

STD51.2V280AH Battery Pack

7.17kW/14.336kWh Air-cooled energy storage PACK

Product introduction

- The battery PACK module consists of 16 1P16S battery cells, and is configured with BMU, collection wiring bundle, high voltage connector, air-cooled core module, series bar, fixed structure, and cooling fan. The battery module has overvoltage, undervoltage, overcurrent, insulation, overtemperature and other protection functions, while the structure is fixed and the external connector is quickly connected to charge and discharge functions.
- The module is composed of a standard 280Ah lithium iron phosphate (LFP) square aluminum shell cell with a nominal capacity of 14.336kWh, a nominal voltage of 51.2V, and a working voltage range of 43.2V~58.4V.

Product features

- Product standardization, modular design, easy to install and maintain.
- The standard product has good energy and power adaptability, and can be flexibly configured to match various industrial and commercial scenarios.
- Long service life, cycle life of more than 6000 times, design life of up to 15 years.
- Excellent electrical performance, using automatic laser welding welding, good battery consistency, small internal resistance, superior charging and discharging performance.
- The module adopts self-opening heat dissipation partition, which has excellent heat dissipation performance.

PACK box appearance diagram



Technical Specification

NO.	Item	Specification	Remark
1	Nominal voltage(V)	51.2	
2	Minimal working voltage(V)	43.2	T > 0°C @cell 2.7V
3	Maximum working voltage(V)	58.4	T > 0°C @cell 3.65V
4	Configuration mode	1P16S	
5	Rated capacity(kWh)	14.336	25±2°C,0.5C
6	Weight(kg)	110±2(TBD)	
7	Number of temperature collection points (PCS/box)	8(TBD)	
8	Energy density (Wh/Kg)	≥135(TBD)	
9	Rated capacity(Ah)	280	0.5C discharge current, 25±2°C
10	Cycle life	≥6000	25±2°C, 0.5C/0.5C, SOC5%~95%,surplus capacity ≥80%
11	Maximum continuous charging current(A)	140A/0.5C	20 ~ 35°C, SOC:0 ~ 90%
12	Maximum pulse charging current(30s)	1C	25 ~ 35°C, SOC:0 ~ 80%
13	Maximum continuous discharge current(A)	140A/0.5C	15 ~ 35°C, SOC:10% ~ 100%
14	Maximum pulse discharging current(30s)	1C	20 ~ 35°C, SOC:20% ~ 100%
15	Self-discharge rate	≤ <u>3</u> %/ month	new cell, 25±2°C, 30%SOC, After three months of storage
16	Storage temperature (°C)	0 ~ 45°C, RH≤65%	Storage time ≤ 3 month, SOC keep 20% ~ 50%
17	Insulation grade(MΩ)	≥1000	Battery pack total positive, total negative over the ground
18	Battery case IP Grade	IP20	
19	Cooling method	Air-cooled	
20	Charge at the time of shipment (SOC)	30%±5%	
21	Product size(mm)	435*234*800	
22	Certificate	CE,UN38.3,MSDS,IEC62619	