

Description

Maximize power without sacrificing space. Renogy Core Series Mini LiFePO4 Batteries offer capacities from 100Ah to 300Ah in an ultra-compact footprint. They save up to 50% space compared to standard batteries with similar power, making them ideal for tight installs in trailers, kayaks, and boats.

Built for harsh outdoor conditions, they feature low-temperature charging protection and a rugged, IP65-rated design for all-weather durability. Pair with the optional Renogy Battery Shunt for smart remote monitoring and management directly from your phone.

Key Features

■ Mini-Sized Design

Save up to 50% of space compared to the same-capacity batteries, with flexible installation options, including side mounting, making it perfect for replacing lead-acid batteries in tight areas.

■ Reliable BMS Protection

Offers extensive protection and precise balancing through the battery management system (BMS) to reduce electric hazards.

- High/low voltage protection
- Charge/discharge overcurrent protection
- Short circuit protection
- High/low temperature protection
- Cold charging protection (low-temp cut-off)
- Cell balancing during the charging

■ 10x Longer Lifespan

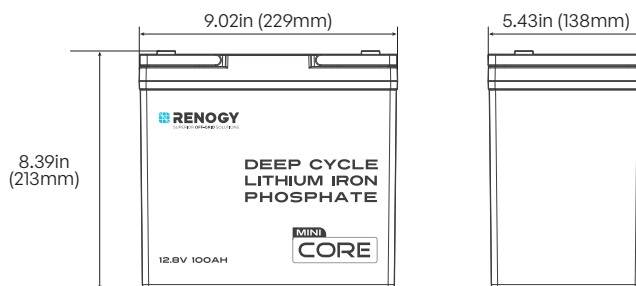
Achieve over 5,000 cycles (80% DOD) with automotive-grade cells. Enjoy unmatched longevity that outperforms lead-acid batteries for years to come.

■ Outdoor-Ready Design

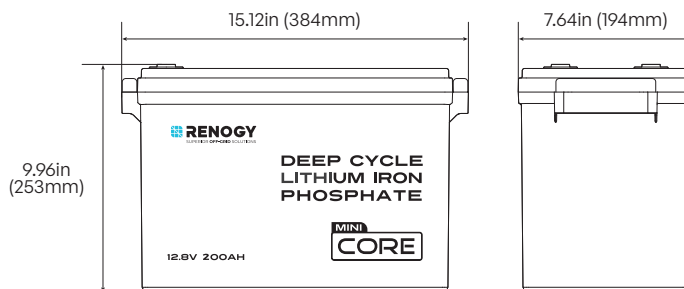
Reliable IP65 rating and our innovative vibration-resistant build guard against moisture, sand, and shocks. These features translate to fewer failures, lower maintenance, and continuous operation, whether outdoors or in transit.



Product Dimensions



Core 12V 100Ah Mini LiFePO4 Battery



Core 12V 200Ah Mini LiFePO4 Battery*

*Core 12V 300Ah Mini LiFePO4 Battery is the same size as the 12V 200Ah option.

Technical Specifications

Electrical Specifications

Model	RBT12100LFP-M	RBT12200LFP-M	RBT12300LFP-M
Battery Cell Type	Prismatic	Prismatic	Prismatic
Cell Chemistry	LiFePO4	LiFePO4	LiFePO4
Rated Voltage	12.8V	12.8V	12.8V
Rated Capacity (0.5C, 25°C)	100Ah	200Ah	300Ah
Voltage Range	10-14.8V	10-14.8V	10-14.8V
Cycle Life (0.5C, 25°C)	5,000 Cycles (80% DOD)	5,000 Cycles (80% DOD)	5,000 Cycles (80% DOD, 80% EOL)
Maximum Continuous Charge Current	100A	120A	150A
Maximum Continuous Discharge Current	100A	200A	200A
Peak Discharge Current	300A@5s	380A@10s	380A@10s
Self Discharge	<3%	<3%	<3%
Connection Method	4S/8P/4S4P	4S/8P/4S4P	4S/8P/4S4P

Temperature Specifications

Charge Temperature	32°F to 122°F / 0°C to 50°C	32°F to 131°F / 0°C to 55°C	32°F to 140°F / 0°C to 60°C
Discharge Temperature	-4°F to 131°F / -20°C to 55°C	-4°F to 149°F / -20°C to 65°C	-4°F to 149°F / -20°C to 65°C
Storage Temperature	-13°F to 149°F / -25°C to 65°C	-4°F to 140°F / -20°C to 60°C	-4°F to 140°F / -20°C to 60°C
Operation Relative Humidity	10% to 95%	5% to 95%	5% to 95%

Mechanical Specifications

Weight	21.8 lbs / 9.9kg	42.44 lbs / 19.25kg	55.1 lbs / 25.0kg
Dimensions (LxWxH)	9.02 x 5.43 x 8.39in / 229 x 138 x 213mm	15.12 x 7.64 x 9.96in / 384 x 194 x 253mm	15.12 x 7.64 x 9.96in / 384 x 194 x 253mm
Communication Protocol	No	No	No
Terminal Bolt Size	M8 Terminal	M8 Terminal	M8 Terminal
Recommended Terminal Torque	88.5 inch-lbs to 106.2 inch-lbs / 10 N·m to 12 N·m	70.8 inch-lbs / 8 N·m	70.8 inch-lbs / 8 N·m
Housing Material	ABS	ABS	ABS+PC
Flame Retardancy	No	No	No
Protection Rating	IP65	IP65	IP65
Self-Heating	No	No	No
Shipping Class	UN3480, Class 9	UN3480, Class 9	UN3480, Class 9
Certifications	CE, FCC, IC, UKCA, RCM, UN38.3, R10, CB	CE, FCC, IC, UKCA, RCM, UN38.3, CB, R10	CE, FCC, IC, UKCA, RCM, UN38.3, CB, R10
Warranty	5-Year	5-Year	5-Year

Package Contents

Long Terminal Bolts	Yes (x2)	Yes (x2)	Yes (x2)
Terminal Bolts	No	Yes (x2)	Yes (x2)
User Manual	Yes (x1)	Yes (x1)	Yes (x1)

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