

EN-QSG Jun-2025 Version1.1

High Voltage Battery System

Battery-Box

HVB 5.9, 8.9, 11.8, 14.8, 17.8, 20.7, 23.7, 26.7, 29.6 HVM+ 8.3, 11.0, 13.8, 16.6, 19.3, 22.1 HVS+ 5.1, 7.7, 10.2, 12.8

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.

2. Firefighting measures

2.1 Extinguishing media

• Small fire Dry powder, sand, carbon dioxide (CO₂), water spray

• Large fire Water spray

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.

Explosion data

Extreme mechanical abuse will result in rupture of the batteries.

Throw into the fire will result in burning.

Special protective

In the event of a fire, wear full protective clothing and self-contained equipment for firefighters

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.

 \bullet iPhone users : Search for "BYD Energy" in the App Store







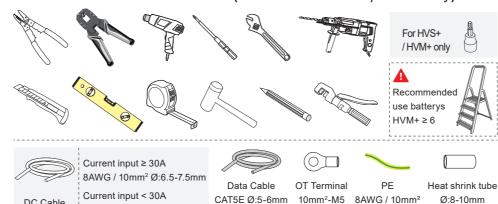




For detailed configuration steps, please refer to the user manual and APP instructions, Website: www.bydenergy.com.

Requirements for Installation

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



2. Safety Gear & Required Personnel

10AWG / 6mm² Ø:5.2-6mm

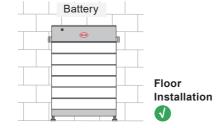






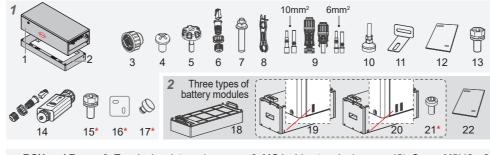
3. Installation Scene & Installation Mode





unit-mm

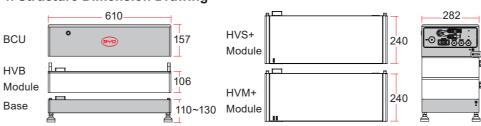
Scope of Delivery



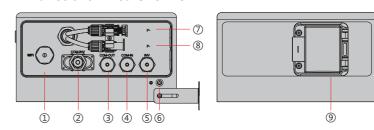
Ĭ	14 15*	16* 17*	19	20 21* 22
1	BCU and Base	3. Terminal resistor x 1	9. MC4 wiring terminal	15*. Screw M5*16 x 2
	Package	4. Screw M4*8 x 2	10. Foot x 4	16*. Hanger2 x 2
		5. Knob screw x 2	11. Hanger1 x 2	17*. Plastic rivet x 2
		6. Communication terminal x 2	12. QSG x 1	
	1. BCU x 1	7. Expansion screw M8 x 2	13. Screw M5*16 x 2	* (for HVS+ / HVM+ only)
	2. Base x 1	8. Connector special tool x 1	14. Smart WiFi/ LAN Module	
2	Battery Module Package	18. HVB Module x 1 19. HVS+ Module x 1	20. HVM+ Module x 1 21*. Screw M5*10 x 2	22. MSDS x1

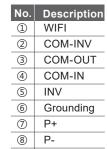
Battery System Overview

1. Structure Dimension Drawing

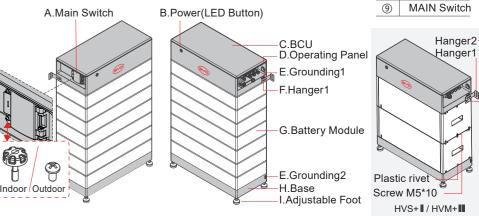


2. Functional Area Overview

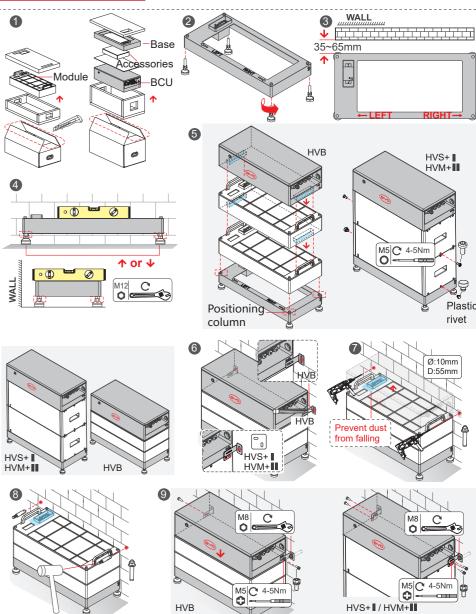




3. Battery System Description

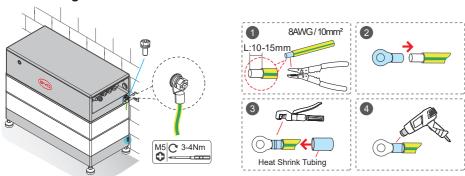


Floor Installation



Electrical Connection

1. Connecting the PE

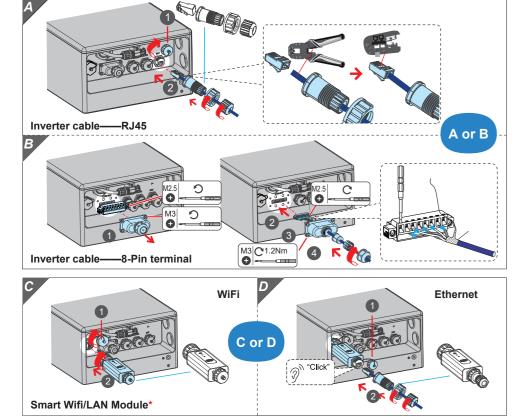


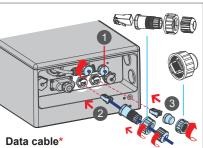
2. Connection Diagram



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
COM-INV	CAN_H	CAN_L	IGND	NC	PCS_EN+	PCS_EN-	RS485B	RS485A

3. Connecting the Inverter cable, Smart Wifi/LAN Module* and Data cable*

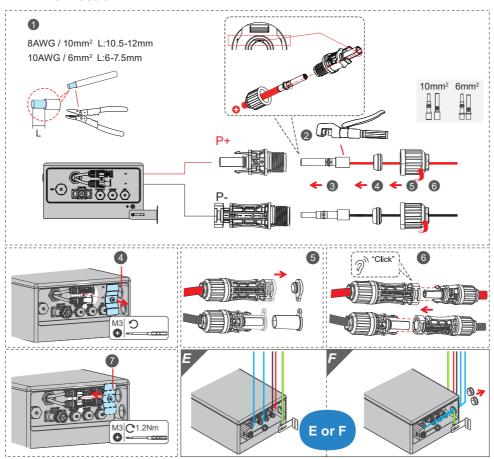




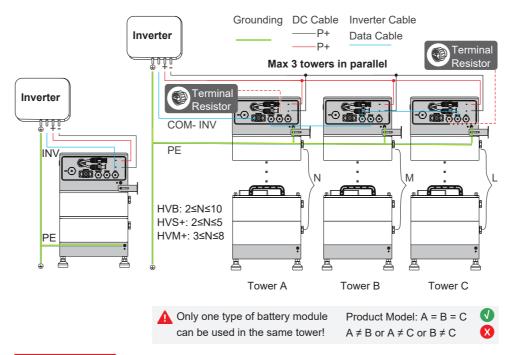
- * The battery system doesn't have a wireless communication function. Through the USB, the battery system supports the expansion of connection with the Smart WiFi/LAN Module to implement the wireless function, and the Smart WiFi/ LAN Module had obtained individual cyber security certification in accordance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

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

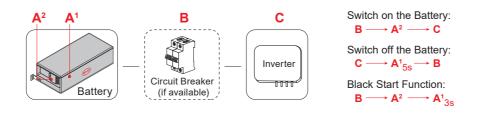
4. DC Connection



Systems Connection



Operation

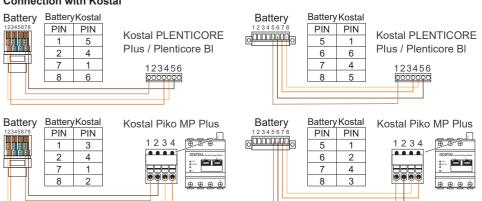


LED Signals

Indicator	Status	Description
lashing white and lue alternatively	Whiteo ON OFF OFF	-
	Blue OFF JULIAN	The battery system is initiating
Flashing white slowly	White ON 2s 2s	The best of the second of the second of
	Blue ON OFF	The battery system is charging
	WhiteO ON 1s	The battery system is discharging
White light flashing	Blue ON OFF	Zanary eyetem to also hanging
	WhiteO ON OFF	Idle (the battery system is neither
Constant white	Blue ON OFF	charging nor discharging).
Constant blue	WhiteO ON OFF	DOLLS II
	Blue ON OFF	BCU failure
Blue light flashes a	N	Counting from top to bottom, flashing N
ertain number of imes	OFF 0.5s	times, represents the Nth battery module failure, N represents 1-10
	Blue ON OFF	battery modules

Connection Options with Inverters

Connection with Kostal



Connection with Kaco

