

# LIFEPO4 BATTERY BSN48314

51.2V 314AH

BSM48314H is a high voltage battery storage system based on lithium iron phosphate battery, is one of new energy storage products developed and produced by BLUESUN, it can be used to support reliable power for various types of equipments and systems. BSM48314H is especially suitable for application scene of high power, limited installation space, restricted load-bearing and long cycle life.

BSM48314H has 3 levels BMS (battery management system), which can manage and monitor cells information including voltage, current and temperature. What's more, BMS can balance cells charging and discharging to extend cycle life. Multiple batteries can connected in series to expand capacity and power in series for larger capacity and longer power supporting duration requirements.

### Battery Module BSM48314

High Voltage Lithium-Ion Phosphate Battery storage system



MODULE	BSM48314
Capacity (kWh)	16.076
Nominal Voltage(Vdc)	51.2
Nominal Capacity(AH)	314
Voltaqe Range(Vdc)	44.8-56
Depth of Discharge	90%
Dimension(W* D* H,mm)	895*500*235
Design Life	10+ years(25°C)
Cycle Life	> 6000 (25°C)
Communication	CANBUS/ModbusRTU/TCP/IP
Protection Class	IP22
Weight (kg)	120
Operation Temperature	0-50°C
Storage Temperature	-20-60°C
Certification	UN38.3

### Main Controller BSM1000V300A



MODULE	BSM1000V300A
Related Product	1000V 300A
AC Supply	<del></del>
System Operation Voltage (Vdc)	0-1000
Nominal Current(A)	300
Self-consumption Power(W)	14
Dimension (W* D* H, mm)	543*500*235
Communication	MODBUSRTU/CAN
Protection Class	IP20
Weight(kg)	26
Operation Life	10+years(25°C)
Operation Temperature	-20-65°C
Storage Temperature	-40-80°C

## Powercube BSM48314

System Voltage < 1000V



MODULE	BSM48314
Battery System Capacity (kWn)	16.076* n
Battery System Voltage (Vdc)	51.2* n
Battery System Capacity (AH)	314
Battery Capacity(kWh)	16.076
Battery Modules Qty. (Optional )	16
Battery System Charge Upper-Voltage	56* n
Standard Operation Current(A)	157
Normal Operation Current( A)	157
Max. Operation Current(A)	314
Battery System Discharge lower-Voltage	44.8* n

MODULE	BSM1000V300A	
Round-trip efficiency (@1C-rate)	95%	
Depth of Discharge	90%	
Communication	CANBUS/ModbusRTU/TCP/IP	
Operation Life	10+Years	
Operation Temperature	10~40°C	
Storage Temperature	-20~60℃	
Humidity	5 - 95% (without condensing)	
Altitude (m)	<4000	
Product Certificate	IEC62619/CE/UN38.3	

### **BUS Cabinet**

The bus cabinet is the dc side bus control unit of the energy storage battery system, which is connected with the high voltage box and storage.

Intermediate unit capable of converter; The power pool system (stack) is installed in the bus cabinet.

Switch off/circuit breaker (optional), three-level BMS (ESMU), and UPS power supply. Confluence ark.

The electrical characteristics, heat dissipation performance and safety performance of each component have been fully considered in the design.

And operation and maintenance, reasonable space layout, with compact structure, flexible configuration, security.

Full reliability and other characteristics. Three stage BMS module (ESMU) in the bus cabinet, with CAN, RS-485, RJ45 Ethernet communication interface, can be realized with high voltage box, PCS/UPS or The communication function between EMS realizes the data communication and control of the energy storage battery management system and protection.



NO	ITEM	PARA RANGE	QUANTITY	FUNCTION	REMARK
1	DC Breaker	250/630/ 1500A	1	Main Loop Protection	
2	BMS	ESMU-10 II	1	Display Communication Contro	
3	Switching power suooly	35W/75W 24V	1	Power Supply	
4	Miniature clrcult breaker	S202-C64/20/10	/	Switch	
5	Emergency stop switch	LA38-22ZS	1	Scram Protection	
6	Repeaters	CR-MX024DC2L	/	Signal Control And Conversion	
7	LED instruction	ED16-22DSR (G/Y/R)	/	Status Indicator	
8	Surge protective devices(spd)	Ex9UEP 20 3P	1	Lightning Protection Bus	
9	Fuse	DC1500V 1000V 200A	1	Protection	
10	DC Breaker		/	Communication Power Signal Conversion	





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