

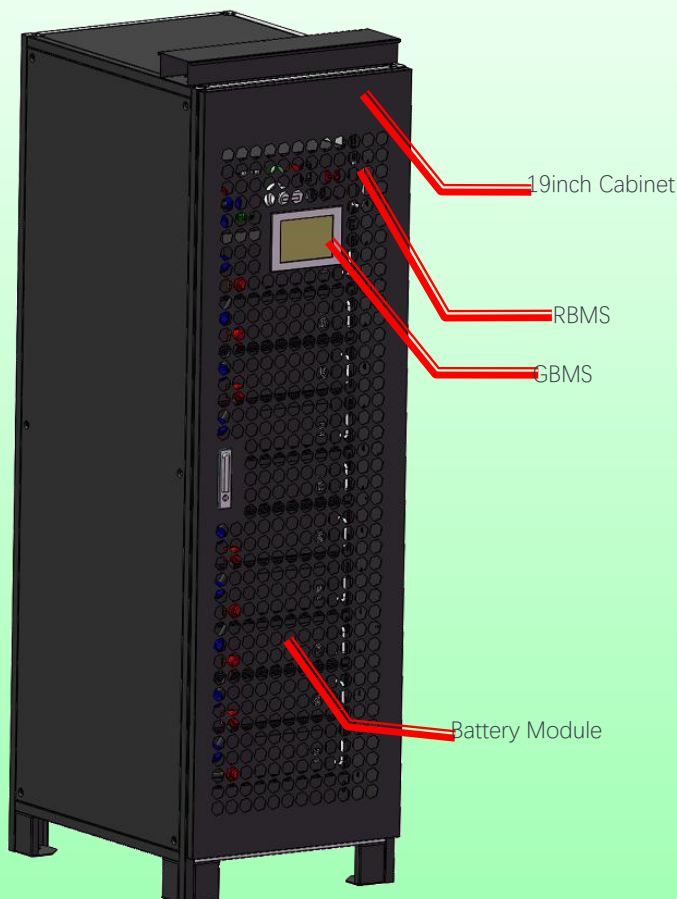
Overview

PWR247 Techsol 4U Pvt. Ltd. Lithium Iron Phosphate (LiFePO₄) battery module is designed for energy storage and power supply system applications. The module is integrated with an intelligent BMU/RBMS, offering significant advantages in safety, cycle life, energy density, operating temperature range, and environmental protection.

This specification outlines the type, dimensions, structure, electrochemical performance, service life, and RBMS features of the product. The specifications may be updated in accordance with varying customer requirements.



Rack Overview



Images reference only, it will be adjustment based on module quantities

Features

- The battery module comprises single LFP cells, wiring, BMS, container, battery racks, and RBMS.
- Built with high-performance LFP single cells, ensuring long life, safety, and a wide operating temperature range.
- Features high energy density, compact size, lightweight design, and zero pollution.
- Equipped with RBMS-BMU for protection against voltage, current, and temperature variations throughout the process.
- Integrated communication interfaces (CAN2.0 and RS485) enable connectivity with UPS or PC.
- Built-in LED indicator for displaying SOC (State of Charge) and operating status.
- Provides cell balancing and rack-to-rack balancing for stable performance.
- Customizable LCD display for real-time battery system Information
- Housed in a standard 19-inch cabinet for easy installation and capacity expansion.
- Option to customize the battery system with a neutral line (Compatible to 3-wire or 2-wire DC bus of UPS systems).
- Designed for a service life of up to 15 years, offering stable, maintenance-free performance, 6000 cycles & 6C design.
- UL9540A Compliant Li-ion cells.

Technical Specifications

Name	Item	Parameter	Remarks
LFP48120	Battery Type	LiFePO4	
	Module Voltage	51.2V	
	Rated capacity	120Ah	
	Each cell voltage (Nominal)	3.2V	
	BMU inside	1	
	Dimension (W*D*H)	442*600*155	
	Weight	~60kg	
	Power Terminal	Screw type	
RBMS-BP6C	Two level protection	Relay & MCB	
	LED indicator	RUN & ALM	
	Balance between modules	Passive, integrated	
	Balance between cells	Passive, integrated	
	Power consumption	< 50 W: Operating	
	Power consumption	0, Switch off	
	Dimension (W*D*H) mm	442*550*260mm	
	Weight	40kg	
	Communication	Rs485/CAN/LAN/dry contact	
	Dry contact integrated	3	
System specification	Pack Module	LFP48120 (51.2V120AH)	8 Modules
	RBMS Module	RBMS-BP6C	
	Rated voltage (V)	409.6 (2-Wire DC Bus)	±204.8 Center Tapped (3-Wire DC Bus)
	Rated capacity(Ah) 0.2C @25°C	120	
	Rated energy(Kwh)	49.15	
	Max. Charging current	120A	Single cabinet
	Max. Discharging rate	6C	Single cabinet
	Charging voltage	435.2~441.6V	3.4~3.45V/cell
	Discharge cut-off voltage	358.4V	2.8V/cell
	Cycle life (1C/6C)	>3000/6000 cycles	100%DOD/70~80%DOD,@25°C
	Short circuit current(A)	9000A	<10ms
	System dimension	600*1000*2000	19-inches cabinet
	Total weight(kg)	≈760kg	
	Internal Resistance	<100mΩ	Fully charged @25°C
	Thermal Management	Forced air cooling	
	Operating temperature	Charge: -5~55°C	
		Discharge: -20~65°C	
	Communication	RS485/CAN/LAN	
	Dry contact	3	
	Display	7 inches touch LCD screen (optional)	Integrated with GBMS(optional)