



RE

EMBRACE THE
POWER OF SUN  **GHT.**

RE  ON[®]

FEATURES AND BENEFITS – LITHIUM

BENEFIT	FEATURE
SAFETY	Inherently safe chemistry. BMS provides extra protection.
DROP-IN REPLACEMENT	Available in standard industry sizes.
LIGHTWEIGHT	50-60% less weight than lead-acid equivalent.
LONGEST LIFE	Up to 10X longer cycle life than lead-acid equivalent.
MORE USABLE CAPACITY	25-50% more capacity than lead-acid equivalent.
CONSTANT POWER	Full power available throughout discharge. Voltage does not drop like lead-acid.
TEMPERATURE TOLERANT	2.5X more efficient operation at low temperatures. Safely operational up to 149°F (65°C).
CHARGING – FAST & SAFE	Highly efficient charging. Can fully charge in 1-3 hours. Built-in overcharge protection.
PSOC TOLERANT	No damage from partial state of charge operation or storage.
LONG SHELF LIFE	Low self-discharge so battery maintains state of charge.
MAINTENANCE-FREE	Plug, play and charge. No watering.
NON-HAZARDOUS	No gasses emitted.
INSTALLATION FLEXIBILITY	Can be installed upright or on its side.
CUSTOMIZABLE	Easy to customize for your size and power needs.

LITHIUM PRODUCT SPECIFICATIONS

Part Number	BCI Group Size	Capacity @ 25°C (77°F)		Energy (Wh)	Current Capability		Dimensions inches (mm)			Weight lbs (kg)	Terminal Type	Case Material
		AH	Min @ 25A		Continuous (A)	Peak (A)	Length	Width	Height			

12V - STANDARD

RB5	NA	5	12	64	5	10	5.9 (151)	2.6 (65)	3.9 (99)	2.0 (0.9)	F2	ABS
RB10	NA	10	24	128	10	20	5.9 (151)	3.9 (98)	4.0 (101)	3.6 (1.65)	F2	ABS
RB10PVC	NA	10	24	128	10	20	10.3 (262)	1.4 (36)	3.0 (77)	4.0 (1.8)	Wire Leads	PVC
RB20	NA	20	48	256	20	40	7.1 (181)	3.0 (76)	6.7 (169)	5.6 (2.55)	M6	ABS
RB35	U1	35	84	448	35	70	7.7 (195)	5.2 (131)	6.7 (171)	11 (4.8)	M8	ABS
RB40	NA	40	96	512	40	80	7.8 (197)	6.5 (166)	6.8 (173)	12 (5.4)	M8	ABS
RB50	NA	50	120	640	50	100	7.8 (197)	6.5 (166)	6.8 (173)	15 (6.7)	M8	ABS
RB75	24	75	180	960	75	150	10.2 (260)	6.6 (168)	8.6 (218)	24 (10.7)	M8	ABS
RB80	27	80	192	1024	80	160	12.0 (305)	6.6 (168)	8.6 (219)	25 (11.3)	M8	ABS
RB80-D	DIN	80	192	1024	80	160	13.2 (335)	6.9 (174)	7.5 (191)	25 (11.3)	M8	ABS
RB100	31	100	240	1280	100	200	13.0 (329)	6.8 (172)	8.8 (223)	30 (13.5)	M8	ABS
RB100-D	DIN	100	240	1280	100	200	13.2 (335)	6.9 (174)	7.5 (191)	30 (13.7)	M8	ABS
RB200	8D	200	480	2560	100	200	20.5 (520)	10.5 (267)	9.0 (228)	61 (27.7)	M8	ABS
RB300	8D	300	720	3840	100	200	20.5 (520)	10.5 (267)	9.0 (228)	83 (37.5)	M8	ABS

12V - X-SERIES (HIGH CONTINUOUS AND PEAK PERFORMANCE)

RB20-X	NA	20	48	256	50	90	7.1 (181)	3.0 (76)	6.7 (169)	5.6 (2.55)	M6	ABS
RB35-X	U1	35	84	448	70	100	7.7 (195)	5.2 (131)	6.7 (171)	11 (4.8)	M8	ABS
RB60-X	24	60	144	768	100	200	10.2 (260)	6.6 (168)	8.6 (218)	20 (8.9)	M8	ABS

12V - LT-SERIES (LOW TEMPERATURE OPERATION)

RB100-LT	31	100	240	1280	100	200	13.0 (329)	6.8 (172)	8.8 (223)	30 (13.5)	M8	ABS
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24V - STANDARD

RB24V20	U1	20	48	512	30	60	7.7 (195)	5.2 (131)	6.7 (171)	12 (5.4)	M8	ABS
RB24V50	31	50	120	1280	50	100	13.0 (329)	6.8 (172)	8.8 (223)	29 (13.2)	M8	ABS
RB24V100	NA	100	240	2560	100	200	20.5 (520)	10.5 (267)	9.0 (228)	61 (27.7)	M8	ABS

48V - STANDARD

RB48V100	NA	100	240	5120	100	200	22.8 (578)	16.1 (410)	8.3 (210)	187 (72)	M10	STEEL
RB48V150	NA	150	360	7680	100	350	23.6 (600)	12.1 (308)	12.6 (320)	179 (81)	M10	STEEL
RB48V200	NA	200	480	10240	200	250	34.1 (867)	14.1 (358)	15.5 (393)	302 (137)	M10	STEEL
RB48V300	NA	300	720	15360	100	200	29.1 (740)	19.9 (506)	16.1 (408)	388 (176)	M10	STEEL



Maximum Power. Maximum Life.

When you use RELiON Lithium Iron Phosphate (LiFePO₄) batteries as part of your solar energy system, you know you're making the absolute most of it. That's because RELiON batteries are the ultimate clean energy, delivering highly-efficient, ultra-long life and constant power you can depend on in even the most extreme environments.

TAKE CHARGE: Partial state of charge, known as PSOC, which is a killer of lead-acid batteries, does not affect performance or battery life of a lithium battery. Sometimes batteries don't get fully charged, or they regularly operate in a partial state of charge. Either way, you can count on RELiON lithium batteries living a long and productive life.

ULTRA-LONG LIFE: RELiON lithium batteries provide up to 10 times longer life than lead-acid batteries, and they still provide 80% of rated capacity after 2,000 cycles. Spend more time powering your applications and less time replacing your batteries.

MORE HOURS OF POWER: Lead-acid batteries are typically sized up to two times your energy needs to account for extended periods without sun and less usable energy with higher rates of discharge. Plus, you are typically cautioned to limit your use to 50% of the rated capacity, as using more can significantly reduce performance. Lithium batteries provide 100% of their rated capacity, regardless of the rate of discharge. And, you can use it all and still get substantially longer cycle life.

WORRY-FREE: RELiON lithium batteries are maintenance-free – no watering, no corrosion. Low self-discharge means the batteries don't lose capacity when they're idle, assuring that you have the energy you need, every time you need it.

EXTREME PERFORMANCE: RELiON lithium batteries are designed to perform in harsh conditions—freezing cold, scorching heat or rough waters.

ECO-FRIENDLY: RELiON lithium batteries are the ultimate clean energy. No gassing, no fumes and no pollution. Enjoy reliable power, while protecting the environment, using these non-hazardous batteries.

SAFETY TESTED: Unlike other lithium chemistries, RELiON LiFePO₄ batteries are inherently safe due to their stable chemical composition, and we have the UL1642 and IEC62133 test results to prove it.

BACKED BY THE BEST: Built to last, designed to perform, premium RELiON lithium batteries deliver unsurpassed performance wherever you are. We back this claim with a comprehensive, 5-year warranty.



RELi³ON[®]

WE'RE INVESTED

OUR CUSTOMERS. OUR PARTNERS. OUR EMPLOYEES. OUR FUTURE.

IT'S A PROMISE WE MAKE AND KEEP EVERY DAY



UN38.3

ISO 9001:2008
ISO/TS 16949:2009
ISO 14001:2004
OHSAS 18001:2007

Certifications Applicable to the Design and Manufacture of Lithium Iron Phosphate Batteries

Quality Management System
Quality Management System
Environmental Management System
Occupational Health and Safety Management System

reliionbattery.com

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RELiON Battery provides our customers with the highest quality and safest lithium products, in compliance with all regulatory standards.

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SOLAR SHEET
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