





# RENOGY LITHIUM BATTERIES

The Renogy Lithium-Iron Phosphate Battery is perfect for deep-cycle applications including cabins, solar/wind energy systems, UPS battery backups, telecommunication systems, medical equipment, and more. Unlike gel or lead-acid batteries, the Renogy LFP battery is safer, lighter, and more powerful with a long service and shelf life to boot. Invest in this sealed, maintenance-free battery for your off-grid system today!

## **KEY FEATURES**

#### **Designed for Safety**

Extremely safe lithium iron phosphate cells, fully sealed and sturdy waterproof housing helps keep the battery from leaking or corrosion.

#### **Extended Lifespan**

With more than 2000 cycles the service life is more than double that of traditional lead acid batteries.

### **Battery Management System (BMS)**

The built-in battery protection system optimizes the battery performance by automatically balancing the cells and providing multiple protections against over-charging, over-discharging, over-current, short-circuit and over-temperature.

## Wide range of applications

Widely used in RV, Marine and solar applications.

#### Low self-discharge

The battery self-discharges below 3% per month, providing optimal longevity and shelf life.

## **Specifications**

Model		RNG-BATT- LFP-12-50	RNG-BATT- LFP-12-100	RNG-BATT- LFP-12-170
Electric Characteristics				
Nominal Voltage		12.8V		
Rated Capacity (o.2C)		50Ah	100Ah	170Ah
Minimal Rated Capacity (0.2C)		47.5Ah	95Ah	161.5Ah
Energy		640Wh	1280Wh	2176Wh
Specific Energy		95.5Wh/kg	100.4Wh/kg	103.6Wh/kg
Energy Density		114.4Wh/L	126.7Wh/L	149.1Wh/L
Internal Resistance		≤5omΩ	≤3omΩ	≤10mΩ
Cycle Life (o.2C, 20±5°C)		2000 Cycles @ 80% DOD		
Charging Parameters				
Charge Voltage		14.4±0.2V		
Maximum Charge Current		50A		85A
Charge Cut-off Voltage		14.6V		
Discharging Parameters		e.		
Maximum Continuous Discharge Current		50A	100A	125A
Discharge Cut-off Voltage		≥10V		
Temperature Parameters				
Operation Temperature Range (60±25% R.H.)	Charge	0~45°C / 32~113°F		
	Discharge	-20~60°C / -4~140°F		
	Recommended	23±5°C / 73.4±9°F		
Storage Temperature Range (60±25% R.H.)	Less Than 1 Year	o~25°C / 32~77°F		
	Less Than 3 Months	-5~35°C / 23~95°F	~95°F -10~35°C/ 14~95°F	
Mechanical Properties				
Dimensions	Length	197 mm / 7.8 inch	260 mm / 10.2 inch	357 mm / 14.0 inch
	Width	166 mm / 6.5 inch	158 mm / 6.2 inch	155 mm / 6.1 inch
	Height	171 mm / 6.7 inch	246 mm / 9.7 inch	270 mm / 10.6 inch
Weight		6.7 kg / 14.7 lbs	12.75 kg / 28.1 lbs	22 kg / 48.5 lbs
Housing Material		ABS+PC		
Terminal Model		M8x1.25x12mm	M8xo.75x14mm	M12x1.75x16mm
Assembly Method		4S15P	4S30P	4S53P