48V 100Ah 3U Lithium Iron Phosphate (LiFePO4) Battery



48V 100Ah 3U Battery Brief

A 48V, 100Ah lithium iron phosphate battery in a 3U metal rack case, storing 4800Wh. Built for telecom sites and compatible with Huawei rectifiers, it delivers more than 6000 cycles at 80% depth of discharge.

The front panel carries SOC, ALM and RUN indicators, RS232, RS485 and CAN ports, a standard breaker and M8 terminals, and up to 16 modules run in parallel.

Salient Features

- Longer life cycles: ~20 times longer cycle life and ~5 times longer float/shelf life than lead-acid, minimising replacement cost and total cost of ownership
- Higher power: delivers twice the power of lead-acid, even at high discharge rates, while keeping high energy capacity
- Superior safety: eliminates the risk of explosion or combustion from high impact, overcharging or short circuit
- Lighter weight: 40% lighter than lead-acid batteries
- Wider temperature range: 0℃~55℃

Applications

- Telecommunication (compatible with Huawei rectifiers)
- UPS (backup power)
- Lighting
- Marine
- Solar / wind energy storage systems
- Medical equipment
- Electric vehicles and electric mobility
- Robotics

Specifications of LiFePO4 Batteries

	Model	LFP-48V100Ah
Electrical	Nominal Voltage	48V
	Nominal Capacity	100Ah
	Energy	4800Wh
	Internal Resistance	≤20mΩ
	Cycle Life	>6000 at 80% DOD 1C/1C
	Monthly Self-discharge	<3%
	Efficiency of Discharge	96~99% @0.5C
Charge	Charge Voltage	54V ±0.2V
	Charge Mode	0.5C to 54V, then @54V charge current to 0.02C (CC/CV)
	Recommended Charge Current	30A
	Max. Charge Current	1C
Discharge	Recommended Discharge Current	30A
	Max. Discharge Current	1C
	Discharge Cut-off Voltage	37.5V
Environment	Charge Temperature	0°C to 55°C (32°F to 131°F) @60±25% relative humidity
	Discharge Temperature	-20°C to 60°C (-4°F to 140°F) @60±25% relative humidity
	Storage Temperature	0°C to 40°C (32°F to 104°F) @60±25% relative humidity
Front Panel	Status Indicator	SOC / ALM / RUN
	Communication Ports	RS232 / RS485 / CAN
	Communication in Parallel	16 modules in parallel
	Terminal Size	M8 (screw size)
	IP Rating	IP20
	LCD Screen	Optional
	Breaker	Standard
Mechanical	Case	Metallic
	Dimensions (D×W×H) mm	480×430×133 (standard); 400×430×133 (customised)
	Weight	~45kg
Discharge @25℃	Constant Current to 37.5V	1h: 100A · 2h: 50A · 3h: 33.2A · 4h: 25A · 5h: 20A · 10h: 10A · 20h: 5A
	Constant Power to 37.5V	1h: 4800W · 2h: 2400W · 3h: 1600W · 4h: 1200W · 5h: 960W · 10h: 480W · 20h: 240W

Product specifications are subject to change without further notice.