



# 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



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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<sub>2</sub>), 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°C), when damaged or abused (e.g., mechanical damage or electrical overcharge). Burning cells can ignite other batteries in close proximity. Throw into the fire will result in burning.

**Explosion data** Extreme mechanical abuse will result in rupture of the batteries.

**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.
- iPhone users : Search for "BYD Energy" in the App Store



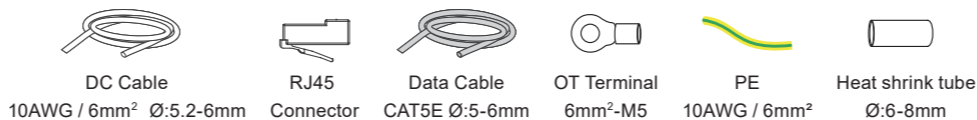
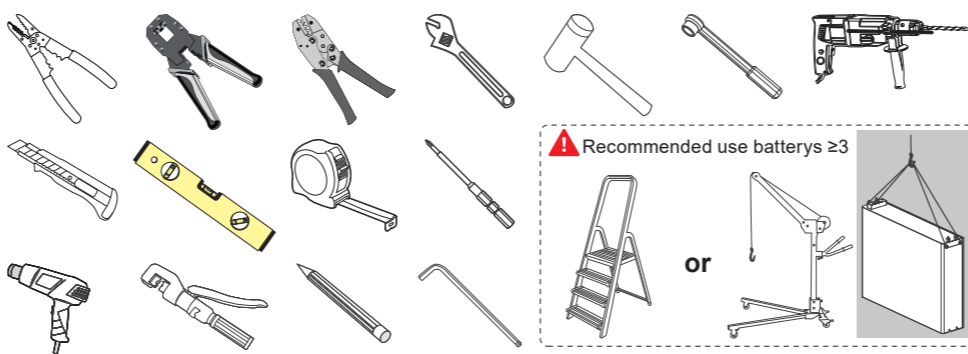
Configuration steps:



For detailed configuration steps, please refer to the user manual and APP instructions, Website: [www.bydenery.com](http://www.bydenery.com).

## Requirements for Installation

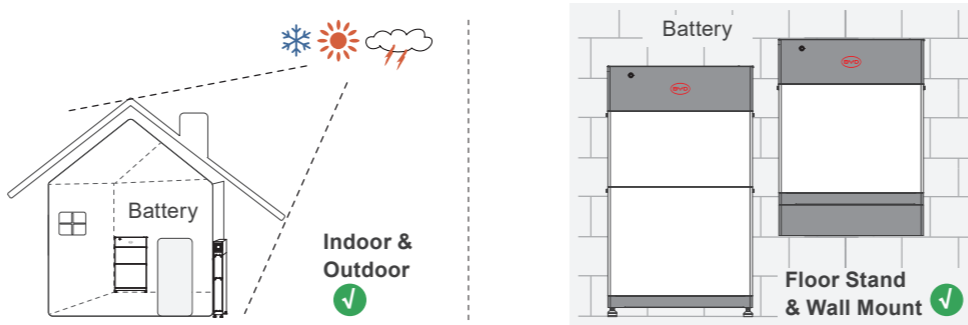
### 1. Tools & Additional Accessories (not included in the scope of delivery)



### 2. Safety Gear & Required Personnel

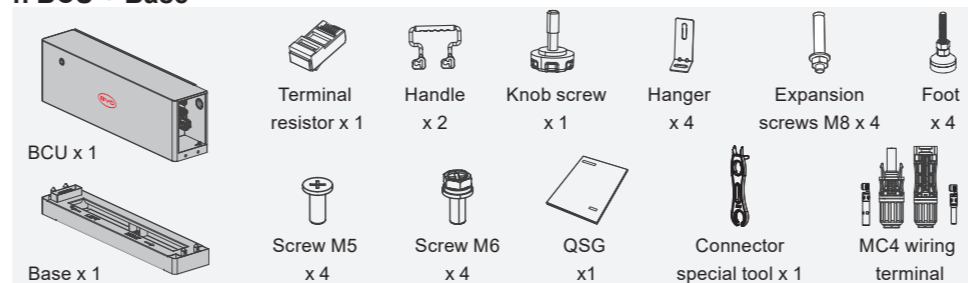


### 3. Installation Scene & Installation Mode

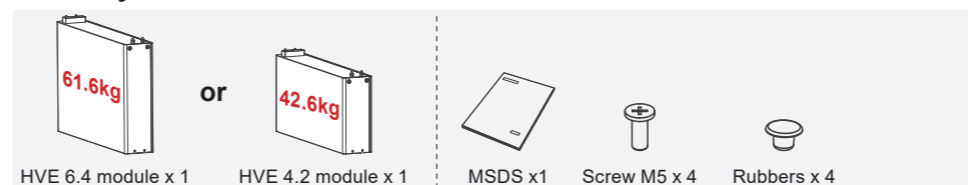


## Scope of Delivery

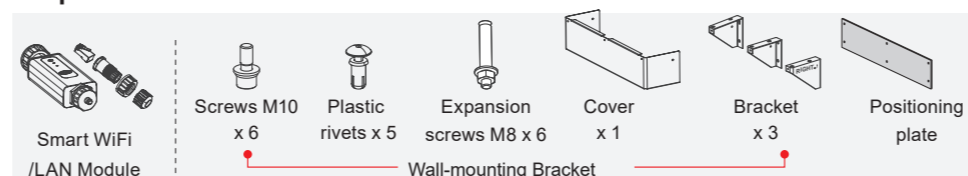
### 1. BCU + Base



### 2. Battery Module

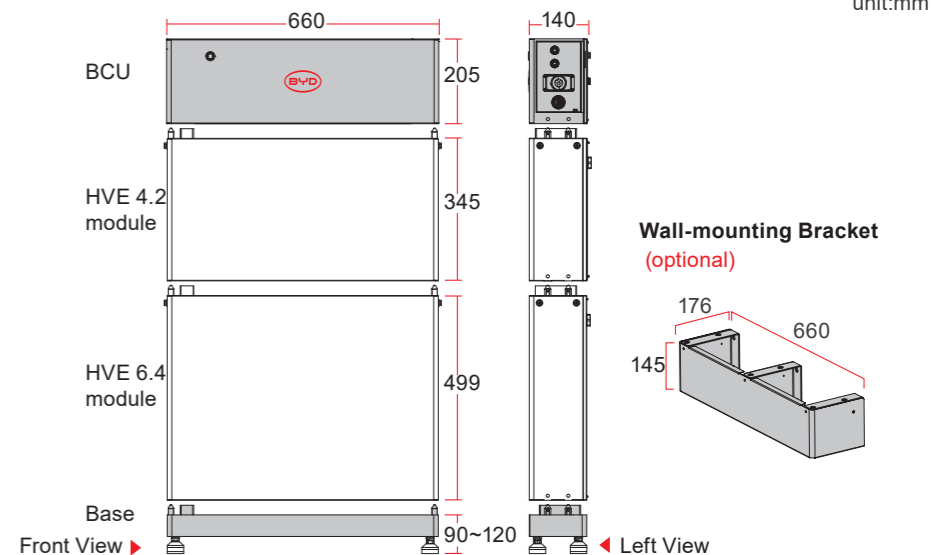


### 3. Optional Accessories

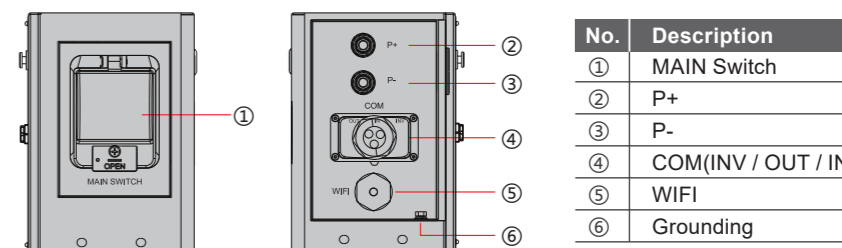


## Battery System Overview

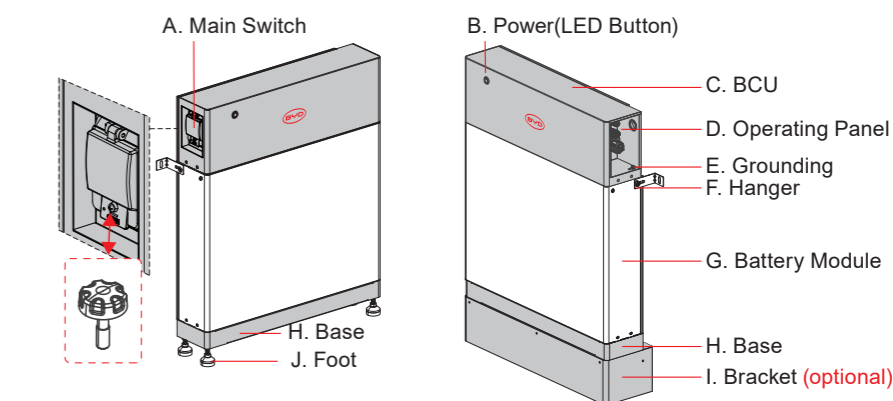
### 1. Structure Dimension Drawing



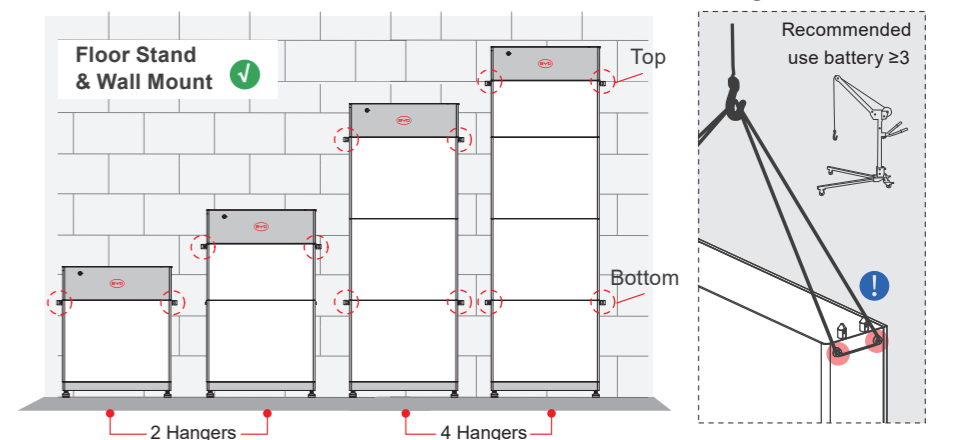
### 2. Functional Area Overview



### 3. Battery System Description



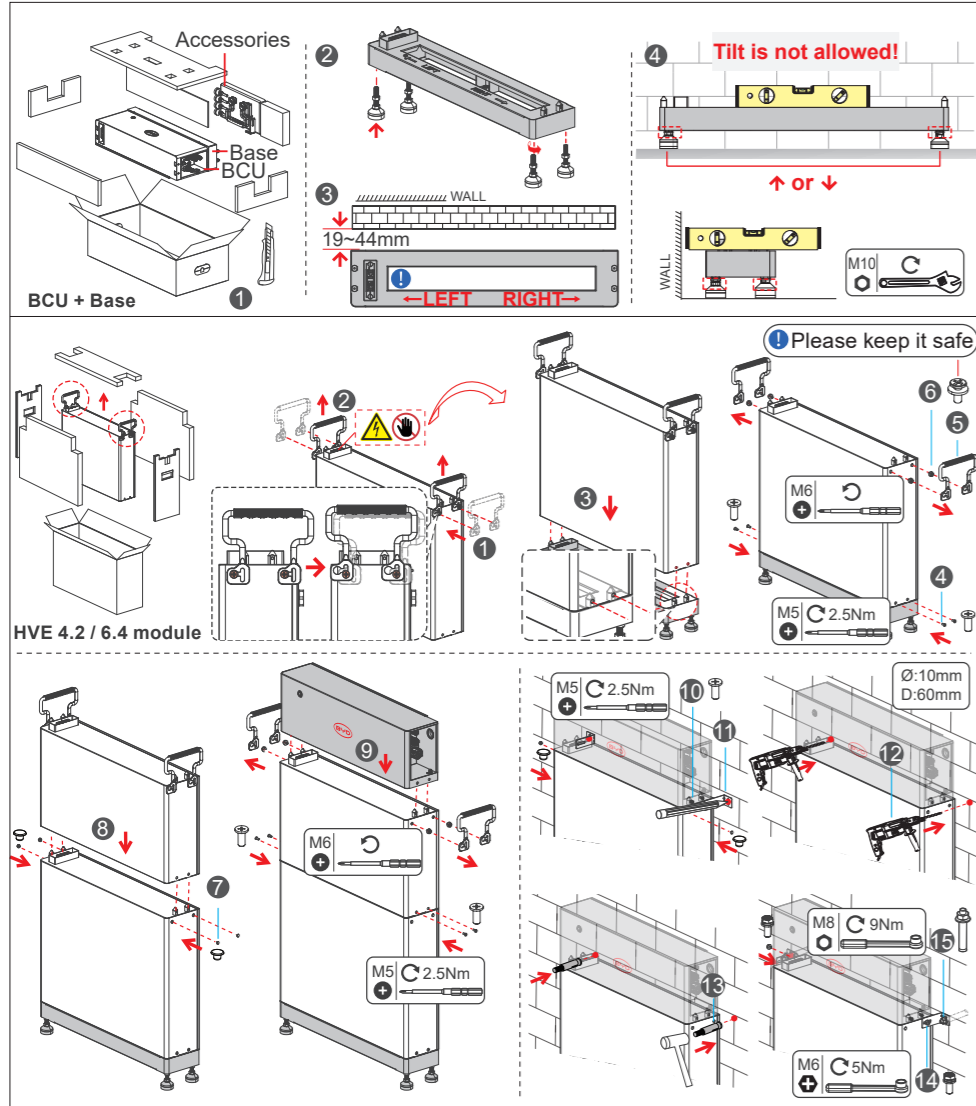
### 4. Quantity and location of hanger



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

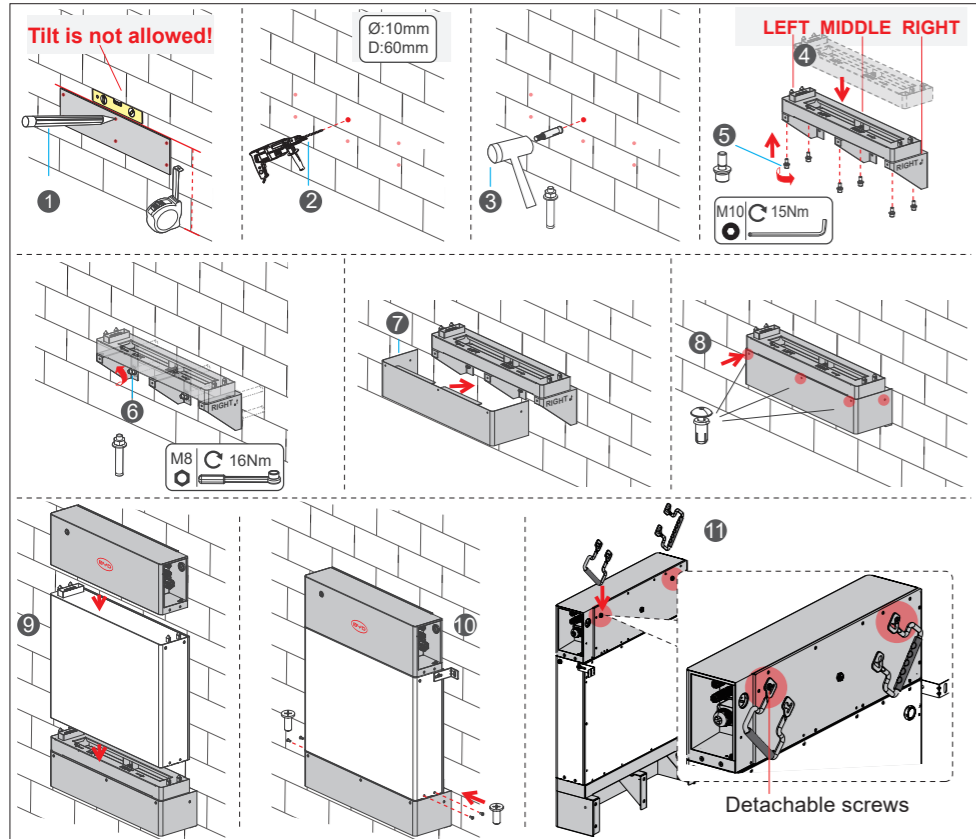
## Floor Installation

The bearing capacity of the ground must be greater than or equal to 800kg/m<sup>2</sup>



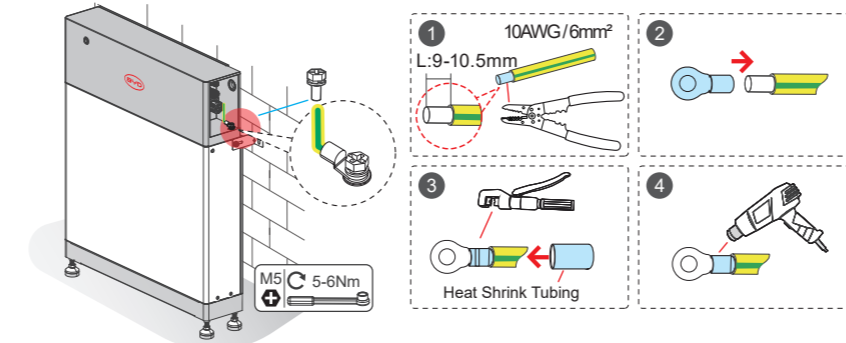
## Wall Mount (Optional)

Concrete walls and brick walls are recommended!



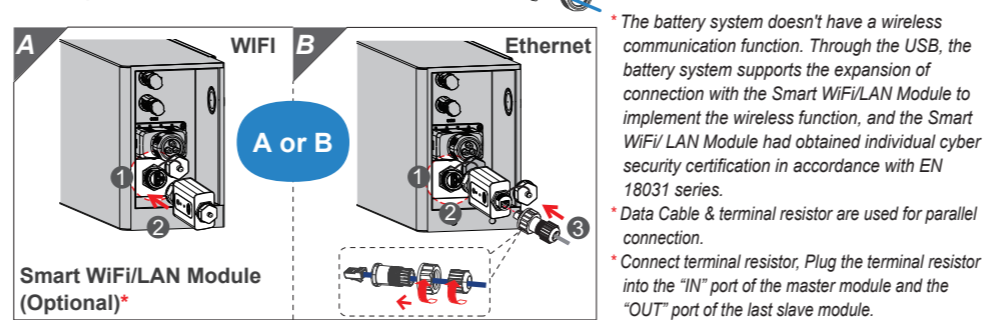
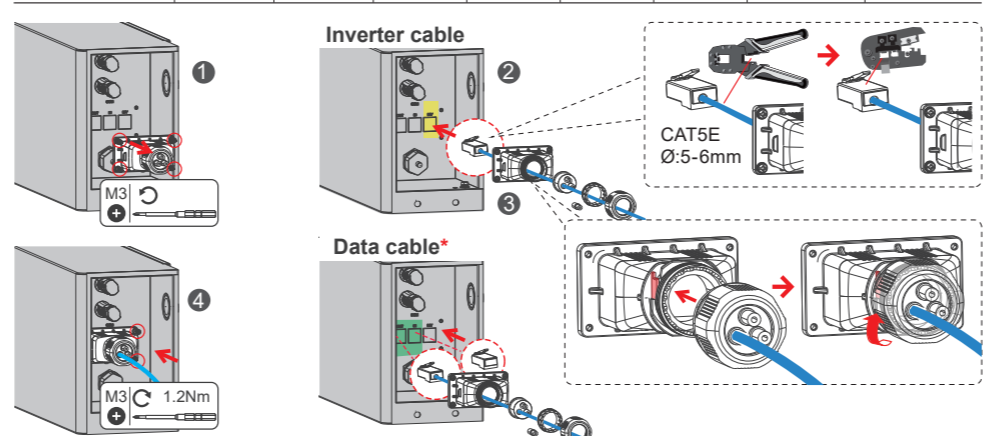
## Electrical Connection

### 1. Connecting the PE

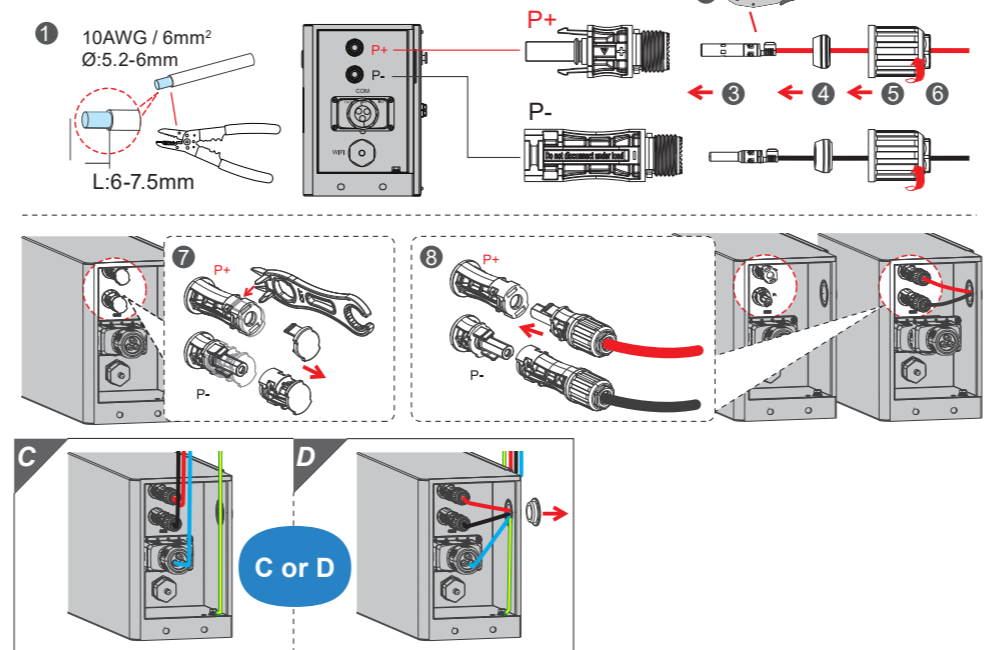


### 2. Connecting the Inverter cable, Data cable\* and Smart Wifi/LAN Module\* (Optional)

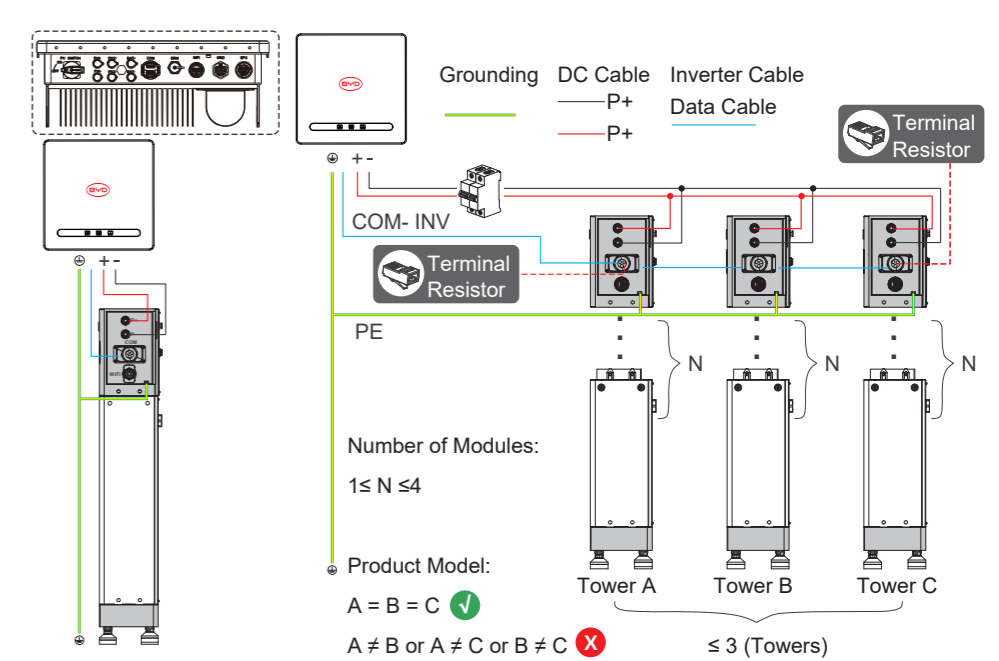
No.	1	2	3	4	5	6	7	8
INV	RS485A	RS485B	IGND	CAN_H	CAN_L	NC	PCS_EN+	PCS_EN-
IN/OUT	Unused	Unused	Unused	Unused	Unused	Unused	CAN_L	CAN_H



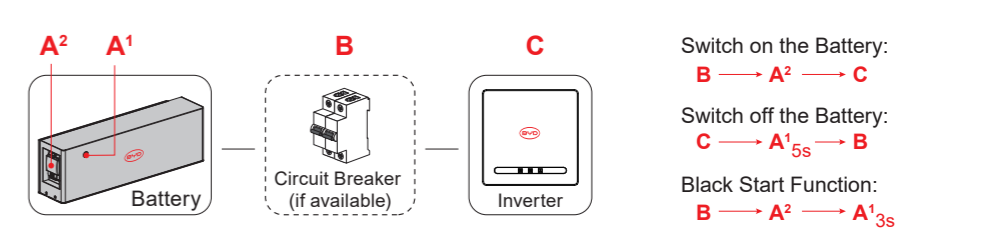
### 3. DC Connection



## Systems Connection



## Operation



## LED Signals

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

## Connection Options with Inverters

