

Foshan SNAT Energy electrical
Technology co., LTD

Product specification
book

Product name: 16S1P energy storage battery

Product Specification: 36130145-100AH

fiction: Sabrina Liu

examine and verify: _____

ratify _____

1. Scope:

This product specification specifies the technical specifications, test methods and precautions of 51.2V battery

Items and marks, packaging, transportation and storage.

2. Quotation criteria

GB / T 191-2000 packaging storage and transportation sign

3. Name and specification



3.1 Name of battery pack: 51.2V lithium battery

4. Performance parameters

.14 Battery pack

order number	project	parameter	remarks
1	nominal voltage	48	
2	nominal capacity	100000mAh	
3	internal resistance	$\leq 30\text{m } \Omega$	
4	Maximum continuous charging current	0-70A	
5	Maximum continuous discharge current	0100A	
6	Power instructions	have	
7	Weakness switch	Often open often closed	
8	RS485 communication port	two	
9	display screen	have	

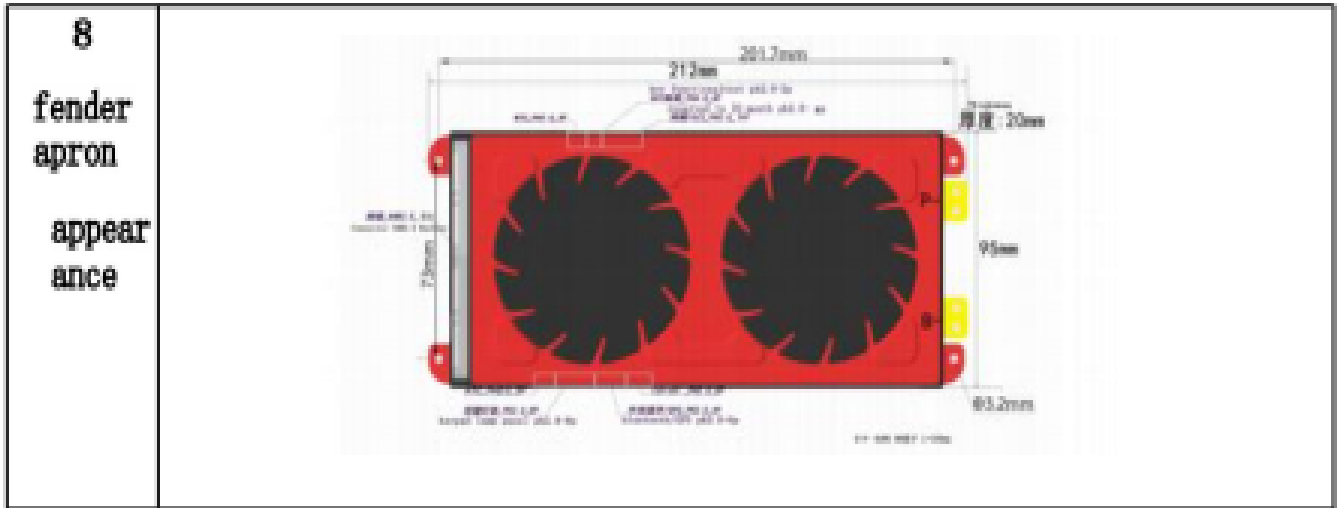


10	work	charge	0°C~55°C	
11	temperature	discharge	-20°C~55°C	
12	Storage temperature		Save for three months from 0°C to 30°C	
13	Transport and storage form		Static batteries shall be transported and stored under semi-filled conditions	About 70%
14	weight		About 65K g	
15	outline dimension		Approximately 610 * 490 * 160mm	
16				

.24. Protection board function

order number	project		parameter	remarks
1	defective function	Charging and protection voltage	3.75V±50mV	monomer
2		Overcharge is slow, overvoltage	3.55V±50mV	monomer
3		Discharge protection voltage	2.2V±100, mV	monomer
4		Overslow, complex voltage	2.7V±100mV	monomer
5		overcurrent protection	180±10A	
6		short-circuit protection	1300A	(Release condition is off-load) / MOS tube

			bears the highest short circuit current
7	Balanced function	Equilibrium current is $45 \pm 5\text{mA}$	3. 2V-on



5. Test conditions

5.1 Environmental conditions

Unless otherwise specified, the tests specified in this standard shall be conducted under the following

conditions: a) ambient temperature: $25^{\circ}\text{C} \pm 3^{\circ}\text{C}$

b) Relative humidity: 25%~85%

c) Pressure: atmospheric pressure 86kPa ~106kPa

5.2 Measurement instrument and equipment

All instruments, equipment (including test equipment and instruments for monitoring and monitoring test parameters)

It shall be verified or qualified according to the relevant national metrological verification regulations or relevant standards, and has

Effective period. All test instruments and equipment shall have sufficient accuracy and stability, and their accuracy shall be

An order of magnitude higher than the measured index accuracy or an error less than the allowable error of the measured parameters

Test equipment, instruments and materials, etc. provided by the Order shall be specified in the Contract and

Explain in the test outline.

A) Voltmeter: accuracy shall not be less than 0.5, its

internal resistance is at least $1 \text{ K}\Omega / \text{V}$; b) Ammeter:

accuracy shall not be less than 0.5;

c) Thermometer: with the appropriate range, its degree value is not greater than 1°C , calibration

The certainty is not less than 0.5°C ;

d) Timer: on time, minutes, seconds, accuracy

not less than $\pm 1\%$; e) measurement size

measuring tool: measurement value not more

than 1mm;

f) Weight weighing: accuracy not less than $\pm 0.05\%$.

5.3 Standard charging system

When the battery is charged with constant current of 90000mA to constant voltage charge to 56.7V, at

Stop charging when the charging current is less than $1000 \pm 20\text{mA}$.

.16 General features

order number	project	test method	technical requirement
1	outline dimension	Measure with caliper per 5.2	Approximately 610 * 490 * 160m m
2	weight	Measure the battery pack with a gauge conforming to 5.2 weight	65kg
3	surface	visually inspect	Battery appearance quality product appearance should be clean, there should not be cracks, cracks, dents, trachoma, deformation and other mechanical forms of damage wound
4	characteristic	Visually check the battery identification	Battery model and label shall be marked on the battery Call the voltage, the rated capacity.
5	open circuit voltage	Measure the battery with a voltmeter as per 5.2 Open-circuit voltage at both ends of the group positive and negative electrodes	The Open-circuit voltage is 48V
6	Communication impedance	Measure the AC impedance at both ends of the battery using an AC internal resistance tester with a test frequency of 1KHz	The initial internal impedance is less than 30m
7	Room-temperature discharge capacity	Charge the battery as per 5.3 and hold for 1h and give constant discharge at 90,000 m A to discharge termination voltage of 40-42V or	The discharge capacity is 100,000 m A h

		protective plate protect.	
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6.2 Environmental adaptability energy

order number	project	test method	technical requirement
1	Low- temperatu re discharge capacity	Charge the battery as per 5.3, and place the battery pack in a-10°C cooler for another 8 hours , Then constant continuously at 950000mA current	The discharge capacity is 70,000 m A h (70% of the rated capacity)

		Power to discharge termination voltage 40-41V or power Pool protection.	
2	High-temperature discharge capacity	Charge the battery according to 5.3, place the battery in a 40°C heat tank for 8 hours, and then discharge at 90,000 mA to Discharge termination voltage of 20V or battery protection.	The discharge capacity is 95,000 m A h (95% of the rated capacity) right
3	Charge to maintain	Charge the battery as 5.3 For 30 days, then receive a constant discharge at 90,000 mA current to a discharge termination voltage of 40-41V or electricity Pool protection.	The discharge capacity is 80,000 m A h (80% of the rated capacity)

.36 Safety performance

order number	project	test method	technical requirement
1	Over-charging test	Overcharge the battery at 70,000 m A Electricity for 1.42h.	The protection plate protection starts, and the battery does not leak Dew, no smoke, and a fire.
2	Overdischarge test	Overcharge the battery at 90,000 m A Electricity supply for 1.12h.	The protection plate protection starts, and the battery does not leak Dew, no smoke, and a fire.
3	short-circuit test	Copper wire with a total resistance not more than 50m Ω will be Battery positive and negative electrode short circuit.	The protection plate protection starts, and the battery does not leak Dew, no smoke, and a fire.

7. Identification, packaging, transportation and storage

7.1 Identification

The following labels shall be provided for the battery pack product:

- A) Product name;
- b) Product model or specification;
- c) Precautions;

7.2 Packaging

7.2.1 Packaging box

The packing box shall meet the drawing regulations and contract requirements and shall be marked below without special requirements:

- A) Product name, model, specification, quantity, and manufacturer name;

Mark b) for moisture-proof and light release.

.2.27. Data contained in the packing box

The following information is contained in the package box along with the product:

A) Product qualification certificate;

In the form of b) Product Specifications.

7.3 Transportation

The battery pack can be transported by any vehicle. No throwing, rolling and weighing during loading and unloading. During transportation, the battery pack should be in a semi-charge state, and should not be subjected to severe mechanical shock, exposure, rain.

7.4 Storage

Semi-charge battery pack should be stored in a dry, ventilated, clean warehouse, the room temperature should not exceed 40°C,

Relative humidity should not be greater than 80%. Batteries are not allowed to place with acid and other corrosive substances. The battery is discharged every 3 months at 50,000 mA to the protection circuit protection, and then charged for 3.5 hours by the charging method specified in 5.3 or the special charger.

8. The Company is not responsible for any failure to operate in accordance with this Specification.

9. The Company has the right not to notify the customer of this specification.

10. Matters not covered in this specification shall be settled by the supply and demand parties through negotiation.