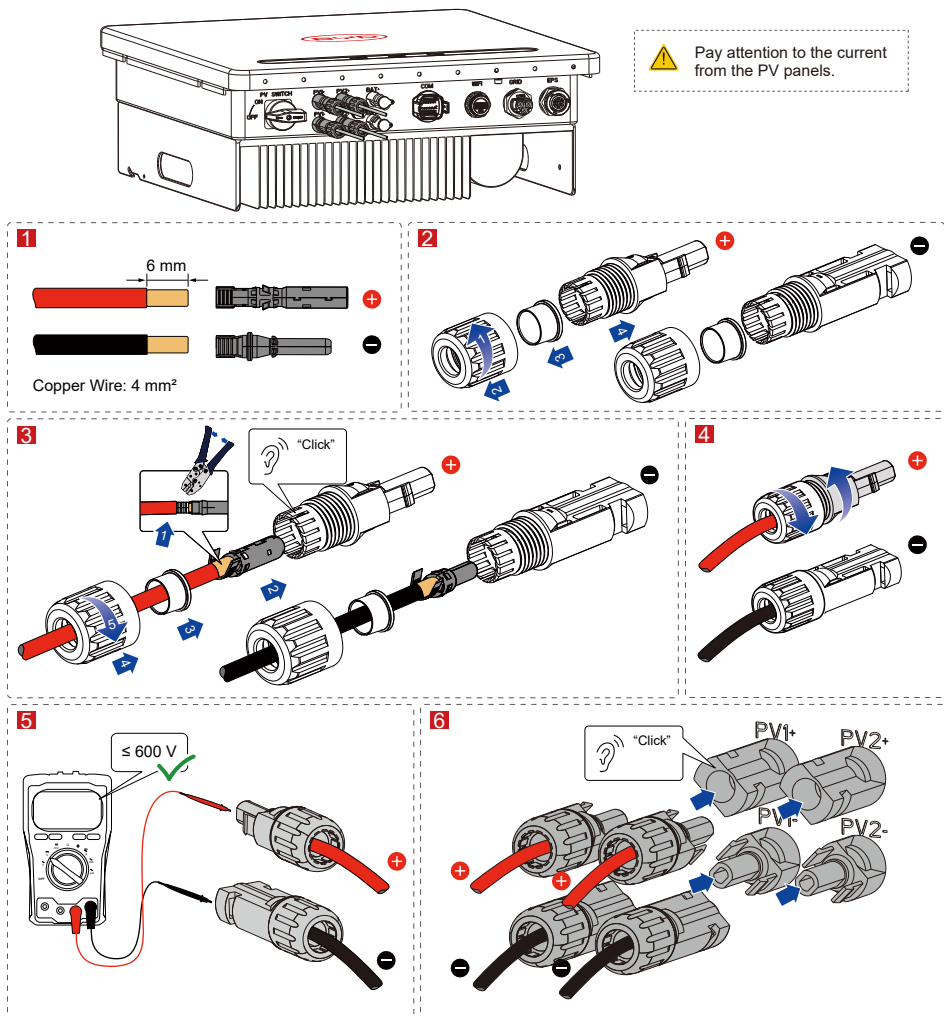


#### 3.3.2 Eps cable

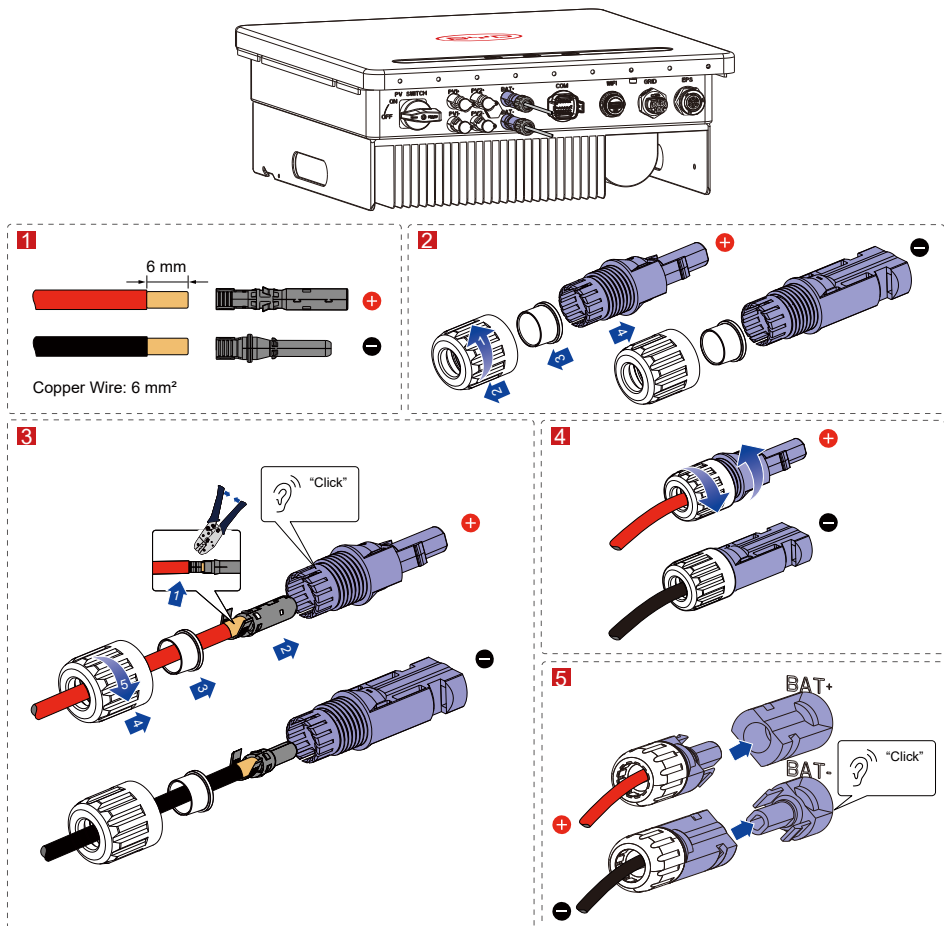


### 3.4 PV cable

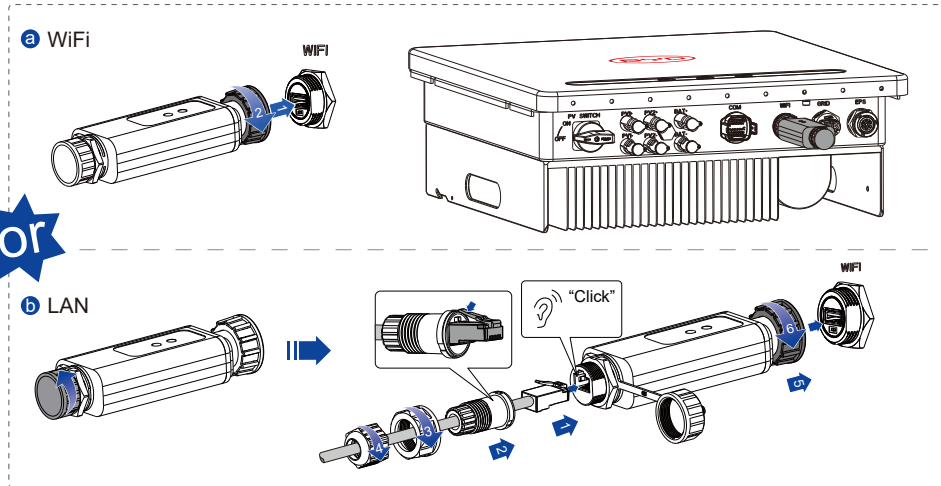




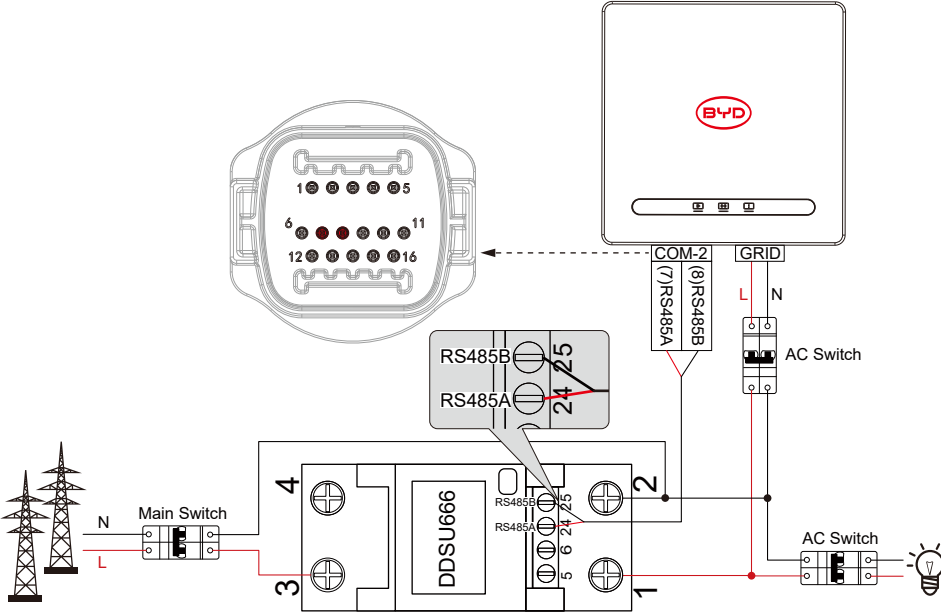
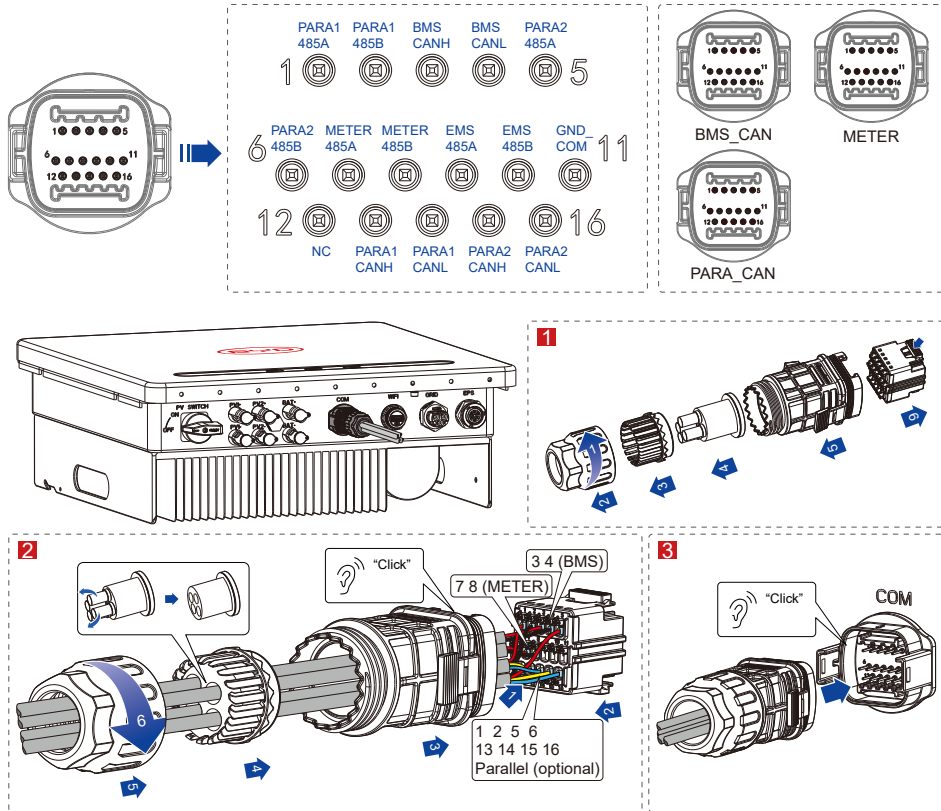
3.5 Battery cable



3.6 Connection of WiFi & BLE stick



3.7 Communication cable

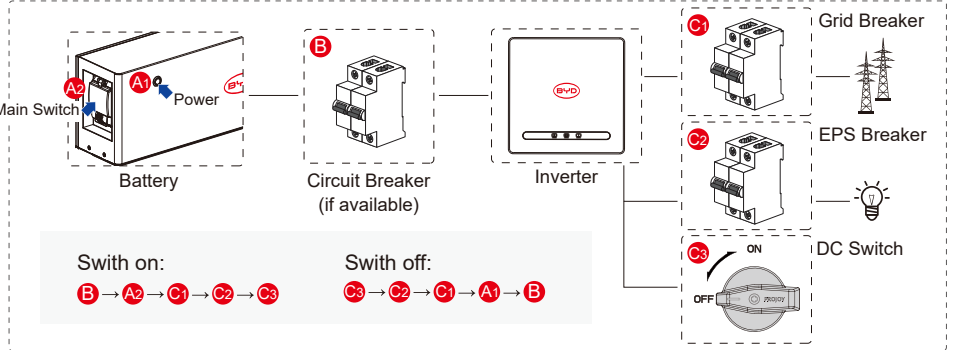


## 4 Commissioning

### 4.1 Check before power on

| No. | Checking Item                                                            | Inspection result<br>Yes √ / No × |
|-----|--------------------------------------------------------------------------|-----------------------------------|
| 1   | Hybrid inverter is installed correctly and firmly.                       | <input type="checkbox"/>          |
| 2   | All switches off.                                                        | <input type="checkbox"/>          |
| 3   | WiFi & BLE stick Installation is installed correctly and firmly.         | <input type="checkbox"/>          |
| 4   | The ground wire confirms the connection and is reliable.                 | <input type="checkbox"/>          |
| 5   | Cable wiring is reasonable, meets the requirements, no broken skin, etc. | <input type="checkbox"/>          |
| 6   | All wires are correct and securely connected.                            | <input type="checkbox"/>          |
| 7   | Cable tie port trimming, no sharp corners, etc.                          | <input type="checkbox"/>          |
| 8   | All exposed terminals are well protected, no vacant ports.               | <input type="checkbox"/>          |
| 9   | Pay attention to packing all the residual materials.                     | <input type="checkbox"/>          |

### 4.2 Power on / off



| Category            | Symbol | Status | Definition                                              |
|---------------------|--------|--------|---------------------------------------------------------|
| Operation light     |        |        | On-grid operation                                       |
|                     |        |        | Standby mode                                            |
|                     |        |        | Off-grid operation                                      |
| Communication light |        |        | Normal communication (battery / meter)                  |
|                     |        |        | Abnormal / disconnected communication (battery / meter) |
| Fault light         |        |        | Serious fault, need to stop for inspection              |

### 4.3 Setting inverter parameters via BYD Energy App

Please set the inverter parameters first via BYD Energy App to ensure its normal operation. BYD Energy App is a smart phone application used to communicate with the inverter via Smart WiFi/LAN Module.

Commonly used functions:

1. Check the operating data, software version, alarms, etc.
2. Set grid parameters, communication parameters, etc.
3. Maintain the equipment.
4. Upgrade the software version of the inverter.

You can scan the QR code or visit the provided link (<http://www.bydenergy.com/smartEnergy?locale=EN>) to download the BYD Energy App and access the user manual.

