

# CORE SERIES DEEP CYCLE LITHIUM IRON PHOSPHATE BATTERY

12.8V | 100Ah



## RENOGY Core Series **Deep Cycle Lithium Iron Phosphate Battery**

The Renogy Core Series 12.8V 100Ah Deep Cycle Lithium Iron Phosphate Battery is designed for the drop-in replacement of deep-cycle lead-acid batteries with its standard Battery Council International (BCI) group size.

Weighing only half of the lead-acid counterparts, the battery can be safely discharged to 100% Depth of Discharge (DOD), delivering twice the energy. Manufactured with automotive-grade battery cells, the battery features the highest safety standards and an extended 5000+ cycle life. In addition, the reliable Battery Management System (BMS) provides comprehensive protection to the battery.

### KEY FEATURE

- **Unparalleled Performance**

Features a greater energy density, a deeper discharge capability, a higher round-trip efficiency, and a faster charging speed in a smaller size over counterparts in the market.

- **Uncompromising Quality**

Ensures an exceptional lifespan with more than 5000 cycles (80% DOD), a continuous charge/discharge current of 100A, and a wide range of operating temperatures with the automotive-grade battery cells.

- **Reliable Protection Mechanisms**

Designed with a sturdy internal structure for RV use, and includes multiple levels of protection such as low temperature cut-off and precise balancing through the battery management system.

- **Higher Capacity than Competitors**

106Ah instead of 100Ah, for a longer-lasting application.

- **Easy to Expand**

Upgrade to lithium batteries seamlessly with the standard BCI group sizes; up to 16 batteries in 4 series and 4 parallel system connection delivering a maximum of 48V (51.2V) 400Ah with 20.48 kWh.

## TECHNICAL SPECIFICATIONS

### General

Product Name	RENOGY Core Series Deep Cycle Lithium Iron Phosphate Battery
Model Name	RBT12100LFP-G1
Battery Cell Type	Lithium Iron Phosphate
Rated Capacity (0.5C, 25°C)	100Ah
Nominal Voltage	12.8V
Voltage Range	10V to 14.8V
Cycle Life (0.5C/1C, 25°C)	5000 Cycles (80%EOL, 80%DOD)
Dimension	10.24 x 6.65 x 8.31 in / 260 x 169 x 211 mm
Weight	23.15 lbs. / 10.5 kg
Connection Method	Series & Parallel (4S4P)
Terminal Bolt Size	M8 x 1.25 x 15 mm
Recommended Terminal Torque	88.5 inch-lbs to 106.2 inch-lbs / 10 N·m to 12 N·m
Protection Rating	IP65
Certification	MSDS, UN38.3, FCC, CE, PSE, and UKCA

### Operation Parameters

Charge Voltage	14.4V
Maximum Continuous Charge Current	100A
Maximum Continuous Discharge Current	100A
Peak Discharge Current	300A@10s
Charge Temperature Range	32°F to 131°F (0°C to 55°C)
Discharge Temperature Range	-4°F to 140°F (-20°C to 60°C)
Storage Temperature Range	-13°F to 149°F (-25°C to 65°C)
Operation Relative Humidity	10% to 95%