



Battery-Box Premium LV BMU Instruction Manual

V 1.1

VALIDITY

This document is valid for the Battery-Box Premium LV BMU (Battery Management Unit) (“**BMU**”) from firmware version 1.0.

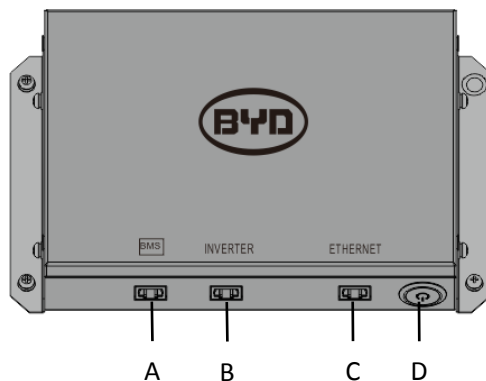
INTENDED USE

BMU is applicable for the BYD Battery-Box Premium LV system(s) (LVS 3.8, LVS 7.7, LVS 11.5, LVS 15.4, LVS 19.2, LVS 23.0 and LVL 15.4) (“**Battery-Box**”), and works as a control unit for the system(s).

PRODUCT DESCRIPTION

BMU is equipped with a WLAN interface as a standard. Special tools BYD developed could communicate with BMU through it.

The WLAN name and code are on the label of BMU.



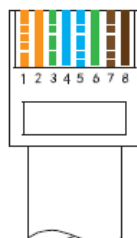
A: RJ45 port for connection with Battery-Box

B: RJ45 port for connection with an inverter

C: Ethernet port

D: Stop button and status LED

Assignment of Port B



No.	Assignment
1	485-A
2	485-B
3	Unused
4	CAN H
5	CAN L
6	Unused
7	Unused
8	Unused



SCOPE OF DELIVERY

- 1 × BMU
- 1 × Instruction Manual

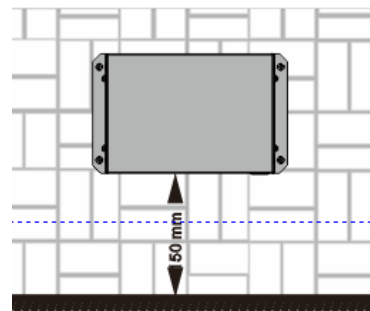
TECHNICAL DATA

Communication	Ethernet/CAN/RS 485
Input voltage*	40-60 V
Input current	200 mA
Weight	1 kg
Dimensions (L × W × H)	250 mm × 122 mm × 50 mm
Ambient temperature in operation	-10°C to 50°C
Relative humidity (non-condensing)	5% to 85%
Degree of protection (in accordance with IEC 60529)	IP21

*BMU is powered by Battery-Box through the network cable. No other power supply is needed.

MOUNTING

Install BMU on the wall or a rack. The recommended expansion screw size is M4 × 12. The minimum distance from the ground is 50 mm.



CONNECTION

1. The communication cable between BMU and an inverter cannot be longer than 10 meters. And the cable should be CAT 5 shield or above.
2. Please make sure the correct pins are connected between BMU and an inverter.
3. The connection between BMU and Battery-Box should be the Straight-Through Wired Cable.

COMMISSIONING

1. Make sure an inverter, Battery-Box, and BMU are correctly connected.
2. Press the Start Button on Battery-Box for 3 seconds.



LED STATUS

Flashing white and blue alternatively	White <input type="radio"/> ON	OFF		BMU and Battery-Box are initiating.
	Blue <input checked="" type="radio"/> ON	OFF		
Glowing white	White <input type="radio"/> ON	OFF		Idle (Battery-Box is neither charging nor discharging).
	Blue <input checked="" type="radio"/> ON	OFF		
Flashing white slowly	White <input type="radio"/> ON	OFF		Battery-Box is charging.
	Blue <input checked="" type="radio"/> ON	OFF		
Flashing white quickly	White <input type="radio"/> ON	OFF		Battery-Box is discharging.
	Blue <input checked="" type="radio"/> ON	OFF		
Flashing white and glowing blue	White <input type="radio"/> ON	OFF		Battery-Box is discharging, and the SOC of Battery-Box is below 15%.
	Blue <input checked="" type="radio"/> ON	OFF		
Flashing white and blue	White <input type="radio"/> ON	OFF		An error has occurred. **
	Blue <input checked="" type="radio"/> ON	OFF		

**1s white once then 1s blue several times are a circle, and also error codes. The definition of the error codes could be found in Battery-Box Premium Operating Manual LVL or LVS.

UPDATING FIRMWARE

The firmware of BMU could only be updated when it operates with Battery-Box. Please refer to the Operating Manual of Battery-Box for further information.

DISPOSAL

Dispose of BMU following the locally applicable disposal regulations for electronic waste.