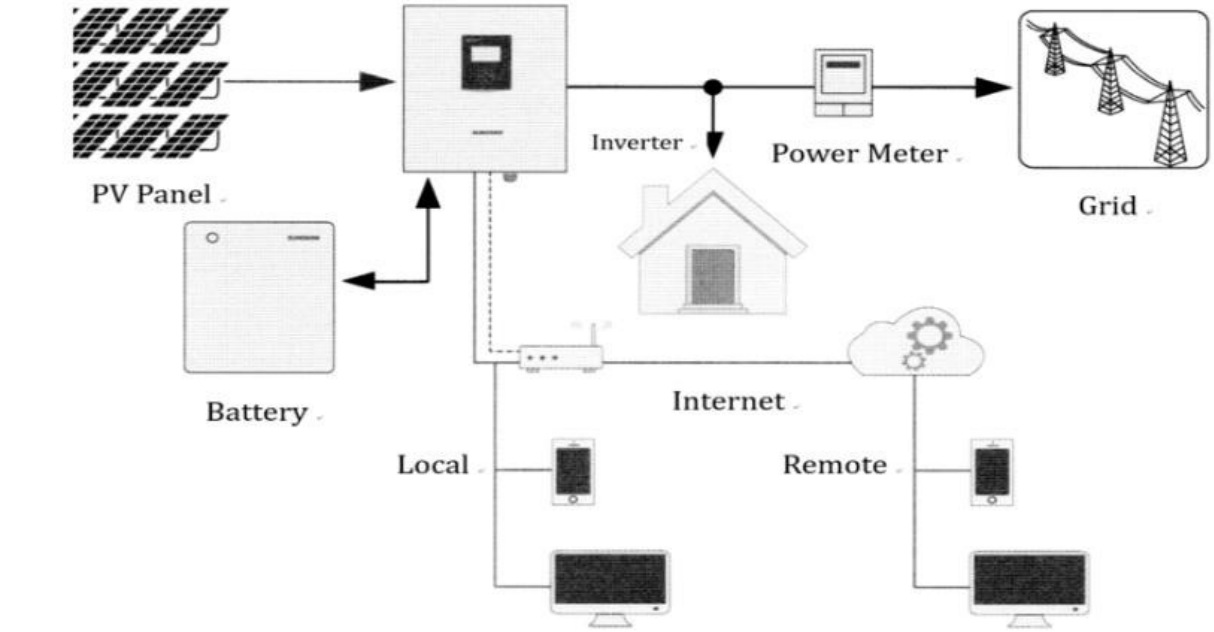
Specifications

1.Parameters

Nominal Voltage	51.2V
Nominal Capacity	120ah
Discharge Cut-Off	40V
Charge Cut-Off	58.4V
Charge Current	30A
Cont. Discharge	150A
Peak Discharge	300A （instantaneous）
Impedance	≤200mΩ
Charge Temperature	0℃ - 55℃
Discharge Temperature	-20℃ - 65℃
Charge Method	CC/CV
Life Cycle	>6000Times
Size	450*260*530mm(Customized)
Weight	68KG
Communication	RS485

System Architecture:



Built-in BMS

No.	Item	Test Item	Creterion
1	Voltage	Charging Voltage	DC:54.8V CC/CV
		Balance voltage for single cell	3.50±0.025V
2	Current	Balance voltage for single cell	35±5mA
		Current consumption	≤50μA
		Maximal continuous charging current	50A
		Rated continuous discharging current	150A(Peak 300A)
3	Over charge Protection	Over charge detection voltage for single cell	3.65V±0.025V
		Over charge detection delay time	0.7S—1.3S
		Over charge release voltage for single cell	3.550±0.05V
4	Over discharge Protection	Over discharge detection voltage for single cell	2.50V±0.07V
		Over discharge detection delay time	1.6±0.5S
		Over discharge release voltage for single cell	3.00±0.75V
5	Over current Protection	Over current detection current	500±50A

		Over current detection delay time	1.6±0.5S
		Release condition	Cut load
6	Short Protection	Detection condition	Exterior short circuit
		Detection delay time	230uS—500uS
		Release condition	Cut load
7	Communication	Communicate	RS485
8	Resistance	Protection circuitry (MOSFET)	≤60mΩ
9	Temperature	Operating Temperature Range	-40~+85℃
		Storage Temperature Range	-40~+125℃

Safety performance：

NO.:	Item	Test Methods	standard
1	Overcharge performance	After the standard battery is charged, the initial state of the battery is measured. When the battery status is normal, the current is charged to 10.0V at 3C current, and then the constant voltage is charged to the current of 0.01C. Observe the appearance of the battery changes.	Do not fire, do not explode
2	Over discharge performance	After the battery is charged, measure the initial state of the battery and discharge it to 0 V at 0.5C when the battery status is normal. Observe the battery appearance changes.	Do not fire, do not explode
3	External short circuit	After the battery is charged, the initial state of the battery is measured and the positive and negative poles (the total resistance of the line is not more than 50mΩ) are directly shortened in the explosion proof hood. When the battery temperature drops below the peak temperature by about	Do not fire, do not explode

		10 ° C, the test ends. Observe the battery temperature and appearance changes.	
4	Hot abuse	Measure the initial state of the battery, the battery standard charge, placed in the oven, the temperature (5 ± 2 ℃) / min rate rose to 130 ± 2 ℃ and heat 30min. Observe the battery appearance changes.	Do not fire, do not explode
5	fall	Test the initial capacity of the battery, the standard charge, the initial state of the battery, the test battery from the height (lowest point height) to 1m vertical position, the horizontal direction of free fall to the concrete floor, asked to fall 2 times.	Do not fire, do not explode
6	Heavy impact	A steel rod with a diameter of 15.8 mm was placed in the middle of the fully charged battery; then the weight of 10 kg was dropped from the height of 1.0 m to the upper part of the battery.	Do not fire, do not explode
7	Extrusion test	The batteries were placed between the two extruded surfaces of the extrusion apparatus, the cylindrical cores were parallel to the extrusion surface, gradually increasing the pressure to 13 kN, maintaining the pressure for 1 min.	Do not fire, do not explode