

# BYD Battery-Box Premium LV BMU -IP55 Instruction Manual

V1.4

#### **VALIDITY**

This document is valid for the BYD Battery-Box Premium LV BMU -IP55 (Battery Management Unit) ("BMU") from firmware version 1.22.

#### **INTENDED USE**

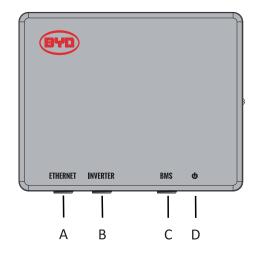
BMU is applicable for the BYD Battery-Box Premium LV system(s)(LV FLEX, LV FLEX LITE, LVS, LVS LITE, LVL) ("Battery-Box"), and works as a control unit for the system(s).

#### PRODUCT DESCRIPTION

BMU is equipped with WLAN. The APP Be Connect 2.0 could communicate with BMU through the WLAN.



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



- A: Ethernet port
- **B:** RJ45 port for connection with an inverter
- C: RJ45 port for connection with Battery-Box
- D: LED Button



# Assignment of Port B

	No.	Assignment
1 2 3 4 5 6 7 8	1	Unused
	2	Unused
	3	Unused
	4	CAN H
	5	CAN L
	6	Unused
	7	Unused
	8	Unused

# **SCOPE OF DELIVERY**

- 1×BMU
- 1×Instruction Manual
- 3×Connectors
- 1×Hanger

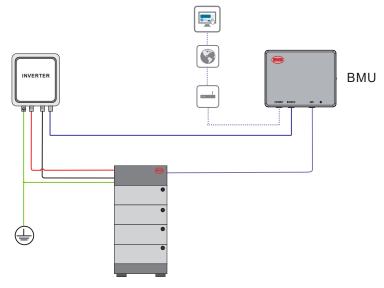
### **TECHNICAL DATA**

Communication	Ethernet/CAN			
Input voltage*	40-60 V			
Input current	200 mA			
Weight	1.3 kg			
Dimensions (L $\times$ W $\times$ H)	220 mm X 60 mm X 176 mm			
Ambient temperature in operation	-10°C to 50°C			
Relative humidity (non-condensing)	5% to 95%			
Degree of protection (in accordance with IEC 60529)	IP55			

<sup>\*</sup>BMU is powered by Battery-Box through the network cable. No other power supply is needed.



#### **CONNECTION DIAGRAM**



	BMU	SMA	STUDER	VICTRON	SELECTRONIC	SOLAREDGE	GOODWE	SUNGROW	SCHNEIDER	SOLIS	Deye
CAN H	4	4	4	7	1	4	4	4	14	4	4
CAN L	5	5	5	8	2	5	5	5	12	5	5

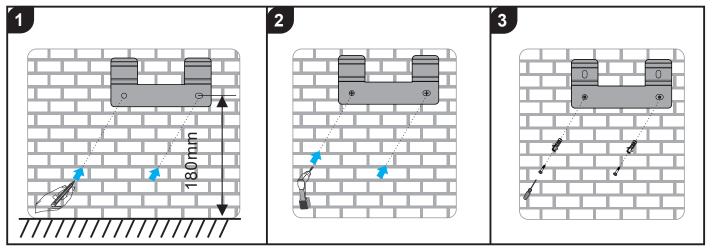
- Detailed connection instructions with inverters could be read in the Battery-Box Quick Start Guide.
- 2. The communication cable between BMU and an inverter cannot be longer than 20 meters. And the cable should be CAT 5 shield or above.
- 3. Please make sure the correct pins are connected between BMU and an inverter.
- 4. The connection between BMU and Battery-Box should be the Straight-Through Wired Cable.
- 5. Connected to the Internet is highly recommended.
- 6. The WLAN of BMU will switch off in 5 hours from turning on.

Press the LED Button once when BMU is on could activate the WLAN again.

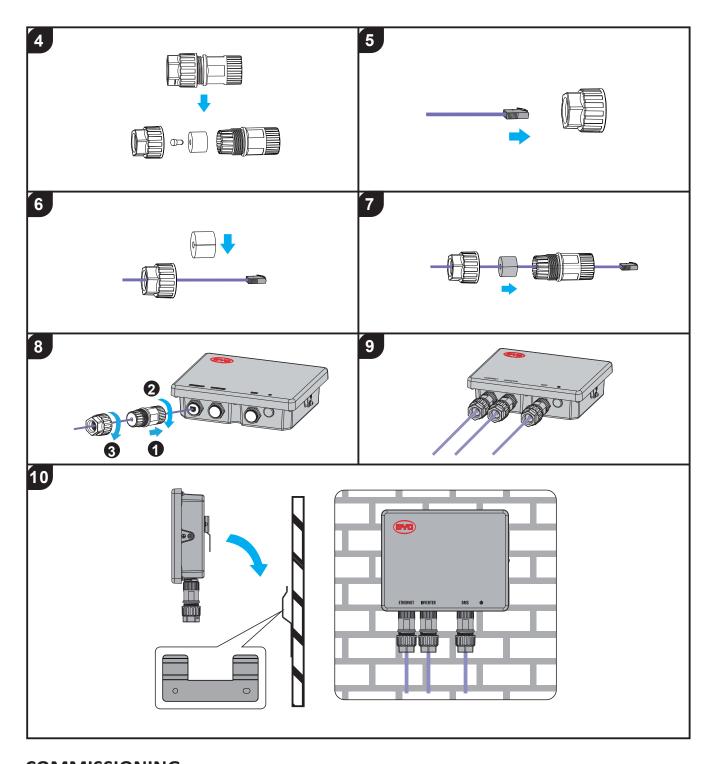
Press the LED Button three times in six seconds, each time around 1 second could reset the WLAN.

#### MOUNTING AND CONNECTION

Install BMU on the wall or a rack. The recommended expansion screw size is M6 $\times$ 12. The minimum distance from the ground is 180 mm.







# **COMMISSIONING**

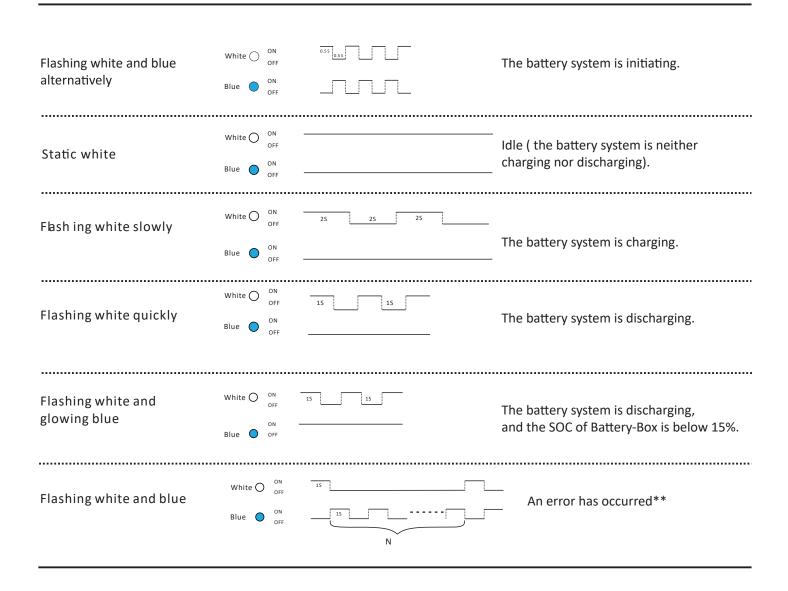
- 1. Make sure an inverter, Battery-Box, and BMU are correctly connected.
- 2. Press the LED Button on Battery-Box for 3 seconds.
- 3. Refer to Battery-Box Operating Manual for further steps.

### **UPDATING FIRMWARE**

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



#### **LED STATUS**



\*\* When an error happens, refer to the Operating Manual of the corresponding Battery-Box for more details.

#### **DISPOSAL**

Following the applicable regulations for electronic waste to dispose of BMU.