2026-09-09 / V1.5 / EN

High Voltage Battery System

Battery-Box HVE 6.4, 8.5, 10.7, 12.8-1, 12.8-2, 15.0, 17.1-1, 19.2,17.1-2, 19.3, 21.4, 23.5



Quick Start Guide

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Disclaimer

1. Target Group

Instructions in this document may only be performed by qualified personnel with the following skills:
- Understand how batteries work and operate.
- Understand the working principle and operation method of the inverter.
- Know and comply with locally applicable connection requirements, standards and directives.
- Understand and follow this document and related system documentation, including all safety instructions.
- Training to handle hazards associated with the installation and operation of electrical equipment and batteries.
- Training on installation and commissioning of electrical equipment.
- For personnel engaged in special scenarios such as working at height or operating special equipment, they must be qualified by the local country or region.
- When installing ≥ 3 modules, tools (lifting devices or ladders) must be used for installation.

2. Firefighting measures

2.1 Extinguishing media

- **Small fire** Sand, carbon dioxide (CO_2), Foam extinguisher
- **Large fire** Foam extinguisher

2.2 Fire precautions and protective measures

Flammable properties	Lithium ion batteries contain flammable liquid electrolyte that may vent,ignite and produce sparks when subjected to high temperature (> 150℃),when damaged or abused (e.g.,mechanical damage or electrical overcharge). Burning cells can ignite other batteries in close proximity.
Explosion data	Extreme mechanical abuse will result in rupture of the batteries. Throw into the fire will result in burning.
Special protective equipment for firefighters	In the event of a fire, wear full protective clothing and self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.
NFPA	Health:0 Flammability:1 Instability:0

Configure the Battery System

Through the APP, you can realize intelligent battery management, including remote data monitoring, firmware upgrade and troubleshooting.

- **Android users:** Search for "BYD Energy" on Google Play or scan Android QR code to download and install.
- **iPhone users:** Search for "BYD Energy" in the App Store or scan iOS QR code to download and install.

Android

iOS

Before configuring the battery system, please confirm that the BCU firmware is the latest version. If not, perform the firmware update on BYD Energy App first.

Configuration steps:

Download → Login/Register → Add Device → Bluetooth Connection /Networking → Enjoy

For detailed configuration steps, please refer to the user manual and APP instructions, Website: www.bydenergy.com.

Requirements for Installation

1. Tools & Additional Accessories (*not included in the scope of delivery*)



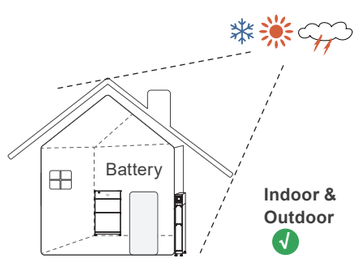
DC Cable 10AWG / 6mm² Ø:5.2-6mm | RJ45 Connector | Data Cable CAT5E Ø:5-6mm | OT Terminal 6mm²-M5 | PE 10AWG / 6mm² | Heat shrink tube Ø:6-8mm

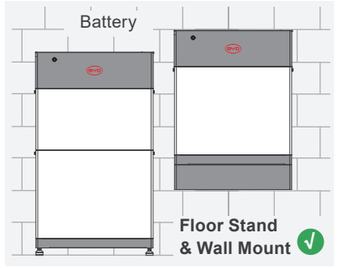
2. Safety Gear & Required Personnel



Insulated gloves | Goggles | Safety shoes | 2~3 qualified installers

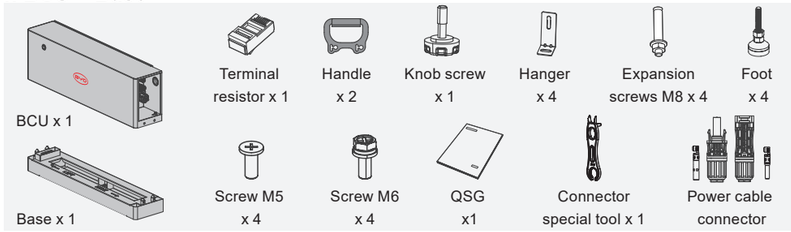
3. Installation Scene & Installation Mode





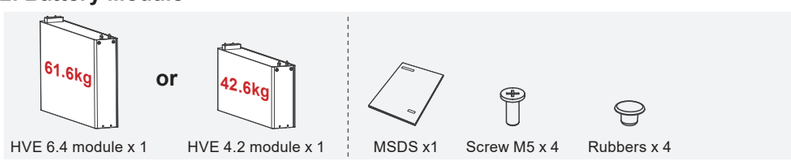
Scope of Delivery

1. BCU + Base



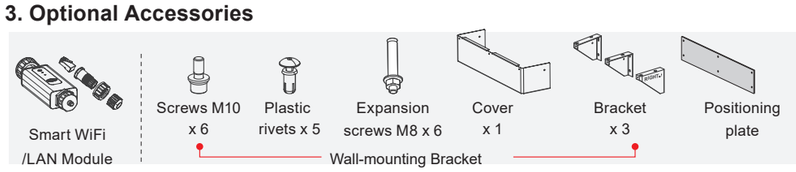
BCU x 1 | Base x 1 | Terminal resistor x 1 | Handle x 2 | Knob screw x 1 | Hanger x 4 | Expansion screws M8 x 4 | Foot x 4 | Screw M5 x 4 | Screw M6 x 4 | QSG x1 | Connector special tool x 1 | Power cable connector

2. Battery Module



HVE 6.4 module x 1 | HVE 4.2 module x 1 | MSDS x1 | Screw M5 x 4 | Rubbers x 4

3. Optional Accessories



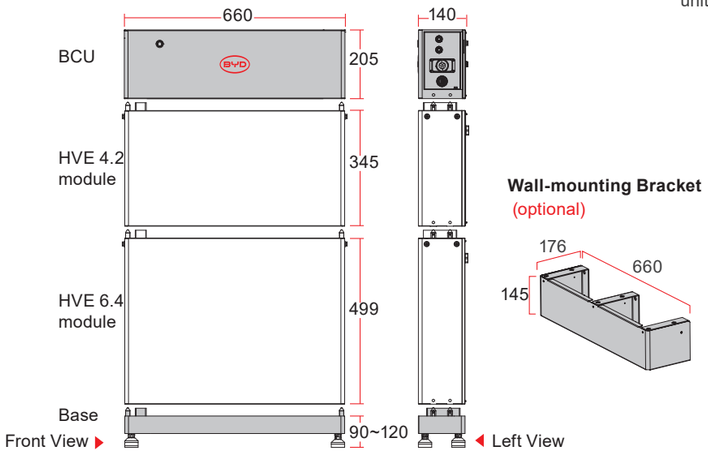
Smart WiFi /LAN Module | Screws M10 x 6 | Plastic rivets x 5 | Expansion screws M8 x 6 | Cover x 1 | Bracket x 3 | Positioning plate

Wall-mounting Bracket

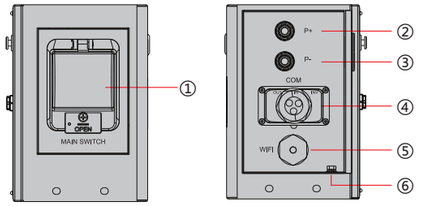
Battery System Overview

1. Structure Dimension Drawing

unit:mm

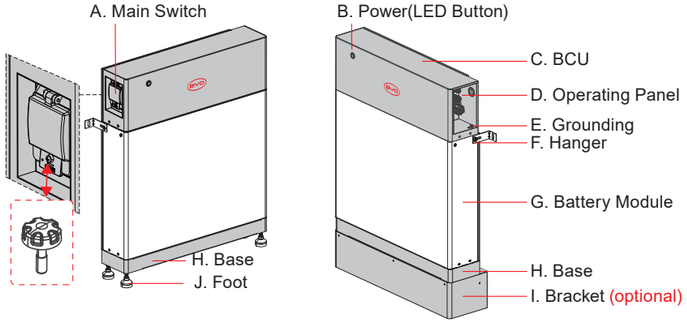


2. Functional Area Overview

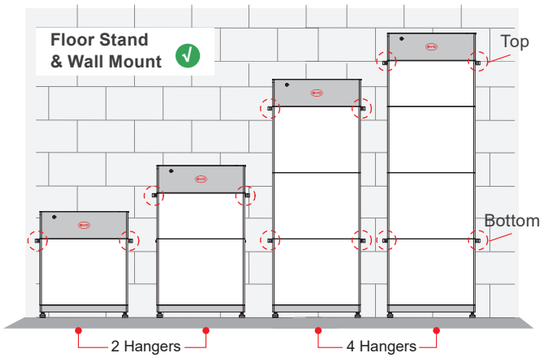


No.	Description
①	MAIN Switch
②	P+
③	P-
④	COM(INV / OUT / IN)
⑤	WIFI
⑥	Grounding

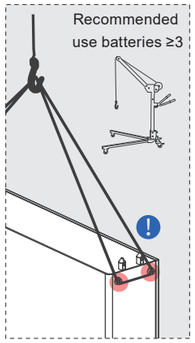
3. Battery System Description



4. Quantity and location of hanger



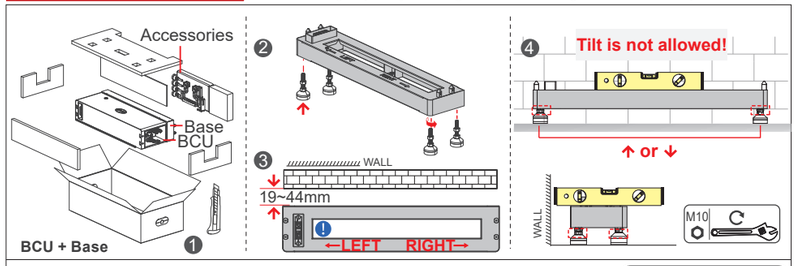
Lifting Device Illustration

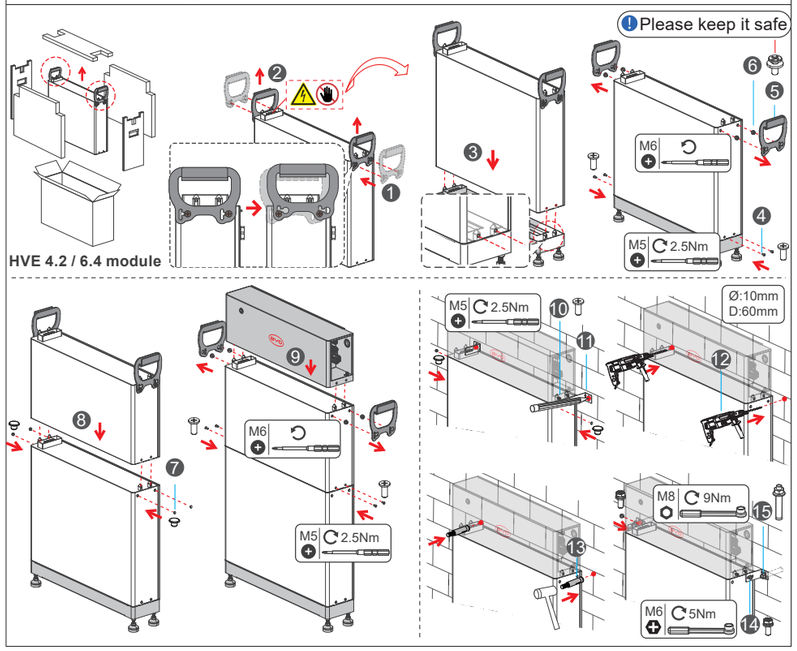


Please install on top and/or bottom battery!
When ≥ 3 modules are installed, 4 hangers must be used!

Floor Installation

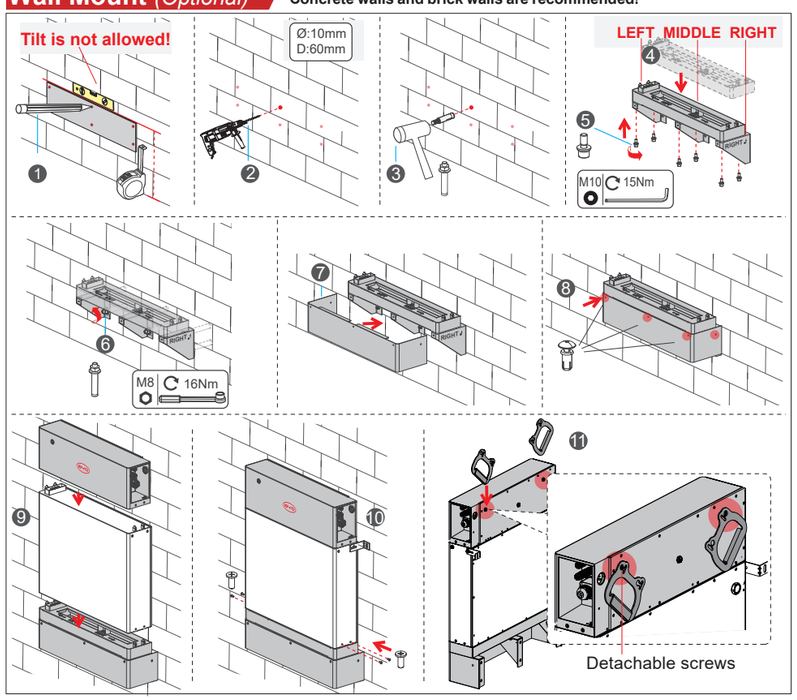
The bearing capacity of the ground must be greater than or equal to 800kg/m²





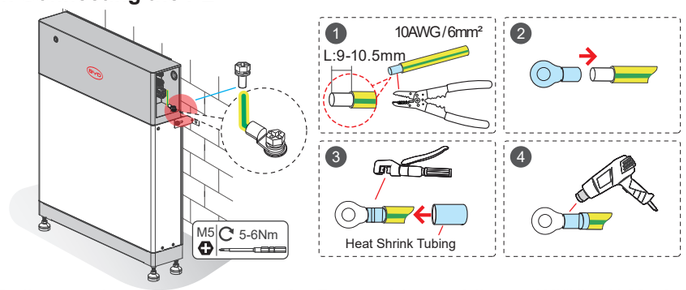
Wall Mount *(Optional)*

Concrete walls and brick walls are recommended!



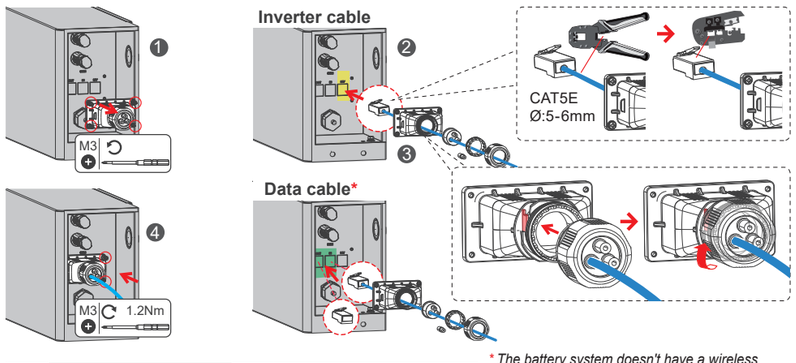
Electrical Connection

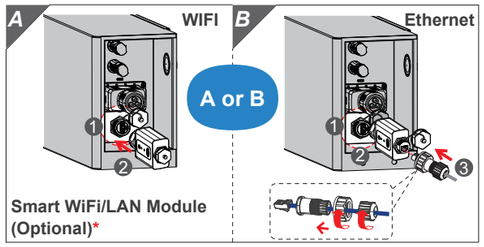
1. Connecting the PE



2. Connecting the Inverter cable, Data cable* and Smart Wifi/LAN Module*(Optional)

No.	1	2	3	4	5	6	7	8
INV	RS485A	RS485B	IGND	CAN_H	CAN_L	NC	PCS_EN+	PCS_EN-
IN/OUT	Unused	Unused	Unused	Unused	Unused	Unused	CAN_L	CAN_H



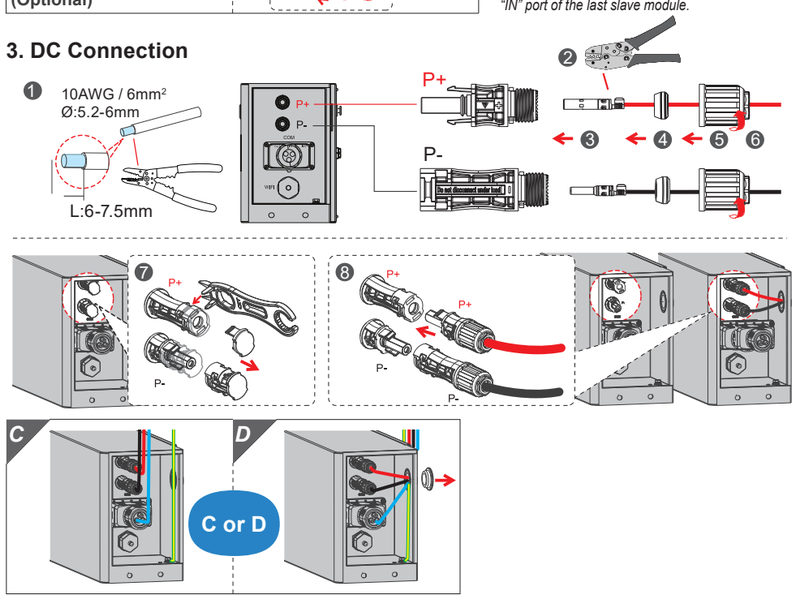


** The battery system doesn't have a wireless communication function. Through the USB, the battery system supports the expansion of connection with the Smart WiFi/LAN Module to implement the wireless function, and the Smart WiFi/ LAN Module had obtained individual cyber security certification in accordance with EN 18031 series.*

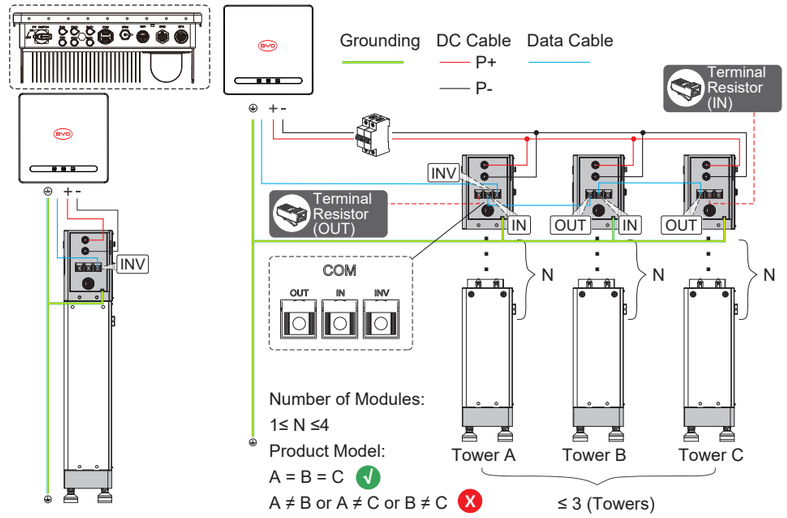
** Data Cable & terminal resistor are used for parallel connection.*

** Connect terminal resistor, Plug the terminal resistor into the "OUT" port of the master module and the "IN" port of the last slave module.*

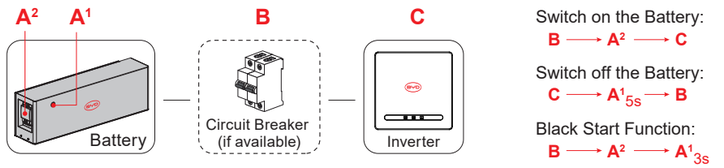
3. DC Connection



Systems Connection



Operation



Please power on the system in the correct sequence; otherwise, it may cause circuit damage!

LED Signals

The specific logic of LED lights can be found in the Service Guideline and Checklist.
The LED light will turn off without any operation during the 12 hour normal operation.

Indicator	Status	Description
Flashing white and blue alternatively	White ON/OFF 0.5s; Blue ON/OFF 0.5s	The battery system is initiating
Flashing white slowly	White ON/OFF 2s; Blue ON/OFF	The battery system is charging
White light flashing	White ON/OFF 1s; Blue ON/OFF	The battery system is discharging
Constant white	White ON/OFF; Blue ON/OFF	Idle (the battery system is neither charging nor discharging).
Constant blue	White ON/OFF; Blue ON/OFF	BCU failure
Blue light flashes a certain number of times	White ON/OFF; Blue ON/OFF N 2.5s 0.5s	Counting from top to bottom, flashing N times, represents the Nth battery module failure, N represents 1-4 battery modules

Connection Options with Inverters

Connection with BYD

