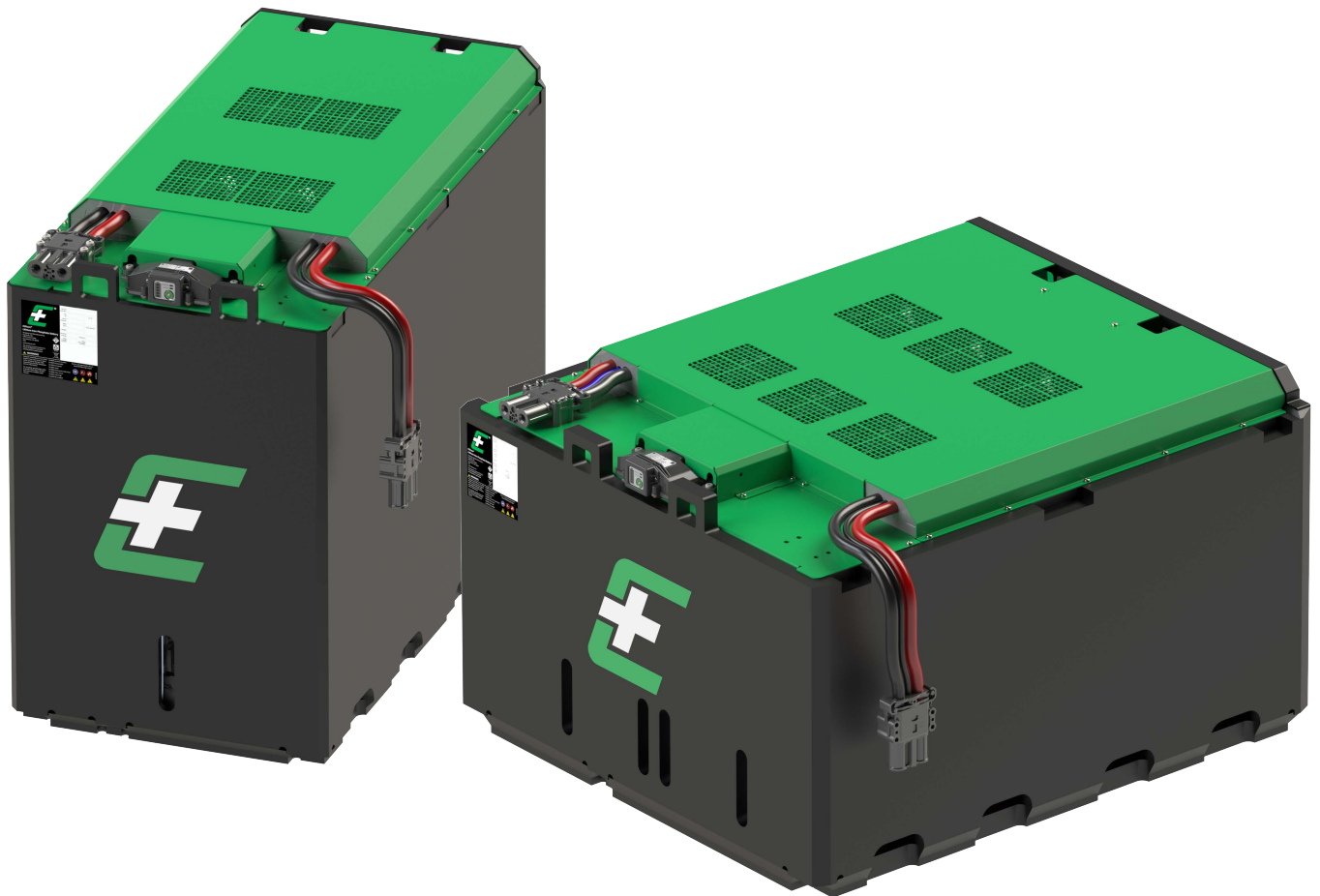




BBR SERIES

LITHIUM-ION BATTERIES
PRODUCT DETAILS



ETHIUM BBR SERIES LITHIUM-ION BATTERIES
ARE ENGINEERED SPECIFICALLY FOR SAFETY
AND TO PROVIDE CONSISTENT AND RELIABLE
POWER TO MATERIAL HANDLING EQUIPMENT FOR
LONG-TERM USE IN ALL WORK ENVIRONMENTS.

SMART LITHIUM-ION TECHNOLOGY AT WORK

BBR PRODUCT DETAILS

Max Module Count	Lead Acid Equivalent	Series Number	Max Energy kWh	Capacity Class♦ Ah	Dimensions L x W x H in. (mm)	Nominal Weight lbs. (kg.)	Nominal Weight with Adder Plate lbs. (kg.)
Module A x 3	12-125-13	2450	24V - 14.4 kWh 36V - 14.5 kWh 48V - 14.4 kWh	24V - 598 Ah 36V - 403 Ah 48V - 299 Ah	30.1 x 12.8 x 30.5 (765 x 325 x 775)	965 (438)	N/A (N/A)
	12-125-15	2840	72/80V - 14.0 kWh	72/80V - 195/176 Ah	36 x 14 x 30.5 (914 x 356 x 775)	1650 (748)	N/A (N/A)
Module A x 4	12-125-17 18-125-11	2410	24V - 19.1 kWh 36V - 19.3 kWh 48V - 19.1 kWh 72/80V - 18.7 kWh	24V - 797 Ah 36V - 537 Ah 48V - 399 Ah 72/80V - 260/234 Ah	38.3 x 13.4 x 30.5 (972 x 340 x 775)	1820 (826)	N/A (N/A)
Module A x 6	12-125-15	2420	24V - 28.7 kWh 36V - 29.0 kWh 48V - 28.7 kWh 72/80V - 28.1 kWh	24V - 1196 Ah 36V - 806 Ah 48V - 598 Ah 72/80V - 390/351 Ah	36 x 14 x 30.5 (914 x 356 x 775)	790 (358)	N/A (N/A)
	18-125-13 12-125-17	2440			38.3 x 15.1 x 30.5 (972 x 384 x 775)	1945 (882)	2007 (910)
	18-125-15	2460			38.3 x 17.1 x 30.5 (972 x 434 x 775)	2545 (1154)	2607 (1183)
Module A x 8	18-125-17 40-125-07	2480 3310	24V - 38.3 kWh 36V - 38.7 kWh 48V - 38.3 kWh 72/80V - 37.4 kWh	24V - 1595 Ah 36V - 1075 Ah 48V - 797 Ah 72/80V - 520/468 Ah	38.3 x 20 x 30.5 (972 x 508 x 775)	2700 (1225)	2789 (1265)
	18-125-19 40-125-07	2490 3320			38.3 x 22 x 30.5 (972 x 558 x 775)	3300 (1497)	3389 (1537)
	24-125-13	2810			43.3 x 20 x 30.5 (1099 x 508 x 775)	2950 (1338)	3039 (1378)
Module A x 10	N/A	2430	24V - 47.8 kWh 36V - 48.4 kWh 48V - 47.8 kWh 72/80V - 46.8 kWh	24V - 1993 Ah 36V - 1343 Ah 48V - 997 Ah 72/80V - 650/585 Ah	38.3 x 22.2 x 30.5 (972 x 563 x 775)	2540 (1152)	2642 (1198)
	N/A	2470			38.3 x 23.2 x 30.5 (972 x 589 x 775)	2840 (1288)	2942 (1334)
	24-125-15	2820			43.3 x 23.2 x 30.5 (1099 x 589 x 775)	3105 (1408)	3207 (1455)
Module A x 12	N/A	2320	24V - 57.4 kWh 36V - 58.0 kWh 48V - 57.4 kWh 72/80V - 56.2 kWh	24V - 2392 Ah 36V - 1612 Ah 48V - 1196 Ah 72/80V - 780/702 Ah	38.3 x 26.4 x 30.5 (972 x 670 x 775)	3000 (1361)	3122 (1416)
	N/A	2330			38.3 x 26.4 x 31 (972 x 670 x 787)	3100 (1406)	3222 (1461)
	40-125-09	3330			38.3 x 26.9 x 30.5 (972 x 683 x 775)	3150 (1429)	3272 (1484)
	N/A	3360			38.3 x 27.9 x 30.5 (972 x 708 x 775)	3425 (1554)	3547 (1609)
	N/A	2850			40.2 x 27.9 x 31 (1022 x 708 x 787)	3850 (1746)	3972 (1802)
Module A x 14	N/A	3710	24V - 67.0 kWh 36V - 67.7 kWh 48V - 67.0 kWh 72/80V - 65.5 kWh	24V - 2791 Ah 36V - 1881 Ah 48V - 1395 Ah 72/80V - 910/819 Ah	38.3 x 31 x 30.5 (972 x 787 x 775)	3440 (1560)	3590 (1628)
	40-125-11	3340			38.3 x 33 x 30.5 (972 x 838 x 775)	4050 (1837)	4200 (1905)
	40-125-13	3350			38.3 x 34.5 x 30.5 (972 x 876 x 775)	4490 (2037)	4640 (2105)
Module A x 16	N/A	3370	24V - 76.5 kWh 36V - 77.4 kWh 48V - 76.5 kWh 72/80V - 74.9 kWh	24V - 3189 Ah 36V - 2149 Ah 48V - 1595 Ah 72/80V - 1040/936 Ah	38.3 x 34.4 x 30.5 (972 x 874 x 775)	3730 (1692)	3898 (1768)
	N/A	3390			38.3 x 37.9 x 30.5 (972 x 963 x 775)	4730 (2145)	4898 (2222)
	N/A	3400			40.2 x 38.9 x 30.5 (1022 x 988 x 775)	5150 (2336)	5318 (2412)
	N/A	3600			44.3 x 38.9 x 30.5 (1124 x 988 x 775)	5560 (2522)	5728 (2598)

♦ Calculation based on Voltage Class

BBR PRODUCT DETAILS

Max Module Count	Lead Acid Equivalent	Series Number	Max Energy kWh	Capacity Class♦ Ah	Dimensions L x W x H in. (mm)	Nominal Weight lbs. (kg.)	Nominal Weight With Adder Plate lbs. (kg.)
Module B x 3	N/A	2860	36V - 18.7 kWh 48V - 18.7 kWh 72/80V - 18.7 kWh	36V - 520 Ah 48V - 390 Ah 72/80V - 260/234 Ah	38.3 x 15.3 x 22.7 (972 x 387 x 575)	1490 (676)	1552 (704)
	18-85-15	2830			38.3 x 17.2 x 22.7 (972 x 437 x 575)	1910 (866)	1972 (894)
Module B x 4	18-85-17 24-85-13	2510	36V - 25.0 kWh 48V - 25.0 kWh 72/80V - 25.0 kWh	36V - 693 Ah 48V - 520 Ah 72/80V - 347/312 Ah	38.3 x 20.2 x 22.7 (972 x 513 x 575)	2055 (932)	2144 (972)
Module B x 5	N/A	3810	36V - 31.2 kWh 48V - 31.2 kWh 72/80V - 31.2 kWh	36V - 867 Ah 48V - 650 Ah 72/80V - 433/390 Ah	38.3 x 22.5 x 22.7 (972 x 572 x 575)	1970 (894)	2072 (940)
	18-85-21 24-85-15	2520			38.3 x 23.5 x 22.7 (972 x 597 x 575)	2180 (989)	2282 (1035)
	18-100-21	2530			38.3 x 24.5 x 22.7 (972 x 622 x 575)	2400 (1089)	2502 (1135)
Module B x 6	N/A	3820	36V - 37.4 kWh 48V - 37.4 kWh 72/80V - 37.4 kWh	36V - 1040 Ah 48V - 780 Ah 72/80V - 520/468 Ah	38.3 x 26.3 x 22.7 (972 x 667 x 575)	2215 (1005)	2337 (1060)
	18-85-23 24-85-17	2540			38.3 x 26.8 x 22.7 (972 x 679 x 575)	2320 (1052)	2442 (1108)
	N/A	3580			38.3 x 27.8 x 22.7 (972 x 705 x 575)	2550 (1157)	2672 (1212)
	18-85-25	2570			38.3 x 28.8 x 22.7 (972 x 730 x 575)	2750 (1247)	2872 (1303)
	24-85-19	2550			38.3 x 29.8 x 22.7 (972 x 756 x 575)	2965 (1345)	3087 (1400)
Module B x 7	18-85-27	2580	36V - 43.7 kWh 48V - 43.7 kWh 72/80V - 43.7 kWh	36V - 1213 Ah 48V - 910 Ah 72/80V - 607/546 Ah	38.3 x 31.5 x 22.7 (972 x 800 x 575)	2680 (1216)	2830 (1284)
	24-85-21	2560			38.3 x 32.5 x 22.7 (972 x 826 x 575)	2890 (1311)	3040 (1379)
	18-85-29	2590			38.3 x 33.5 x 22.7 (972 x 851 x 575)	3110 (1411)	3260 (1479)
	N/A	3590			38.3 x 35 x 22.7 (972 x 889 x 575)	3430 (1556)	3580 (1624)
	24-85-23	3570			38.3 x 36 x 22.7 (972 x 914 x 575)	3490 (1583)	3640 (1651)
Module B x 8	N/A	3460	36V - 49.9 kWh 48V - 49.9 kWh 72/80V - 49.9 kWh	36V - 1387 Ah 48V - 1040 Ah 72/80V - 693/624 Ah	38.3 x 34.9 x 22.7 (972 x 886 x 575)	2940 (1334)	3108 (1410)
	40-85-15	3440			38.3 x 38.4 x 22.7 (972 x 975 x 575)	3690 (1674)	3858 (1750)
Module B x 10	N/A	3490	36V - 62.4 kWh 48V - 62.4 kWh 72/80V - 62.4 kWh	36V - 1733 Ah 48V - 1300 Ah 72/80V - 867/780 Ah	38.3 x 44 x 22.7 (972 x 1118 x 575)	3650 (1656)	3835 (1740)
	40-85-17	3450			38.3 x 45 x 22.7 (972 x 1143 x 575)	3775 (1712)	3960 (1796)
	N/A	3480			38.3 x 45 x 23.7 (972 x 1143 x 601)	4260 (1932)	4445 (2016)
	N/A	3500			45.3 x 45 x 22.7 (1149 x 1143 x 575)	4900 (2223)	5085 (2307)

♦ Calculation based on Voltage Class

ethium®
by **EControls**

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BBR PRODUCT CHARACTERISTICS

CHARACTERISTICS	VALUE
Type	Advanced lithium-ion technology with modular scalability
Chemistry	Lithium iron phosphate [LiFePO ₄]
Battery Management System BMS	Active cell balancing with electronic fusing
Complete Thermal Management	Active forced air cooling and heating elements standard on all batteries
Charger	Compatible with CAN based chargers
Short Circuit Protection	Included
Certification	UL 2580 Listed and compliant with UN/DOT 38.3
Communication	CAN Protocols, proprietary messages can be added to interface with vehicle, EControls displays and wireless devices
Protection	Internal battery components IP67 rated
Discharge Temperature Range*	-40° to 55°C (-40° to 131°F)
Charge Temperature Range*	-40° to 45°C (-40° to 113°F)
Storage Temperature Range	-20° to 50°C (-4° to 122°F), long-term storage see operating manual
Self Discharge Rate	< 2% / month
Warranty Cycle Life**	4,000 cycles
Full Charge Time***	1 hour @ 1.0 C

* Model dependent, actively controlled.

** See User's Manual for complete details.

*** Configuration-dependent: contact EControls for model-specific characteristics.

NEED MORE INFORMATION? CONTACT OUR SALES TEAM

Sales
sales@ethium.com



5711 Farinon Drive, San Antonio, TX
78249 USA
phone: (210) 495-9772