

## RACK MOUNT BATTERY

### 51.2V 106AH

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

Rack mount battery 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 parallel to expand capacity and power in parallel for larger capacity and longer power support-ing duration requirements.



# Battery Module

High Voltage Lithium-Ion Phosphate  
Battery storage system



## MODULE

### BASIC PARAMETERS

Capacity (kWh)	5.42
Nominal Voltage(Vdc)	51.2
Nominal Capacity(AH)	106
Voltage Range(Vdc)	44.8-57.6
Depth of Discharge	90%
Dimension(W* D* H,mm)	450*412*133(3U)
Design Life	10+ years(25°C)
Cycle Life	> 6000 (25°C)
Communication	RS485
Protection Class	IP20
Weight (kg)	48
Operation Temperature	-10-55°C
Storage Temperature	-20-60°C

# Main Controller



## MODULE

### BASIC PARAMETERS

Related Product	1000V 120A
AC Supply	--
System Operation Voltage (Vdc)	0-1000
Nominal Capacity(AH)	120
Self-consumption Power(W)	8
Dimension (W* D* H, mm)	450*412*133(3U)
Communication	RS485/CAN
Protection Class	IP20
Weight(kg)	20
Operation Life	10+
Operation Temperature	-20-65
Storage Temperature	-40-80

# Powercube

System Voltage < 1000V



MODULE	
Battery System Capacity (kWh)	5.12* n
Battery System Voltage (Vdc)	51.2* n
Battery System Capacity (AH)	100
Battery Module	BSMH51.2V106AH
Battery Capacity(Wn)	5.12
Battery Modules Qty. (Optional )	1~19
Battery System Charge Upper-Voltage	57.6* n
Standard Operation Current(A)	50
Normal Operation Current( A)	50
Max. Operation Current(A)	100
Battery System Discharge lower-Voltage	44.8* n

MODULE	
Round-trip efficiency (@1C-rate)	95%
Depth of Discharge	90%
Dimension (W* D* H,mm)	600*600*150*n
Communication	CANBUS/ModbusRTU/TCP/IP
Weight (kg)	120 kg +55kg* n
Operation Life	10+Years
Operation Temperature	10~40°C
Storage Temperature	-20~60°C
Humidity	5 - 95% (without condensing)
Altitude (m)	<4000
Product Certificate	IEC62619/CE/UN38.3

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, 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	630/1000V/ 1250A	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 circult 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(spdc)	Ex9UEP 20 3P	1	Lightning Protection Bus	
9	Fuse	DC1500V 1000V 200A	1	Protection	
10	UPS	3KVA/2KVA/ 1KVA	1	Uninterruptible Back Up Power Supply	
11	DC Breaker		/	Communication Power Signal Conversion	