

ES48100 16S1P-51.2V100Ah-5U

LITHIUM-ION BATTERY PRODUCT SPECIFICATION

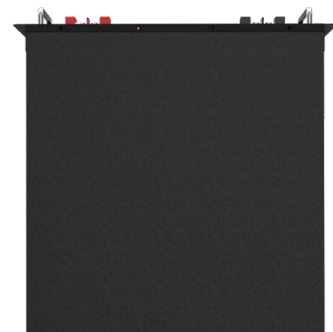
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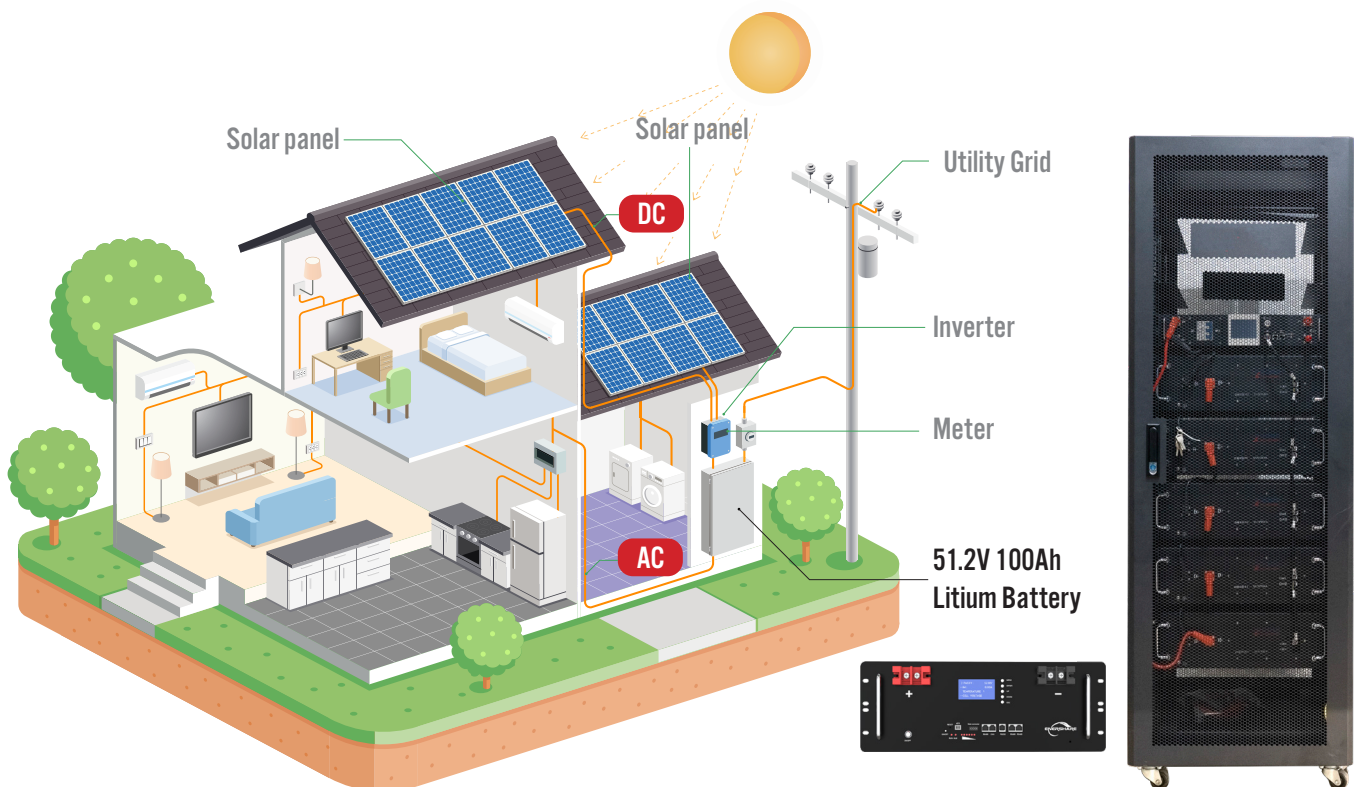
1. Advantages

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

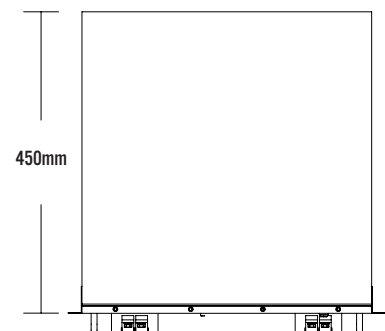
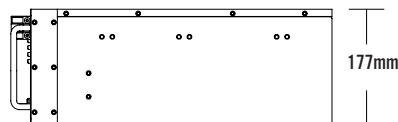
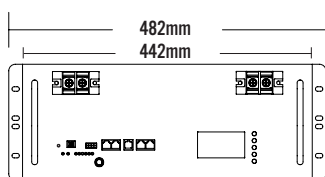


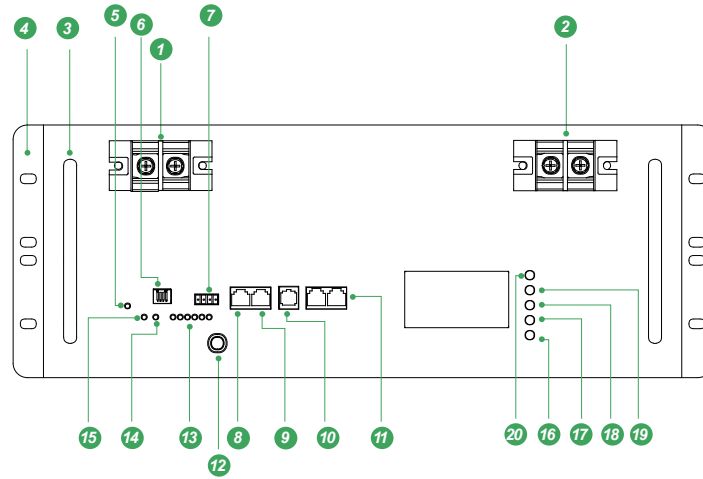
2. Application Drawing



3. Battery module specification

NO.	Item	Specification	Notes	
1	Typical Capacity	100Ah	0.2C charge and discharge for cut-off voltage	
	Minimum Capacity	98Ah		
2	Initial Impedance	Pack \leq 80m Ω	After standard charge,AC1KHz test	
3	Weight	Approx: ~75kG		
4	Nominal voltage	51.2V		
5	Charge limit voltage	58.4V		
6	Discharge cut-off voltage	43.2V		
7	Standard charge current	20A	0 $^{\circ}$ C~45 $^{\circ}$ C	
8	Maximum charge current	100A	10 $^{\circ}$ C~45 $^{\circ}$ C	
9	Standard discharge current	40A	-10 $^{\circ}$ C~60 $^{\circ}$ C	
10	Maximum discharge current	100A	10 $^{\circ}$ C~60 $^{\circ}$ C	
11	Unit voltage	45V~52V	40%~60%	
12	Operating temperature	0 $^{\circ}$ C~45 $^{\circ}$ C	Charging	
		-10 $^{\circ}$ C~50 $^{\circ}$ C	Discharging	
	Storage temperature	-10 $^{\circ}$ C~ +45 $^{\circ}$ C	less than 1 month	Recommended storage temperature: 25 $^{\circ}$ C,at the shipment state
		-10 $^{\circ}$ C~ +35 $^{\circ}$ C	less than 6 months	
13	Recoverable capacity	Constant current 0.2C charge to 58.4V, then constant voltage 58.4Vcharge to current declines to 0.01C, rest for 10min,constant current 0.2C discharge to 43.2V,rest for 10min.Repeat above steps 3 times, recording the maximum capacity		
14	Cycle Performance	Under the temperature of 23 \pm 2 $^{\circ}$ C,charge the battery with 0.2C, when the voltage reaches up to 58.4V charge with constant voltage until the charge current \leq 0.02C,then stop charging, then rest for 0.5h, then discharge with 0.2C to 43.2V. Cycle with the above mode, when the continuous discharge time <3H stop cycling. The cycle life is required \geq 2000 times.		
15	Storage Humidity	\leq 75% RH		
16	Appearance	Without distortion and leakage		
17	Standard testing condition	Temperature: 25 \pm 2 $^{\circ}$ C Humidity : \leq 75%RH Atmospheric Pressure: 86~106 Kpa		





4. Panel Description

No.	Description	Remarks
1	Barrier terminal block	++
2	Barrier terminal block – Neg	--
3	Handle	
4	Hanger	
5	Reset button	
6	Dial switch	
7	main connector	
8	RS485	
9	CAN	
10	RS232	
11	RS485 port	
12	Main switch	
13	LED	
14	LED	
15	LED	
16	ESC	
17	DOWN	
18	UP	
19	ENTER	
20	MENU	