



24V 50Ah Lithium Iron Phosphate Battery

LITHIUM IRON PHOSPHATE

24V 50AH BATTERY

⚠ CAUTION

Fire hazard. Please ensure that your charger is lithium iron phosphate compatible before use.

🚫 DO NOT

- Disassemble, crush, puncture, or incinerate the battery.
- Short circuit the battery terminals.
- Expose the battery to temperatures above 140°F (60°C).
- Connect batteries in series.



RENOGY 24V 50Ah Lithium Iron Phosphate Battery

No more heavy lifting! The Renogy 24V 50Ah Lithium Iron Phosphate Battery is designed for the drop-in replacement of AGM and GEL batteries, provides one-stop power solution for your 24V power system. It features exceptional 3500 cycles (80% DOD) and more than 10 years lifespan, built-in BMS system for better protection, IP65 waterproof, and fast charging speed. A safe and reliable power supply for RV, camper, marine, trolling motor, golf carts, floor scrubber, electric pallet jack, and other off-grid systems.

KEY FEATURE

• Uncompromising Quality

Exceptional lifespan of 3500 cycles (80% DOD), about 10 times longer than lead-acid batteries. 100% usable capacity, 2 times of lead-acid counterpart. Wide discharging temperature ranges from -4°F to 140°F (-20°C~60°C). Fearless of extreme climates, back up your wild adventures.

• Easy Upgrades

A space-saving choice for your 24V power system. Upgrades from lead-acid to lithium seamlessly with a greater energy density, 100% usable capacity, and a faster-charging speed.

• Longer Shelf Life

No need to charge the battery constantly during storage. Automatically switch to energy-saving mode in 30s. The self-discharge rate is as low as 3% per month. Offers better performance on storage and endurance.

• Safe and Reliable

The state-of-the-art battery management system (BMS) provides short circuits, overcharging, and over-temperature protection while maintaining a balanced voltage across all cells. Ensures reliable power output and a longer lifespan.

• Powerful Output

Up to 8 batteries can be easily connected in parallel, providing a maximum of 960Wh power output. Auto-balancing function, improve the average charging efficiency of your batteries over extended use.

• Certified Performance

Reliable output and ultra safety. Performance certified with MSDS, UN38.3, FCC, PSE. IP65 waterproof, protected against water and dust with the fully sealed housing.

Model	RBT2450LFP
Battery Type	Lithium Iron Phosphate
Nominal Voltage	25.6V
Rated Capacity	50Ah (0.2C, 25 °C)
Charge Voltage	29.0V±0.2V
Float Voltage	N/A
Equalization Voltage	N/A
Maximum Charge Current	50A
Maximum Discharge Current	50A
Cycle Life	>3500 Cycles (0.2C, 25 °C, 80% DOD, 80% EOL)
Charge Temperature Range	32°F~113°F (0°C~55°C)
Discharge Temperature Range	-4°F~140°F (-20°C~60°C)
Storage Temperature Range	-13°F~149°F (-25°C~65°C)
Operation Relative Humidity	10%~95%
Self-Discharge Rate	≤3%/Month (Shelf Mode)
Internal Resistance	<20mΩ
Tail Current	2.5A
Peukert Exponent	1.05
Connection Method	Parallel (Up to 8)
Communication Protocol	N/A
Terminal Bolt Size	M8 x 1.25 x 15 mm
Recommended Terminal Torque	88.5 inch·lbs~106.2 inch·lbs (10 N·m~12 N·m)
Housing Material	ABS
Protection Rating	IP65
Dimensions	13.0 x 6.8 x 8.4 inch (330 x 172 x 214 mm)
Weight	28.0 lbs. (12.7kg)
Certifications	MSDS, UN38.3, FCC, CE, UKCA, PSE

Accessories

Long Terminal Bolts (2)	M8 x 1.25 x 20 mm
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Warranty

Material and Workmanship Warranty	3 Year
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