

Technical Data Sheet 技术数据表

LiFePO4 Battery Packs 磷酸铁锂电池组

51.2V/50Ah Series: 51.2V/50Ah 系列:

IP67 等级的磷酸铁锂电池组，专门为船舶设计的储能电池，支持多组电池并联，具有体积小，重量轻的优点，适用于游艇，渔船等船体小，空间有限的船舶进行灵活安装。

IP67 LiFePO4 battery packs, specially designed for energy storage in ships, supports multiple sets of batteries in parallel, has the advantages of small size and light weight, and is suitable for flexible installation in small and limited space vessels such as yachts and fishing boats.

产品特点 Special Features

- 被动电芯平衡 Passive cell balancing
- 在放电深度达 80% 状态下，>2,500 次循环 >2,500 cycles at 80% depth of discharge
- 过充或过放自动保护机制 Automatic protection against overcharge or over-discharge
- 在高低温环境下自动关闭 Automatic shut-off at unsafe temperatures
- 对单体电芯性能及健康状况进行记录分析 Data logging for cell monitoring (performance, state of health)

技术参数 Technical Specifications

参数 Specifications	
型号 Model	51.2V/50Ah LiFePO4 电池 Battery
电芯类型 Cell Chemistry	3.2V/50Ah LiFePO4 方形电芯 Prismatic Cells
组合方式 Cell Configuration	16S1P
额定容量 Rated Capacity (Ah)	50Ah @0.3C 放电倍率 Discharge Rate
标称电压 Nominal Voltage (V)	51.2V
额定能量 Rated Energy (kWh)	2.56kWh
电压范围 Voltage Range (V)	44.8V – 57.6V
循环寿命 Cycle Life	在25°C，放电深度达80%状态下，>2,500循环 >2,500 cycles with 80% discharge depth at 25°C
充电 Charging	
低温充电电流 Low Temperature Charging Current (A)	0.1C/20A @0°C to 10°C (充电持续电流 Constant Current Charging)
标准充电 Standard Charging Current (A)	0.3C/15A (充电持续电流 Constant Current Charging)
最大充电电流 Maximum Charging Current (A)	1C/50A (充电持续电流 Constant Current Charging)
充电条件 Charging Condition	@0°C to 45°C, 60±25% RH
放电 Discharging	
标准放电 Standard Discharging Current (A)	0.5C/25A (放电持续电流 Constant Current Discharge)
最大放电电流 Max. Discharging Current (A)	1C/50A (放电持续电流 Constant Current Discharge)
放电条件 Discharging Condition	@-10°C to 60°C, 60±25% RH
电池管理及通讯 Battery Management & Communication	
电池管理 Battery Management	电池管理系统 (BMS), 电芯平衡, CAN-界面 Battery Management System with cell balancing and CAN-Interface
电芯监察 Cell Monitoring	对单体电芯性能, 健康状况或维护进行记录分析 Data logging for cell performance, state of health or maintenance
保护/耐用性 Protection / Durability	
散热系统 Heat Dissipation	自动散热 Nature Cooling
电芯平衡 Cell Balancing	被动 Passive
安全 Safety	过充, 过放, 过流, 高低温保护 Overcharge, over-discharge, over-current and unsafe operating temp. protection
加热系统 Heating System (optional)	可选 Available upon request
外壳及端子 Enclosure & Terminals	
外壳 Enclosure	304不锈钢壳, 喷粉 304 stainless steel, powder coating
防水等级 IP Code	IP67
尺寸及重量 Dimensions & Weight	400x325x150mm / 30kg