



SLIM-16S1P-51.2V200Ah LITHIUM-ION BATTERY PRODUCT SPECIFICATION

Shenzhen Enershare Technology Co.,Ltd

Tel: 0086-755-28718021 E-mail: <u>wesley.yan@enershare.cn</u> <u>https://www.enersharepower.com</u>



1. Advantages

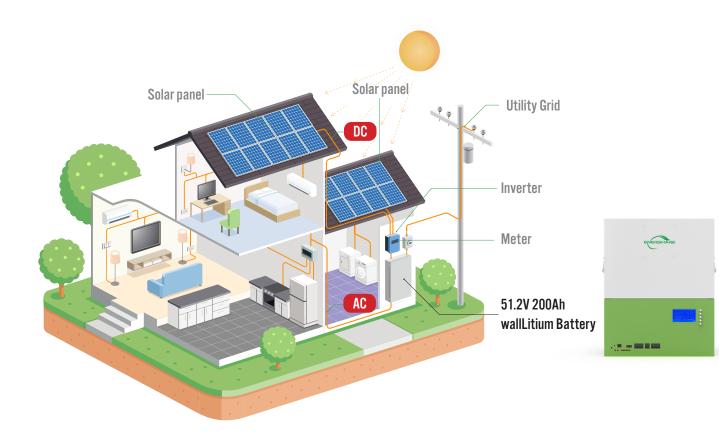
The battery module consists of single LFP cells, wire, BMS and container.

- Packed with high performance LFP single cell, long life, safety and wide temperature range
- High energy density, small size, light weight, no pollution
- Packing with single cell container, fire retardant wire and laser welding, stable and safe
- Built-in BMS, with battery voltage, current, temperature and health management
- LED indicate the battery SOC and operating status
- LCD Screen display the battery voltage, current, temp.,SOC detail information
- Support communicate with solar inverter bu CAN or RS485
- Update software by RS485 port
- Flexible customization of dimensions
- More than 5 years design life
- Stable performance, maintenance-free





2. Application Drawing





2. Battery module specification

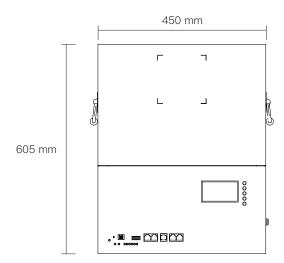
No.	Item	Specification		Conditions
	Detect Occurrity	Typical	200Ah	Standard discharge (0.2C5A) after
	Rated Capacity	Minimum	198Ah	Standard charge
	Nominal Voltage	3.2V		Mean Operation Voltage
	Internal Impedance	≤ 0.65mΩ		Internal resistance measured at AC
				1KHZ after 50% charge
				The measure must uses the new
				batteries that within one week after
				shipment and cycles less than 5
				times
	Dimension	Thickness: 54mm		Initial Dimension
Cell		Width: 173mm		
		Height: 210mm		
	Weight	3.9±0.1kg		APPROX
		Constant Current 0.5C5A		Charge time : Approx2.5h
	Standard charge	Constant Voltage 3.65V		
		0.02C5A cut-off		
		Constant Current 1C5A		Charge time : Approx1.5h@ ≧ 10°C
	Rapid Charge	Constant Voltage 3.65V		
		0.01C5A cut-off		
	Standard discharge	tandard discharge Constant current 0.5C5A end voltage 2.5 V		20A
	Maximum discharge curren	Constant current: 1C5A end voltage: 2.5 V		50A@ ≧ 0°C

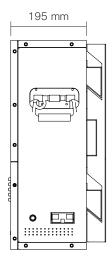


Shenzhen Enershare Technology Co.,Ltd

Tel: 0086-755-28718021 E-mail: <u>wesley.yan@enershare.cn</u> <u>https://www.enersharepower.com</u>

No.	ltem	Specification		Conditions
	Combination method	16S1P		
	Rated Capacity	Typical	200Ah	Standard discharge after Standard
		Minimum	198Ah	charge (package)
	Factory Voltage	51V-55V (40-60%)		Mean Operation Voltage
	Voltage at end of Discharge	43.2V		Discharge Cut-off Voltage
	Charging Voltage	58.4V		
Package	Internal Impedance	≤ 30mΩ		Internal resistance measured at AC 1KHZ after 50% charge The measure must uses the new batteries that within one week after shipment and cycles less than 5 times
ge	Standard charge	Constant Current 30A Constant Voltage see No.5 0.02CA cut–off		Charge time : Approx 5.5 h
	Standard discharge	Constant current: 30A end voltage see NO.4		
	Maximum Continuous Charge Current	100A		
	Maximum Continuous Discharge Current	100A		
	Operation Temperature Range	Charge: 0∼45℃		60±25%R.H. Bare Cell
		Discharge: –20~55°C		
		Less than 12 months : −10~35℃		60±25%R.H.at the shipment state
	Storage Temperature Range	less than 3 months: −10~45℃		
		Less than 7 day : −20~65℃		
	Battery box size	605*450*195 mm		
	System weight	~85kg		



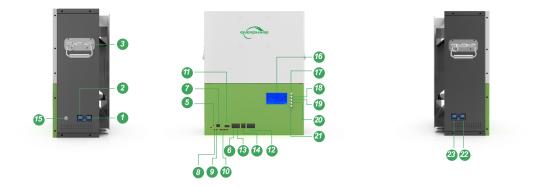


4



Shenzhen Enershare Technology Co.,Ltd

Tel: 0086-755-28718021 E-mail: <u>wesley.yan@enershare.cn</u> <u>https://www.enersharepower.com</u>



4. Panel Description

No.	Item	Description
1	Barrier terminal block	+
2	Barrier terminal block – Neg	_
3	Handle	/
4	Hanger	/
5	Reset button	RST
6	RS485 port	RS485
7	Dial switch	ADS
8	LED	wwRUN
9	LED	ALM
10	LED	CAPACITY
11	main connector	main connector
12	RS485	RS485
13	CAN	CAN
14	RS232	RS232
15	Main switch	ON/OFF
16	Display	/
17	MENU	MENU
18	ENTER	ENTER
19	UP	UP
20	DOWN	DOWN
21	ESC	ESC
22	Merging	+
23	Merging	-



5. BMS specification

BMS provides complete management and protection for the battery.

- Voltage warning and protection for module and each single cell.
- Current warning and protection, and the maximum operating current can be customized.
- Temperature warning and protection, 4 sensors for battery pack and 1 sensor for BMS.
- Battery module SOC and SOH calculation, display the accurate battery status.
- Communicate with inverter or PC monitor, report the battery data.
- Pre-charge/discharge logic, make sure safety use in whole process.
- Switch-off mode, sleep mode, and operating mode, different mode for different condition.



BMS parameters.

Items	Details	Standard
	Overcharge detection voltage	3.65±0.025V
Cell overcharge protection	Overcharge detection delay time	Typical:1.0s
	Overcharge release voltage	3.38±0.02V
	Over-discharge detection voltage	2.7±0.02V
Cell over-discharge protection	Over-discharge detection delay time	Typical:1.0s
	Over-discharge release voltage	2.9±0.02V or charge release
	discharge Over-current protection current1	100A
Over everent protection	discharge Over-current detection delay time 1	1S
Over-current protection	discharge Over-current protection current 2	120A
	discharge Over-current detection delay time 2	100mS
	Short protection current	≥ 200A
Chart protection	Protection condition	Load short
Short protection	Detection delay time	≤ 300us
	Protection release condition	Charging release
	Charge high T protection	55±3℃
	Charge high T recover	50±5℃
	Discharge high T protection	65±5℃
Temperature(T) protection	Discharge high T recover	60±5℃
Temperature(T) protection	Charge low T protection	-5±5℃
	Charge low T recover	0±5℃
	Discharge low T protection	−20±5℃
	Discharge low T recover	–15±5℃
Balance	Balance threshold voltage	3.45V



Shenzhen Enershare Technology Co.,Ltd

Tel: 0086-755-28718021 E-mail: <u>wesley.yan@enershare.cn</u> <u>https://www.enersharepower.com</u>

Items	Details	Standard
Communication	It has RS232 ,Can and RS485 standard communication interface, it can real-time monitoring the capacity of battery bank, the voltage, current, environment temperature, and charging/discharging current.	
Alarm	It has over-temperature, over charge, under-voltage, over-current, short circuit alarm Function.	