

RE

RENEWABLE.
RELIABLE.
RELiON RE.



RELi³ON[®]

FEATURES AND BENEFITS – LITHIUM

BENEFIT	FEATURE
SAFETY	Inherently safe chemistry. PCB/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 ^A @ 25°C (77°F)		Energy (Wh)	Dimensions inches (mm)			Weight lbs (kg)	Terminal Type
		Ah	Min @ 25A		Length	Width	Height		
12V									
RB5	NA	5	NA	64	5.9 (150)	2.5 (64)	3.7 (95)	2 (0.9)	F2
RB10	NA	10	NA	128	5.9 (150)	3.8 (97)	3.9 (99)	4 (1.8)	F2
RB20	NA	20	NA	256	7.1 (181)	3.0 (76)	6.6 (167)	7 (3.2)	M6
RB35	U1	35	84	448	7.7 (196)	5.2 (131)	6.1 (155)	10 (4.5)	M8
RB40	NA	40	96	512	7.8 (199)	6.5 (166)	6.7 (171)	14 (6.5)	M8
RB50	NA	50	120	640	7.8 (199)	6.5 (166)	6.7 (171)	15 (6.8)	M8
RB60	24	60	144	768	10.2 (260)	6.7 (170)	8.6 (219)	20 (8.9)	M8
RB75	24	75	180	960	10.2 (260)	6.7 (170)	8.6 (219)	26 (11.8)	M8
RB80	27	80	192	1024	12.1 (308)	6.8 (172)	8.7 (221)	28 (12.7)	M8
RB100	31	100	240	1280	13.0 (329)	6.8 (172)	8.9 (226)	32 (14.5)	M8
RB150	8D	150	360	1920	19.3 (490)	10.5 (267)	9.0 (229)	60 (27.2)	M8
RB200	8D	200	480	2560	19.3 (490)	10.5 (267)	9.0 (229)	72 (32.6)	M8
RB260	8D	260	624	3328	19.3 (490)	10.5 (267)	9.0 (229)	88 (39.9)	M8
RB300	8D	300	720	3840	20.5 (520)	10.6 (269)	8.7 (221)	84 (38.1)	M8
12V DIN									
RB80-DIN	DIN	80	192	1024	13.2 (335)	6.9 (175)	7.5 (191)	26 (11.6)	M8
RB100-DIN	DIN	100	240	1280	13.2 (335)	6.9 (175)	7.5 (191)	29 (13.3)	M8
24V									
RB24V50	31	50	120	1280	13.0 (329)	6.8 (172)	8.9 (226)	32 (14.5)	M8
RB24V100	NA	100	240	2560	19.3 (490)	6.7 (170)	10.6 (270)	53 (24.2)	M8
48V STEEL CASE									
RB48V100	NA	100	240	5120	22.8 (578)	16.1 (410)	7.8 (198)	145 (66)	Amphenol
RB48V300	NA	300	720	15360	29.1 (740)	16.1 (410)	17.6 (447)	375 (170)	Amphenol
RB48V100H	NA	100	240	4800	24.6 (625)	6.1 (155)	20.5 (520)	143 (65)	Amphenol
RB48V150H	NA	150	360	7200	28.3 (720)	5.7 (145)	20.5 (520)	209 (95)	Amphenol

A. The amount of Ah or minutes the battery can provide when discharged at a constant current to 2.5vpc at 25°C (77°F).

RELiON LITHIUM

Whether you're powering your home or business, or mission-critical remote monitoring equipment, you want reliable power for your residential and commercial energy needs, both on and off the grid. RELiON Lithium Iron Phosphate (LiFePO₄) batteries offer safe, clean and high power energy solutions for all types of renewable energy systems.

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.

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.

HIGHLY EFFICIENT: RELiON lithium batteries have super low resistance, allowing you to charge much faster. And lithium batteries are 99% efficient, minimizing the losses during charge. Compare that to traditional lead-acid batteries at 75-80% efficiency, which results in significant loss when recharging.

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.

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 climates, even freezing cold or scorching heat.

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.

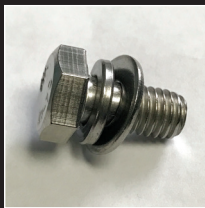
THE RIGHT FIT: RELiON lithium batteries are available in a variety of BCI standard sizes for easy drop-in replacement. Looking for a custom solution? No problem! Our Certified PowerPros will work to design the best system for your needs.

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 7-year warranty.

TERMINAL CONFIGURATIONS



M6/M8



Bolt with
lock washer &
regular washer



F2

AMPHENOL CONNECTORS



RELi³ON[®]

THE POWER BEHIND THE PROMISE



You may know us as a battery manufacturer, but first and foremost, we're in the relationship business. At RELiON, we pride ourselves on creating and maintaining long-term relationships with members of our supply chain, original equipment manufacturers, distributors and end users. How do we do it? We're invested – in the success of our customers, our partners, our employees and our future. It's a promise we make and keep every day.

INVESTED IN OUR PEOPLE. We value knowledge, experience and interpersonal skills, so we seek out the best and brightest. When it comes to innovation, we have the sharpest minds in the business designing, building and testing our products. Our sales and customer service staff is dedicated to doing right by our customers every time. And, our technical support team has the knowledge you need to answer even the toughest energy questions. In a nutshell, we only invest in people with the industry experience, training and relationships to ensure our customers' success.

INVESTED IN OUR SERVICE. Every one of our customers enjoys unparalleled support from RELiON's team of certified PowerPros. Our job is to understand everything about our customers' needs now and help them anticipate the future. We have the expertise to answer all types of battery questions. Every topic from maintenance to recycling to customized solutions for any application. And, since time is valuable, we commit to responding to inquiries within 24 hours.

INVESTED IN OUR FUTURE. At RELiON, we invest major effort and resources in new product development so we can help our customers meet their long-term energy goals, no matter what the application. In addition, we're constantly striving to increase our contribution to a healthier planet through clean, green energy solutions so we can leave the earth a better place for future generations.



ISO 9001:2008 Quality Management System
ISO 16949:2009 Quality Management System
ISO 14001:2004 Environmental Management System
OHSAS 18001:2007 Occupational Health and Safety Management System
Certifications Applicable to the Design and Manufacture of
Lithium Iron Phosphate Batteries

Want more reliable power for your system? Talk to your local distributor, visit www.relionbattery.com or talk to one of our Certified PowerPros.

Call Toll-Free (US Only): 1 (844) 385-9840
All International Calls: 1 (803) 547-7288



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

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