2026-09-21 / V2.4 / EN

Three-Phase Hybrid Inverter

Power-Box TH5K
Power-Box TH6K
Power-Box TH8K
Power-Box TH10K
Power-Box TH10K-BE
Power-Box TH12K
Power-Box TH15K



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.
- 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.

Scan the QR code to access the latest documents.

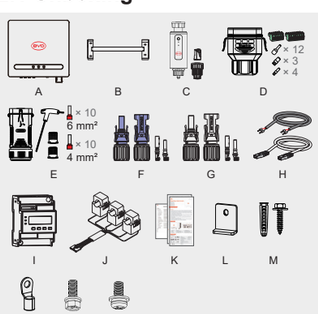
Scan the QR code to access installation guides for advanced functions, including parallel systems, AC coupling and other extended features.

1 Overview

1 Indicator light	5 BAT input port	8 Communication port
2 Hangers	6 SRV-Safety relief valve	9 Protective ground terminal
3 DC switch	7 Communication module interface	10 On-grid / Backup terminal
4 PV input port	(WiFi / Bluetooth / LAN)	*11 Cooling fan (Power-Box TH12/15K)

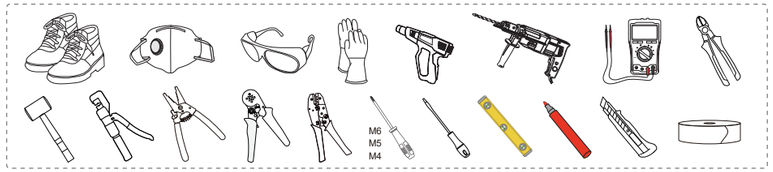
2 Installation

2.1 Unboxing

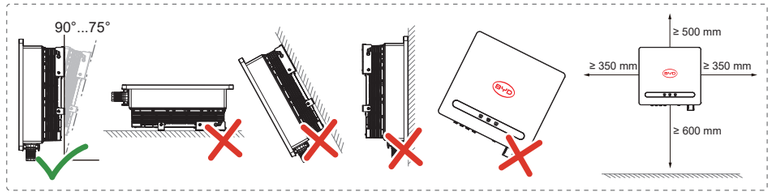


A Inverter × 1	L L-shaped support × 2
B Mounting bracket × 1	M Expansion plug set × 4
C Smart WiFi/LAN Module × 1	N OT terminal × 1
D Communication connector × 1	O M5 × 12 screw × 4
E AC connector × 1	P M4 × 8 screw × 1
F Battery connector × 1	
G PV connector × 3 * 2 sets of PV terminals (Power-Box TH5/6/8/10K)	
H BMS and Meter communication cables × 1	
I Smart Meter × 1	
J CT × 1	
K Documents × 1	

2.2 Tools & additional accessories (not included in the scope of delivery)

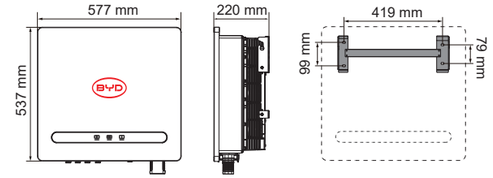


2.3 Installation requirements

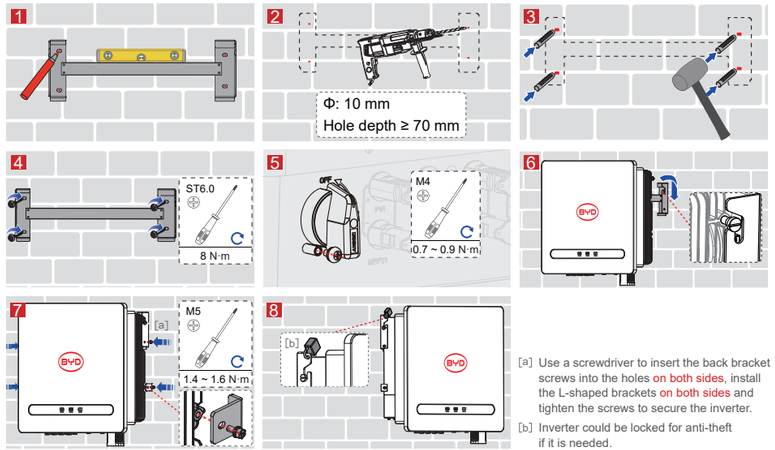


2.4 Installation

2.4.1 Mounting hole



2.4.2 Install the mounting bracket



[a] Use a screwdriver to insert the back bracket screws into the holes on both sides, install the L-shaped brackets on both sides and tighten the screws to secure the inverter.

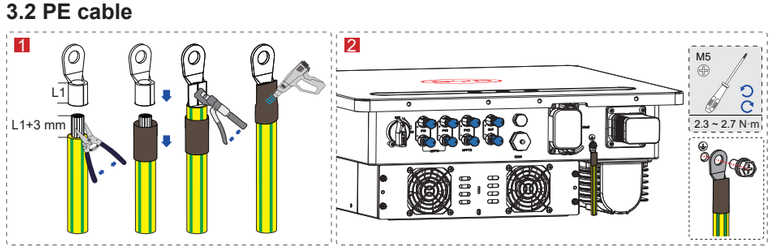
[b] Inverter could be locked for anti-theft if it is needed.

3 Electrical Connection

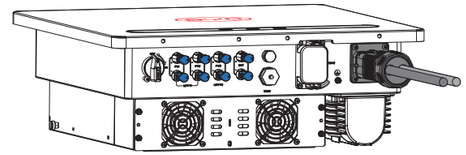
3.1 Cables description

Grounding cable	AC cable (On-grid / Backup)	PV input cable	Battery input cable	Communication cable	Heat Shrink Tubing
6 mm²	4 mm² Ø: 14 ~ 16 mm 6 mm² Ø: 18 ~ 22 mm	4 ~ 6 mm² Ø: 4 ~ 8 mm	6 mm² Ø: 4 ~ 8 mm	Cat.5e cable and above Ø: 5 ~ 6.5 mm 0.2 ~ 0.5 mm² Ø: 4 ~ 5 mm	Ø: 8 ~ 10 mm

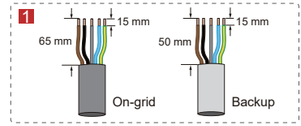
3.2 PE cable

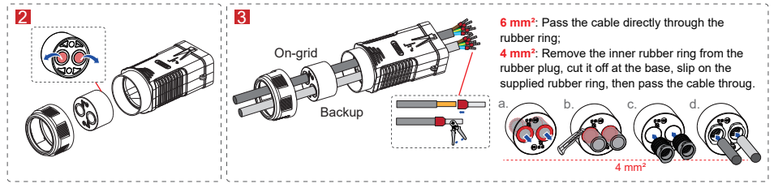


3.3 AC cable (On-grid and Backup)

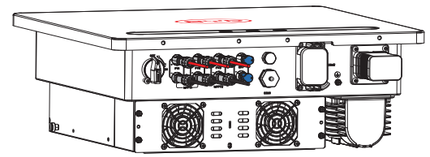


Before connecting the cables, disconnect the circuit breaker between the power grid and the inverter.

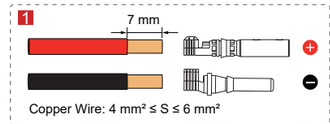


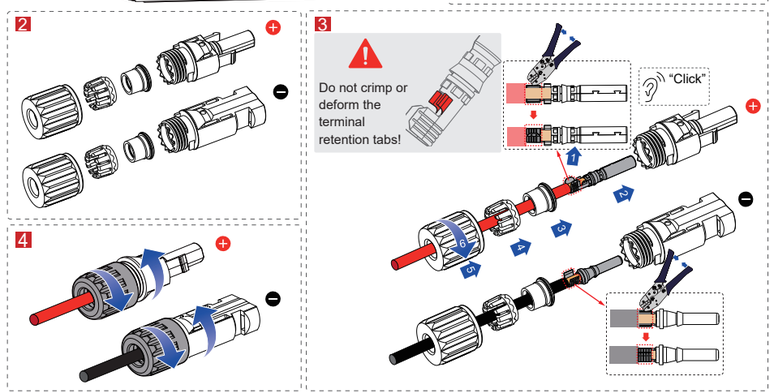


3.4 PV cable

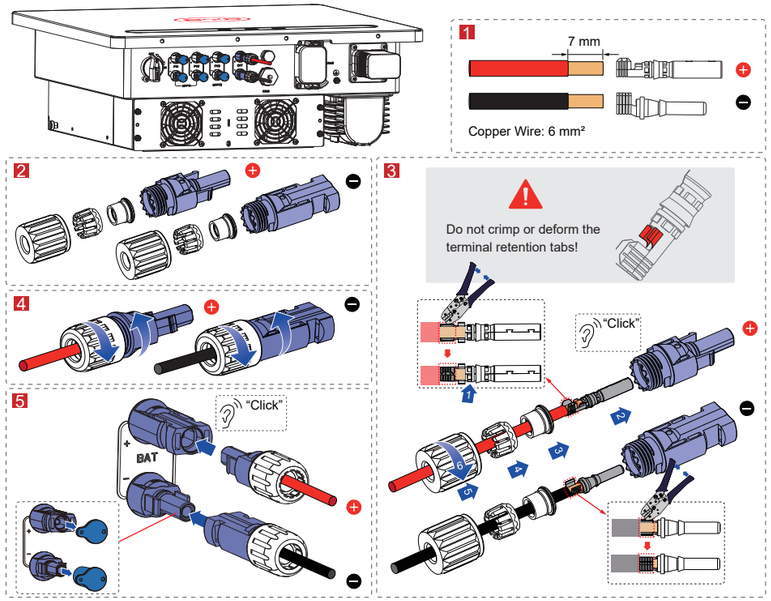


Pay attention to the high voltage from the PV panels.

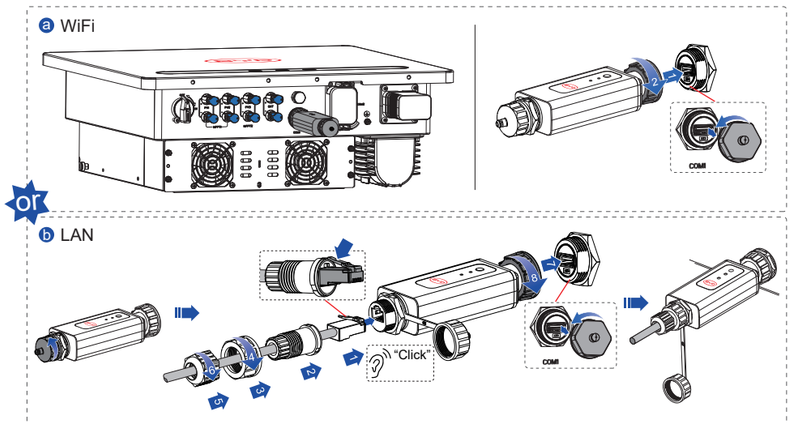




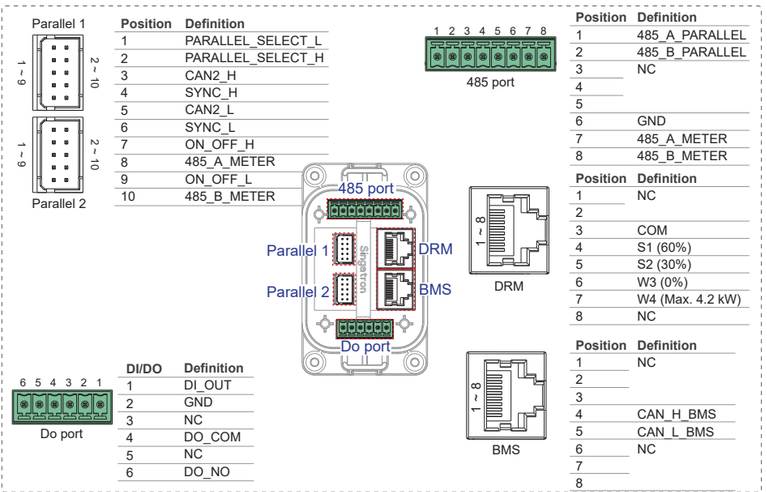
3.5 Battery input cable



3.6 Connection of Smart WiFi/LAN Module (a or b)



3.7 Communication cable



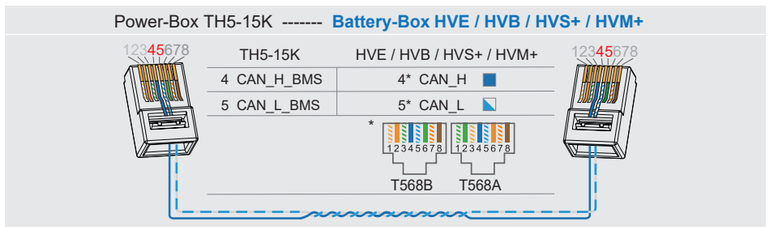
Position	Definition
1	PARALLEL_SELECT_L
2	PARALLEL_SELECT_H
3	CAN2_H
4	SYNC_H
5	CAN2_L
6	SYNC_L
7	ON_OFF_H
8	485_A_METER
9	ON_OFF_L
10	485_B_METER

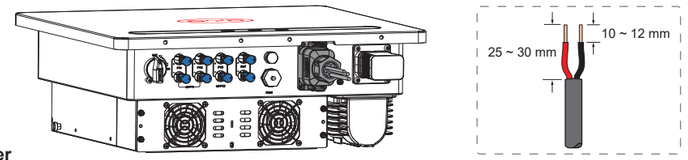
Position	Definition
1	485_A_PARALLEL
2	485_B_PARALLEL
3	NC
4	
5	
6	GND
7	485_A_METER
8	485_B_METER

Position	Definition
1	NC
2	
3	COM
4	S1 (60%)
5	S2 (30%)
6	W3 (0%)
7	W4 (Max. 4.2 kW)
8	NC

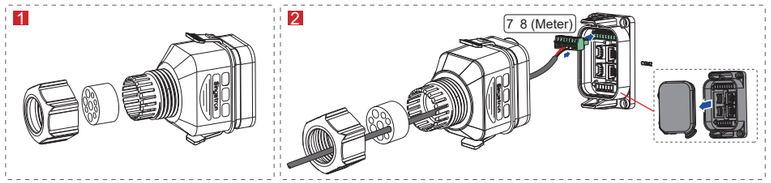
Position	Definition
1	NC
2	
3	
4	CAN_H_BMS
5	CAN_L_BMS
6	NC
7	
8	

DI/DO	Definition
1	DI_OUT
2	GND
3	NC
4	DO_COM
5	NC
6	DO_NO

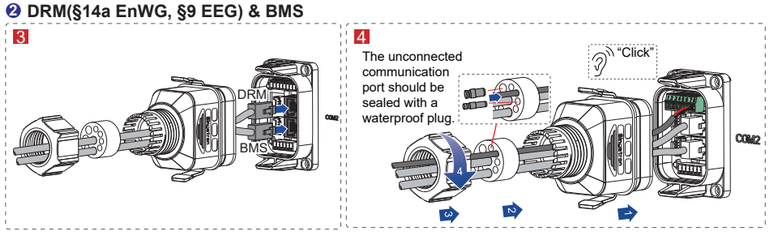




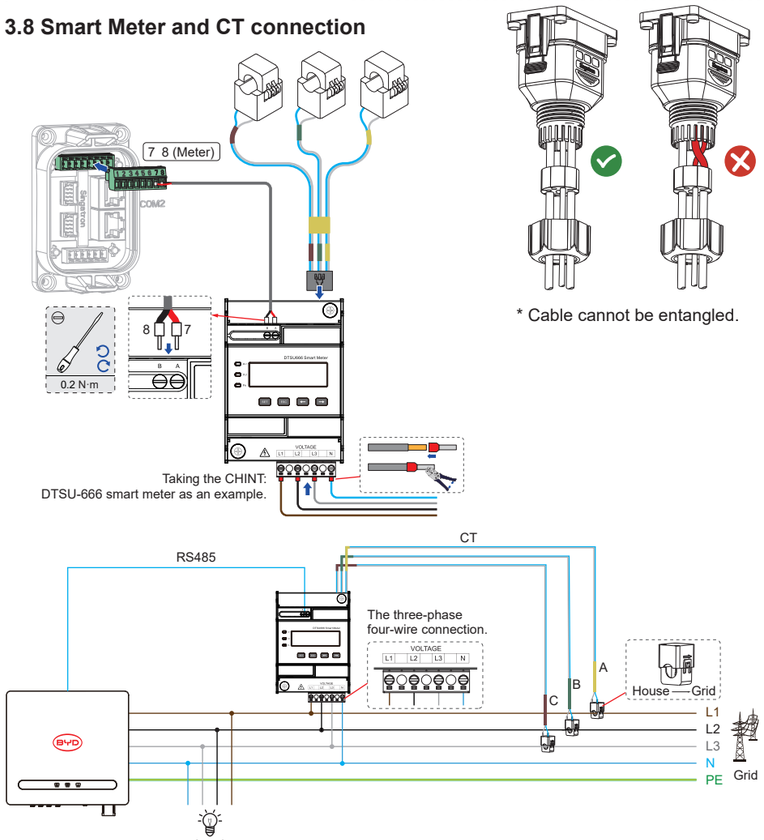
❶ Meter



❷ DRM(§14a EnWG, §9 EEG) & BMS



3.8 Smart Meter and CT connection

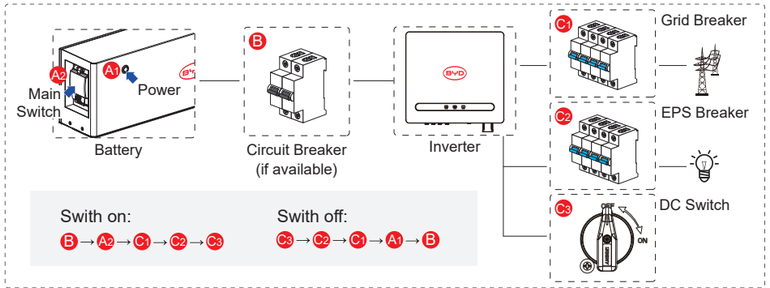


4 Commissioning

4.1 Check before power on

No.	Checking item	Inspection result Yes √ \ No ×
1	Check whether the DC switch of the inverter is in the “OFF” position.	☐
2	The product is firmly installed at a clean place that is well-ventilated and easy-to-operate.	☐
3	The PE, DC input, AC output, and communication cables are connected correctly and securely.	☐
4	Cable ties are intact, routed properly and evenly.	☐
5	Unused cable holes are fitted using the waterproof nuts.	☐
6	The electrical conduit holes are sealed.	☐
7	The voltage and frequency at the connection point meet the inverter grid connection requirements.	☐
8	Check whether the Smart WiFi/LAN Module is installed correctly.	☐

4.2 Power on / off



Category	Symbol	Status	Definition
Operation light			On-grid operation
		0.5s	Self-check / wait mode
		1s	Off-grid operation
Communication light			Normal communication (battery / meter)
		1s	Abnormal / disconnected communication (battery / meter)
Fault light			Serious fault, need to stop for inspection
Special display		1s	Off-grid and disconnected communication
		1s	Update

*The green, blue and red lights are displayed independently.

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 (www.bydenergy.com) to download the BYD Energy App and access the user manual.

* Before proceeding with system configuration, verify that the inverter firmware is updated to the latest version. If not, perform the firmware update first.

iOS Android

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