



# 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.

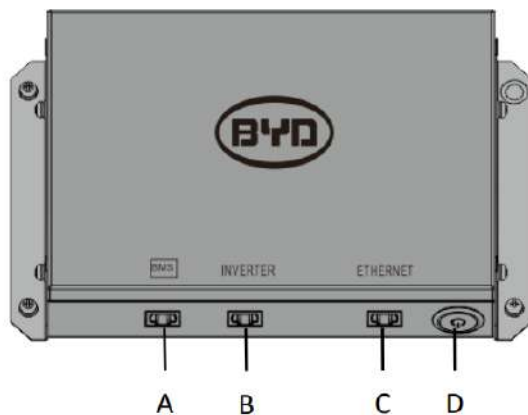
## INTENDED USE

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

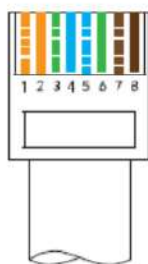
BMU is equipped with a WLAN interface as a standard. Special tools BYD developed could communicate with BMU through it.

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

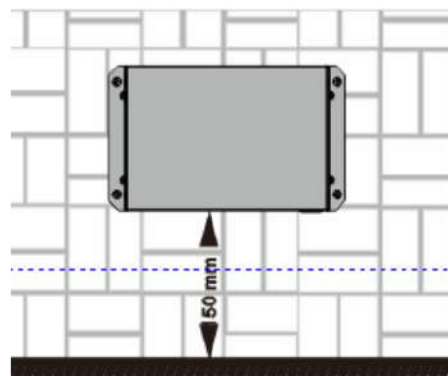
## TECHNICAL DATA

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

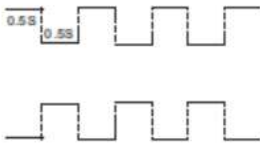

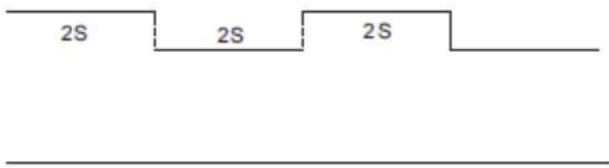
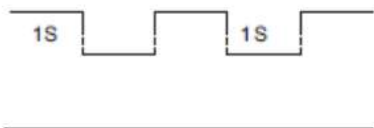
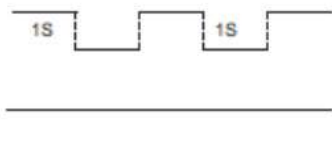
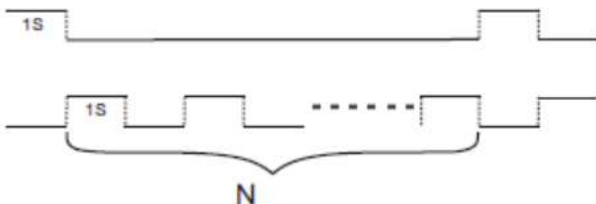
1. The communication cable between BMU and an inverter cannot be longer than 10 meters. And the cable should be CAT 5 shield or above.
2. Please make sure the correct pins are connected between BMU and an inverter.
3. The connection between BMU and Battery-Box should be the Straight-Through Wired Cable.

## 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

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

\*\*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.