51.2V 100Ah Lithium Iron Phosphate (LiFePO4) Rackmount Battery





Front panel: terminals

BK LFP-51.2V-100Ah-RM Brief

A 51.2V, 100Ah lithium iron phosphate battery in an SPCC metal rack case, storing 5120Wh. It delivers 6000 cycles or more at 80% depth of discharge and 0.5C, with 50A continuous and 100A maximum charge and discharge current.

The front panel carries SOC, ALM and RUN indicators, an LCD screen, RS485 and CAN ports 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
- UPS (backup power)
- Lighting
- Marine
- Solar / wind energy storage systems
- Medical equipment
- Electric vehicles and electric mobility
- Robotics

Battery Specifications

	Model	BK LFP-51.2V-100Ah-RM
Electrical	Nominal Voltage	51.2V
	Nominal Capacity	100Ah
	Energy	5120Wh
	Internal Resistance	≤20mΩ
	Cycle Life	≥6000 at 80% DOD & 0.5C
	Monthly Self-discharge	<3%
	Efficiency of Discharge	96~99% @0.5C
Charge	Charge Voltage	58.4V
	Charge Mode	0.5C to 58.4V, then @58.4V charge current to 0.02C (CC/CV)
	Continuous Charge Current	50A
	Max. Charge Current	100A
	Peak Charge Current	200A (5s)
Discharge	Continuous Discharge Current	50A
	Max. Discharge Current	100A
	Peak Discharge Current	200A (5s)
	Discharge Cut-off Voltage	40V
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	RS485 / CAN
	Communication in Parallel	16 modules in parallel
	Terminal Size	M8 (screw size)
	LCD Screen	Available
	Breaker	Optional
Mechanical	Case	SPCC
	Dimensions (W×H×D) mm	420×550×160
	IP Rating	IP20
	Weight	45kg
Discharge @25℃	Constant Current to 40V	1h: 100A · 2h: 50A · 3h: 33.2A · 4h: 25A · 5h: 20A · 10h: 10A · 20h: 5A
	Constant Power to 40V	1h: 4800W · 2h: 2400W · 3h: 1600W · 4h: 1200W · 5h: 960W · 10h: 480W · 20h: 240W

Product specifications are subject to change without further notice.