

SUPER CAPACITOR MODULE

TECHNICAL DATA SHEET

Part Number: SY51.2V9KWh31W | Version Date: March 2023



.Scope

This specification is applied to super capacitor battery pack manufactured by Shanghai SUPRO Energy Tech Co.,Ltd.

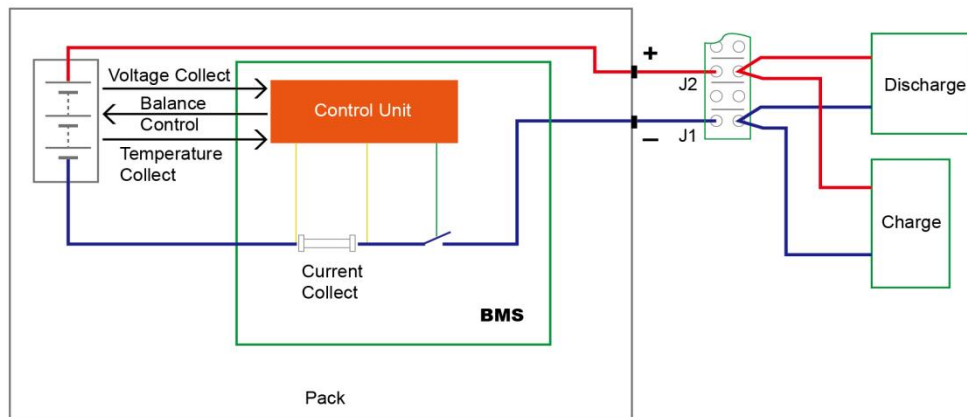
1. Ratings

Part Number	SY51.2V9KWh31W	Remark
Nominal Capacity	180Ah	±5% @25℃
Nominal Voltage	51.2V	---
Nominal Energy	9.6Kwh	---
Upper voltage	57.6V	
Low voltage	41.6V	
Pack resistance	< 50 mΩ	@ 1KHz AC, 50% SOC
Continuous Charge	50A	
Continuous Discharge	100A	
Peak dis current	120A	: @50%soc , 10s
Weight	104kg	
Cooling	Natural cooling	
Case material	Steel case	
Projected Cycle Life (25℃)	20000 times	
Warranty	15 years	
Cells Self-discharge Rate	2% per month	
Storage Temperature	-20℃~40 ℃	SOC>30%, one full charge needed per two months
Storage Humidity	25% ~ 95%RH	---
Operating Temperature	Discharge: -30 ℃~60 ℃	---
	Charge: 0 ℃~55 ℃	---
Dimension (mm)	730*760*120	

2. System electrical diagram

The system is function modularity design.

- 1) The interface of charge and discharge is integrated.
- 2) The cell voltage and battery temperature is detected by BMS.



3. Caution

- 3.1 Place the battery out of the reach of children and infants.
- 3.2 Do not place the battery in microwave ovens or other similar appliances.
- 3.3 Do not remove the product label.
- 3.4 Do not attempt to open or service the battery pack.
- 3.5 Do not expose to temperatures above 80°C.
- 3.6 Do not short-circuit the positive and negative terminals of the battery with wire or other metallic objects. Do not transport or store the battery with metallic items.
- 3.7 Do not expose the battery to direct heat or flame, and do not use or store it near a fire or a location, subject to high temperatures. In addition, do not immerse or dampen the battery in water, saltwater, or any other liquid.
- 3.8 Do not puncture the battery with any sharp objects, hit it with a hammering device or similar device, step on it, drop it or subject it to strong shock.
- 3.9 Do not use battery if it is damaged or deformed.
- 3.10 Immediately cease use of the battery if it produces strange smells or smokes or becomes abnormally hot.
- 3.11 If the battery fluids leak and come into contact with an eye, do not rub the eye and immediately flush it with plenty of water before seeking medical assistance.

4. Notes

- 4.1 The pictures in the file are only for reference.
- 4.2 We reserve the final explanations of the items in this specification. This proposal is applicable for prototype.