

Description

Renogy solid-state LiFePO₄ batteries transform mobile off-grid living through advanced hybrid semi-solid-state cells. Offering superior resistance to high temperatures and shock compared to traditional lithium options, these innovative batteries significantly reduce the risks of thermal runaway.

Integrated Bluetooth and CAN connectivity provide real-time energy monitoring, ensuring peace of mind through the Renogy App or Renogy ONE Core. This series includes 104Ah, 120Ah, and 240Ah capacities to fulfill demanding power needs.

Key Features

■ Inside-Out Safety

Housed in a fire-retardant, waterproof, and dustproof (IP67) casing, Renogy solid-state batteries reduce liquid electrolyte for improved stability, including stronger resistance to ignition or explosion in scenarios such as puncture.

■ Best-in-Class Battery Protection

Offers over 60 types of protection to deploy targeted defense based on risk levels, helping prevent unnecessary shutdowns and maintain smooth operation.

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

■ Safe Charging in Winter

Keep battery cells above freezing with self-heating pads, allowing for charging down to -4°F (-20°C)*.

■ Monitoring Made Easy

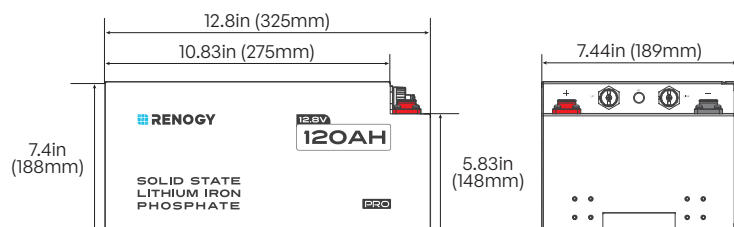
Understand your batteries better through Bluetooth and CAN connectivity. Monitor power consumption, remaining capacity, and more information even when you are not near the battery.

■ Compact Design for Limited Space

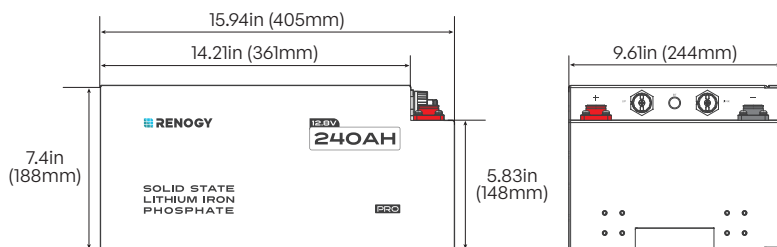
Engineered for tight spaces behind or under seats, Renogy's Pro S1 120Ah and the super-slim 104Ah battery enable a clean and aesthetic installation.



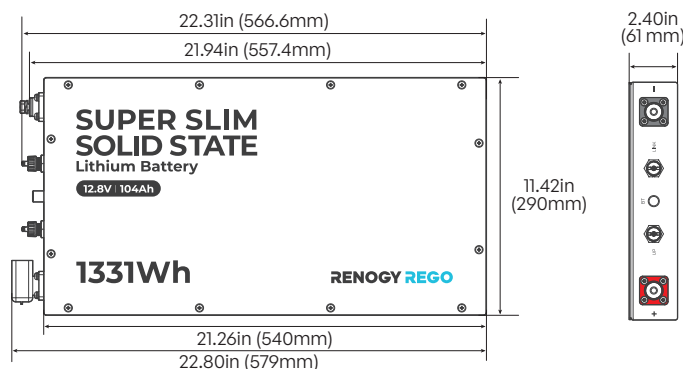
Product Dimensions



Pro S1 120Ah LiFePO₄ Battery



Pro S1 240Ah LiFePO₄ Battery



REGO 104Ah Super Slim LiFePO₄ Battery*

*May vary with models.

*The self-heating version is the same size as the regular option.

Technical Specifications

Electrical Specifications

Model	RBT12120LFP-SBH	RBT12240LFP-SBH	RBT12104LFP-SSL-BT	RBT12104LFP-SSBH
Battery Cell Type	Prismatic	Prismatic	Pouch	Pouch
Cell Chemistry	LiFePO4	LiFePO4	LiFePO4	LiFePO4
Rated Voltage	12.8V	12.8V	12.8V	12.8V
Rated Capacity (0.5C, 25°C)	120Ah	240Ah	104Ah	104Ah
Voltage Range	10.8-14.6V	10.8-14.6V	10-14.8V	10-14.8V
Cycle Life (0.5C, 25°C)	6,000 Cycles (80% DOD, 80% EOL)	6,000 Cycles (80% DOD, 80% EOL)	6,000 Cycles (80% DOD, 80% EOL)	6,000 Cycles (80% DOD, 80% EOL)
Maximum Continuous Charge Current	120A	240A	100A	100A
Maximum Continuous Discharge Current	150A	240A	200A	200A
Peak Discharge Current	350A@30s	450A@30s	290A@30s	290A@30s
Self Discharge	3%/month	≤3%/month	<3%/month	<3%/month
Connection Method	4S/16P/4S4P	4S/16P/4S4P	4S/16P/4S4P	4S/16P/4S4P

Temperature Specifications

Charge Temperature	-4°F to 131°F / -20°C to 55°C	-4°F to 131°F / -20°C to 55°C	14°F to 131°F (-10°C to 55°C, 1C) 14°F to 32°F (-10°C to 0°C, 0.1C)	-4°F to 131°F / -20°C to 55°C
Discharge Temperature	-4°F to 140°F / -20°C to 60°C	-4°F to 140°F / -20°C to 60°C	-4°F to 140°F (-20°C to 60°C)	-4°F to 140°F (-20°C to 60°C)
Storage Temperature	-4°F to 140°F / -20°C to 60°C	-4°F to 140°F / -20°C to 60°C	-4°F to 140°F (-20°C to 60°C)	-4°F to 140°F (-20°C to 60°C)
Operation Relative Humidity	5% to 95%	5% to 95%	5% to 95%	5% to 95%

Mechanical Specifications

Weight	29.5 lbs / 13.4kg	56.22 lbs / 25.5kg	28.55 lbs / 12.95kg	29.5 lbs / 13.38kg
Dimensions (LxWxH)	12.8 x 7.44 x 7.4in / 325 x 189 x 188mm	15.94 x 9.61 x 7.4in / 405 x 244 x 188mm	22.8 x 11.4 x 2.4in / 579 x 290 x 61mm	22.8 x 11.4 x 2.4in / 579 x 290 x 61mm
Communication Protocol	CAN and Bluetooth	CAN and Bluetooth	CAN and Bluetooth	CAN and Bluetooth
Terminal Bolt Size	M8 Terminal	M8 Terminal	M8 Terminal	M8 Terminal
Recommended Terminal Torque	70.8 in-lb / 8 N·m	70.8 in-lb / 8 N·m	70.8 in-lb / 8 N·m	70.8 in-lb / 8 N·m
Housing Material	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy
Flame Retardancy	Yes	Yes	Yes	Yes
Protection Rating	IP67	IP67	IP67	IP67
Self-Heating	Yes	Yes	No	Yes
Heating Temperature	40°F / 5°C On, 50°F / 10°C Off	40°F / 5°C On, 50°F / 10°C Off	/	40°F / 5°C On, 50°F / 10°C Off
Self-Heating Power	80W (±5W)	120W	/	150W
Shipping Class	UN3480, Class 9	UN3480, Class 9	UN3480, Class 9	UN3480, Class 9
Certifications	CE, R10, FCC, IC, UKCA, RCM, UN38.3, IEC 62619	CE, R10, FCC, IC, UKCA, RCM, UN38.3	CE, R10, FCC, IC, UKCA, RCM, UN38.3, IEC 62619	(In Progress)
Warranty	7-Year	7-Year	8-Year	8-Year

Package Contents

User Manual	Yes (x1)	Yes (x1)	Yes (x1)	Yes (x1)
Terminal Bolts	Yes (x2)	Yes (x2)	Yes (x2)	Yes (x2)
Long Terminal Bolts	Yes (x2)	Yes (x2)	Yes (x2)	Yes (x2)
Insulation Sleeves	No	No	Yes (x2)	Yes (x2)
Brackets Kit	Yes (x1)	Yes (x1)	Yes (x1)	Yes (x1)

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