

10KWH Series

WALL MOUNTED LiFePO₄ BATTERY



IBattery-EA-51.2V-200AH

User Manual

This manual introduces the 10Kwh Series, please read this manual before installing the battery, and follow the instructions carefully during the installation process. If you have any questions, please contact manufacturer for assistance immediately.

catalogue

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Product introduction

Household energy storage battery box mainly includes battery module, BMS module, output interface, etc. . It can store and release power according to the requirements of AC/DC inverter system, and support the expansion of multi-module capacity. With photovoltaic, inverter composed of household optical storage system, under the control of the inverter, the photovoltaic excess energy stored in the battery, and when the photovoltaic energy is insufficient, the stored electricity will be released to supply power to the load.

Product characteristics

1. Flexible configuration, easy installation

Modular design, free to deploy as needed

2. Ultra-high protection, safety

IP65 The level of protection, calmly deal with the outdoor environment

3. Seamless multi-mode switching

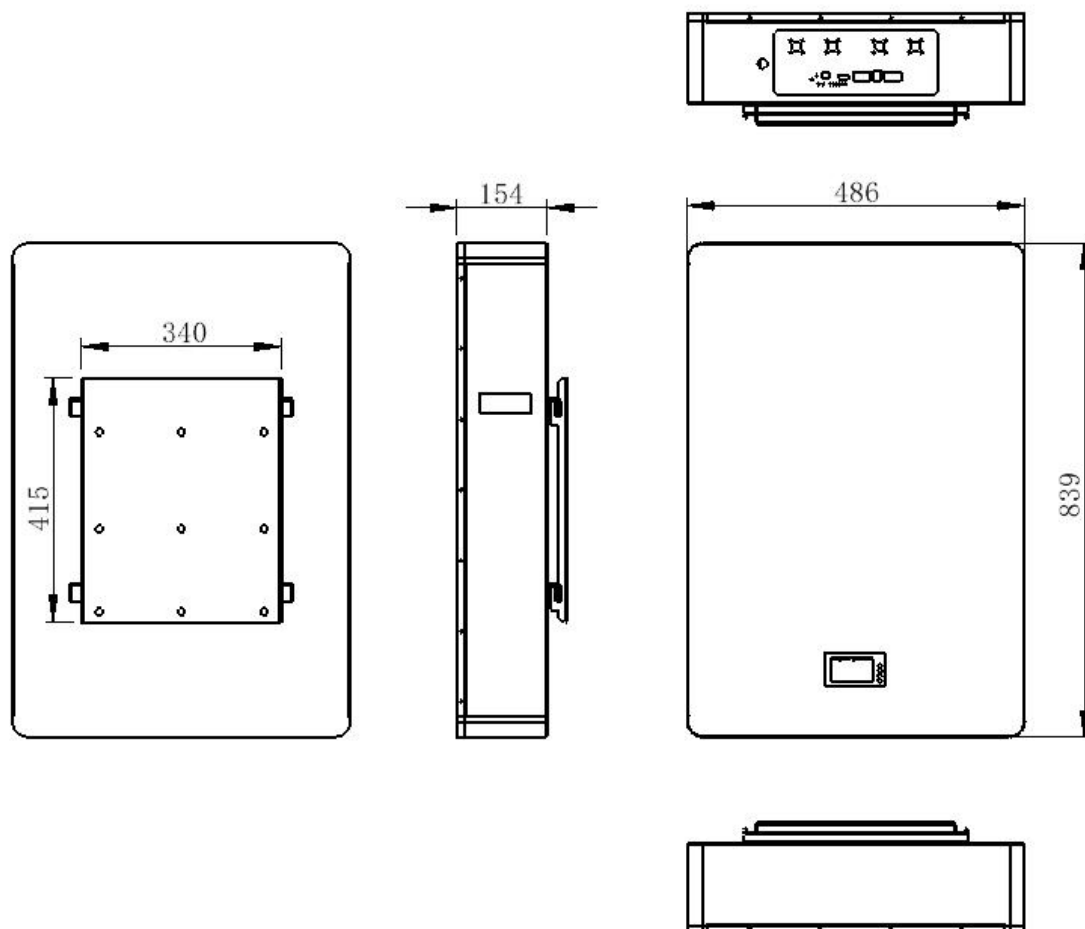
All kinds of application mode intelligent switching, seamless switching to off-grid grid blackout mode

4. Humanized design of management platform, computers can freely login to view real-time working status

Shape of the product

The overall dimensions of the product are shown in figure 1-3

Figure 1-3 overall product
dimensions



Interface Definition

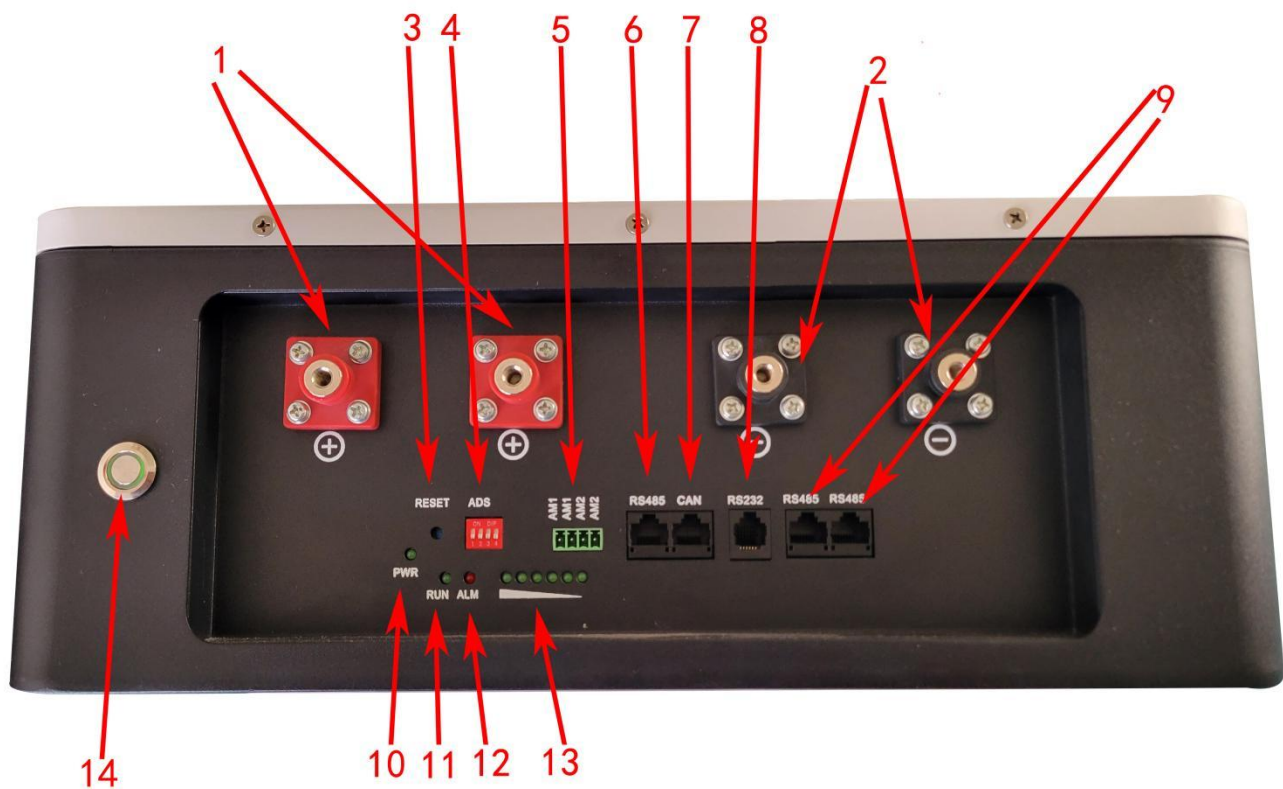


Figure 1-4 power and communication interface

Serial	name	description
1	positive	battery box positive interface
2	negative	battery box negative interface
3	reset button	reset system status
4	address code	the code switch is used for setting the address of each BMS protection board,supports multi-module expansion using

5	dry contacts	provides multi-channel dry contacts signal,the dry contacts signal is passive switch, does not divide the polarity
6	external RS485 communication	independent RS485 communication for communication with external inverter,inverter protocol to upload the corresponding summary battery information, the default baud rate of 9600bps.
7	external CAN communication	independent CAN communication for communication with external inverter, inverter protocol to upload the corresponding summary battery information, CAN communication default baud rate of 500 kbps
8	RS232 communication	with RS232 communication function for BMS internal testing and debugging, the default baud rate is 9600bps
9	RS485 communication	with parallel dual RS485 function for the battery pack parallel machine, address compatibility automatic and manual settings, the default baud rate of 9600bps
10	status indicator	display BMS switch status
11	Operation	Indicator display battery current status
12	Warning indicaton	display battery current status
13	power indicator	display battery current
14	Switch	Control the battery output, turn on the switch, and the battery will work

Main product parameters

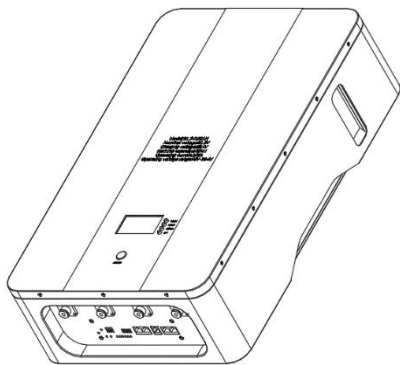
Figure 1-5 main product parameters

Serial	name	specification parameter
1	cell	LFP 3.2V/100Ah
2	cell series-parallel mode	16S2P
3	nominal capacity	200Ah
4	nominal voltage	51.2V
5	working voltage	43.2-58.4V
6	capacity	10.24kWh
7	Rated charge-discharge current	100A
8	Maximum charge-discharge current	100A
9	cycle life	6000 cycles
10	operating temperature	Discharge: 0℃~55℃; Charging: -10℃~55℃;
11	weight	82±5Kg

Installation

Check out the box

1. Check the product name, model and specifications, case number, case number and packaging;
2. Check whether the random accessories are complete and correct against the list of shipped accessories (as shown in figure 2-1);
3. Check product packaging to see if there is any collision damage in transit;
4. Open the outer packing of each module and check the appearance of each module to see if there is any transportation damage;



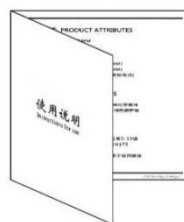
1



2



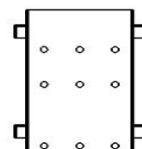
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4



5



6

Fig. 2-1 Schematic diagram of each part shipped

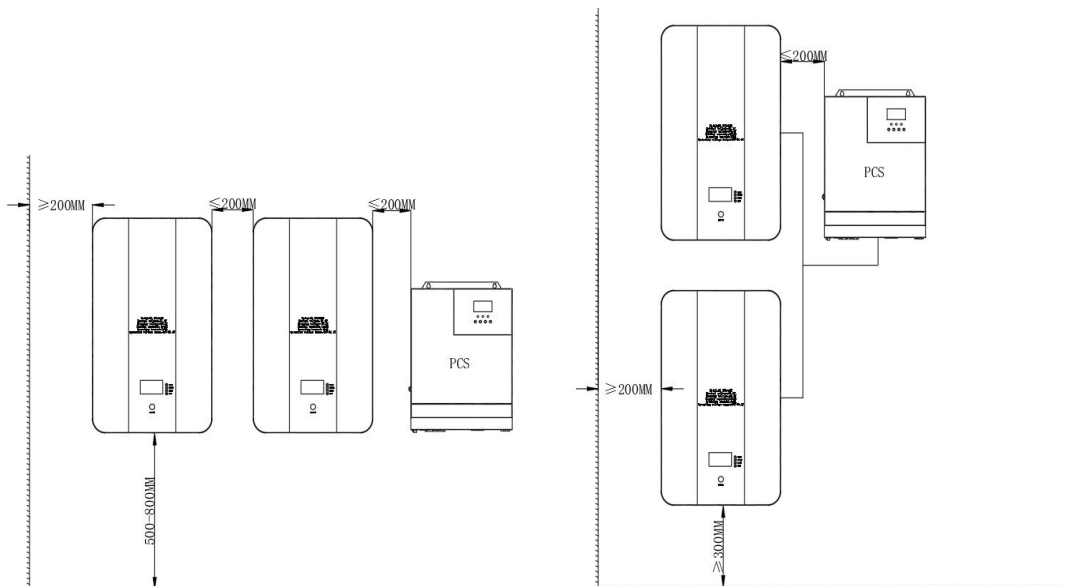
Serial	name	quantity	remark
1	Battery Box	1 PC	/
2	Power line	2PCS	1 positive/ 1 negative
3	Communication cable	1 PC	/
4	Accessory bag	1 PC	Contains user manual
5	Expansion screw	5 PCS	/
6	Wall hanging bracket	1 PC	/

Table 2-1 quantity of parts shipped

Ready for installation

Installation space

Indoor installation: the rear side of the battery case is fixed by hanging close to the wall. The side spacing is as shown in the diagram below;



schematic diagram of indoor installation space

LED lights working status instruction

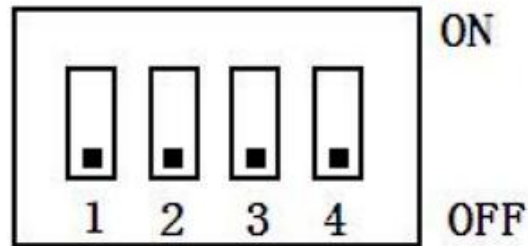
Status	Normal/ Alarm/ Protect	RUN	ALM	LED Lights Show Battery Electricity Status						Explanation
										
Power off	Dormant	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	All Off
Stand by	Normal	Flash one time	OFF	Show battery electricity status						Stand by
	Alarm	Flash one time	Flash three times							Under voltage
Charge	Normal	OFF	OFF	Show battery electricity status The LED which one indicate highest electricity that flash two times it means full charged						The LED light which one indicate highest electricity that flash two times it means full charged, alarm LED light is off
	Alarm	OFF	Flash three times							
	Over charging protect	ON	OFF	ON	ON	ON	ON	ON	ON	All LED lights are stand by if did not connect on grid
	Temperature, Large current and Error protect	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	Stop charging
Discharge	Normal	Flash three times	OFF	Show battery electricity status						
	Alarm	Flash three times	Flash three times							Stop discharging
	Under voltage protect	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	Stop discharging
	Temperature, Large current, Reverse connection and Error protect	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	Stop discharging
Error		OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	Stop charge or discharging

Table 1-5 LED lights working status instruction

Setting DIP Switches

When battery strings are connected in parallel, the hardware address of each PACK is unique.

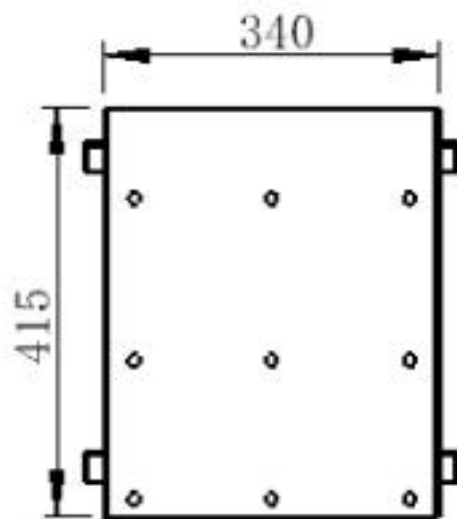
The hardware address can be set by the DIP switch on the board. For the definition of the switch, see the following figure.



Adress	Code Switch Arrangement				Explanation
	#1	#2	#3	#4	
0	OFF	OFF	OFF	OFF	SINGLE USE
1	ON	OFF	OFF	OFF	SET TO PACK 1 (MAIN)
2	OFF	ON	OFF	OFF	SET TO PACK 2
3	ON	ON	OFF	OFF	SET TO PACK 3
4	OFF	OFF	ON	OFF	SET TO PACK 4
5	ON	OFF	ON	OFF	SET TO PACK 5
6	OFF	ON	ON	OFF	SET TO PACK 6
7	ON	ON	ON	OFF	SET TO PACK 7
8	OFF	OFF	OFF	ON	SET TO PACK 8
9	ON	OFF	OFF	ON	SET TO PACK 9
10	OFF	ON	OFF	ON	SET TO PACK 10
11	ON	ON	OFF	ON	SET TO PACK 11
12	OFF	OFF	ON	ON	SET TO PACK 12
13	ON	OFF	ON	ON	SET TO PACK 13
14	OFF	ON	ON	ON	SET TO PACK 14
15	ON	ON	ON	ON	SET TO PACK 15

Size of mounting hole

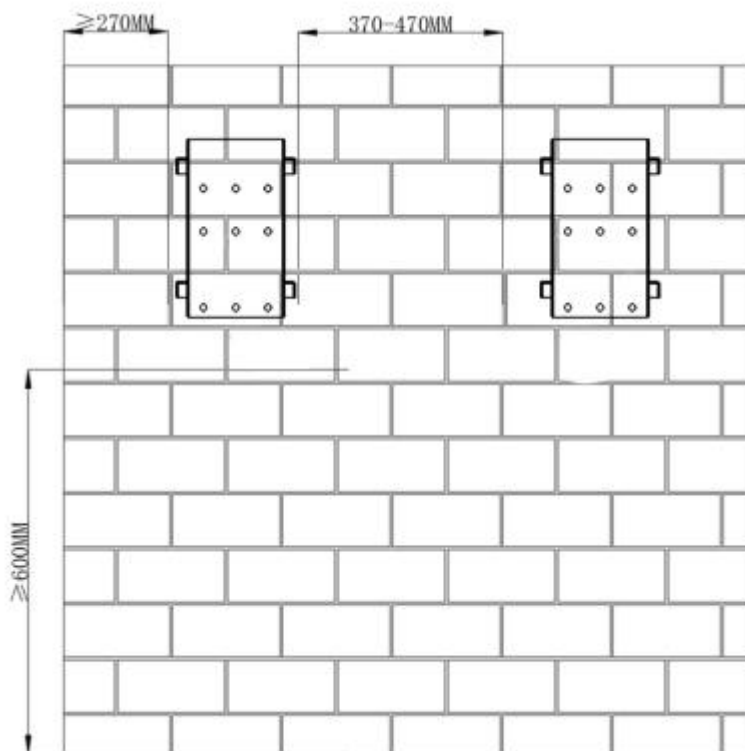
When the product is mounted on the wall, the size of the mounting hole is as shown in the following diagram。



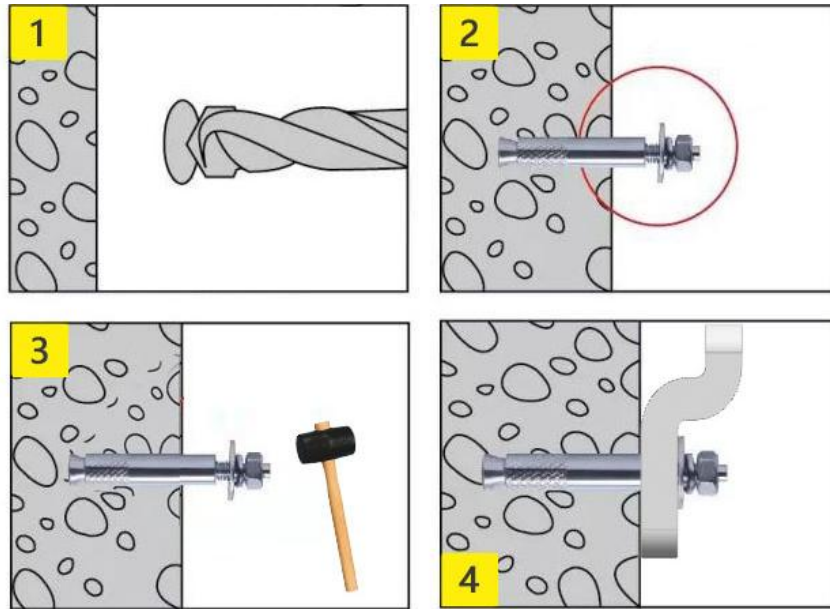
Wall mount installation

Installation steps

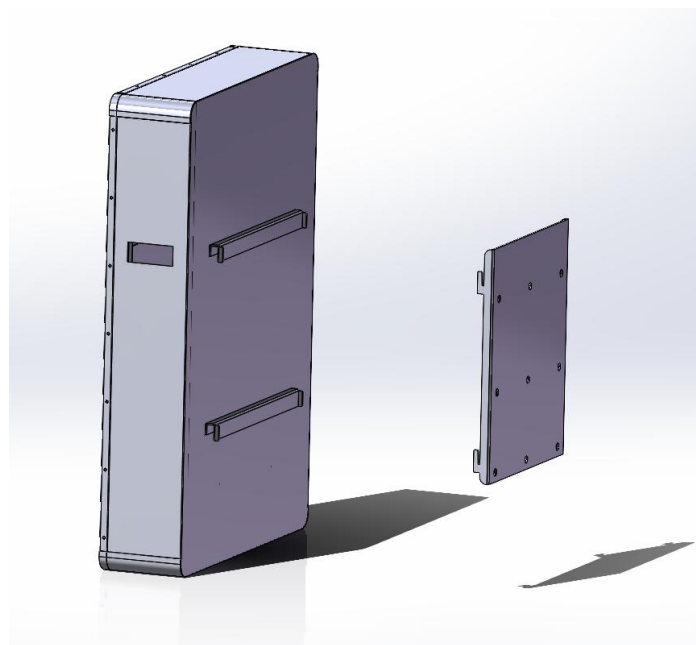
Step 1: Using tape measure to determine the installation height, through the wall bracket to determine the drilling position, level the hole with a level ruler, and mark with a marker;



Step 2: use impact drill to drill holes in the wall marked by marker, after cleaning holes, use rubber hammer to hammer stainless steel expansion bolts into the wall, and install wall support;



Step 3: Hang the battery on the back





Schematic diagram after installation

Maintenance guarantee

If the equipment breaks down, please call the customer service hotline and contact the distributor or directly with us. Thank you for your support of our products.