



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.

BBR PRODUCT DETAILS

VOLTAGE CLASS	LEAD ACID EQUIVALENT	SERIES NUMBER	ACTUAL ENERGY CAPACITY	DIMENSIONS in. (mm) W x L x H	WEIGHT lbs. (kg.)
24 VOLTS	12-125-17	ET24-2410-18	17.9 kWh / 699 Ah	13.5 x 38.25 x 30.5 (343 x 972 x 775)	1,650 (748)
	12-125-15	ET24-2420-13	13.4 kWh / 524 Ah	14 x 36 x 30.5 (356 x 914 x 775)	1,650 (748)
		ET24-2420-13	13.4 kWh / 524 Ah		790 (358)
		ET24-2420-9	8.9 kWh / 350 Ah		700 (318)
	12-125-13	ET24-2450-13	13.4 kWh / 524 Ah	12.75 x 30.5 x 31 (324 x 775 x 787)	965 (438)
36 VOLTS	18-125-11	ET36-2410-18	18.0 kWh / 471 Ah	13.5 x 38.25 x 30.5 (343 x 972 x 775)	1,650 (748)
		ET36-2410-13	13.5 kWh / 353 Ah		
	18-125-13	ET36-2440-27	27.1 kWh / 707 Ah	15.125 x 38.25 x 30.5 (384 x 972 x 775)	2,000 (907)
		ET36-2440-22	22.6 kWh / 589 Ah		
		ET36-2440-18	18.0 kWh / 471 Ah		
	18-125-15	ET36-2460-27	27.1 kWh / 707 Ah	17.5 x 38.25 x 30.5 (445 x 972 x 775)	2,500 (1,134)
		ET36-2460-22	22.6 kWh / 589 Ah		
	18-125-17	ET36-2480-36	36.1 kWh / 942 Ah	20.1 x 38.25 x 30.5 (511 x 972 x 775)	2,600 (1,179)
		ET36-2480-31	31.6 kWh / 825 Ah		
		ET36-2480-27	27.1 kWh / 707 Ah		
	18-125-19	ET36-2490-36	36.1 kWh / 942 Ah	23 x 38.25 x 30.5 (584 x 972 x 775)	3,100 (1,406)
		ET36-2490-31	31.6 kWh / 825 Ah		
		ET36-2490-27	27.1 kWh / 707 Ah		
	18-85-17	ET36-2510-23	23.3 kWh / 608 Ah	20 x 38.25 x 22.65 (508 x 972 x 575)	2,000 (907)
		ET36-2510-17	17.5 kWh / 456 Ah		
	18-85-21	ET36-2520-29	29.1 kWh / 760 Ah	23.5 x 38.25 x 22.65 (597 x 972 x 575)	2,300 (1,043)
		ET36-2520-23	23.3 kWh / 608 Ah		
	18-85-23	ET36-2540-35	35.0 kWh / 912 Ah	26.75 x 38.25 x 22.65 (679 x 972 x 575)	2,600 (1,179)
		ET36-2540-29	29.1 kWh / 760 Ah		
	18-85-25	ET36-2570-35	35.0 kWh / 912 Ah	28.75 x 38.25 x 22.65 (731 x 972 x 575)	3,000 (1,361)
		ET36-2570-29	29.1 kWh / 760 Ah		
		ET36-2570-23	23.3 kWh / 608 Ah		
	18-85-27	ET36-2580-41	40.8 kWh / 1,064 Ah	31.25 x 38.25 x 22.65 (794 x 972 x 575)	3,000 (1,361)
		ET36-2580-35	35.0 kWh / 912 Ah		
	18-85-29	ET36-2590-41	40.8 kWh / 1,064 Ah	33.5 x 38.25 x 22.65 (851 x 972 x 575)	3,200 (1,451)
		ET36-2590-35	35.0 kWh / 912 Ah		
	18-100-21	ET36-2530-29	29.1 kWh / 760 Ah	24.75 x 38.25 x 22.65 (629 x 972 x 575)	2,600 (1,179)
		ET36-2530-23	23.3 kWh / 608 Ah		

BBR PRODUCT DETAILS

VOLTAGE CLASS	LEAD ACID EQUIVALENT	SERIES NUMBER	ACTUAL ENERGY CAPACITY	DIMENSIONS in. (mm) W x L x H	WEIGHT lbs. (kg.)
48 VOLTS	24-85-13	ET48-2510-23	23.3 kWh / 456 Ah	20 x 38.25 x 22.65 (508 x 972 x 575)	2,100 (953)
		ET48-2510-17	17.5 kWh / 342 Ah		
	24-85-15	ET48-2520-29	29.1 kWh / 570 Ah	23.5 x 38.25 x 22.65 (597 x 972 x 575)	2,400 (1,089)
		ET48-2520-23	23.3 kWh / 456 Ah		
	24-85-17	ET48-2540-35	35.0 kWh / 684 Ah	26.75 x 38.25 x 22.65 (697 x 972 x 575)	2,500 (1,134)
		ET48-2540-29	29.1 kWh / 570 Ah		
	24-85-19	ET48-2550-35	35.0 kWh / 684 Ah	29.75 x 38.25 x 22.65 (756 x 972 x 575)	2,600 (1,179)
		ET48-2550-29	29.1 kWh / 570 Ah		
	24-85-21	ET48-2560-41	40.8 kWh / 798 Ah	32.5 x 38.25 x 22.65 (826 x 972 x 575)	3,100 (1,406)
		ET48-2560-35	35.0 kWh / 684 Ah		
		ET48-2560-29	29.1 kWh / 570 Ah		
	24-125-13	ET48-2810-18	17.9 kWh / 350 Ah	20 x 43.5 x 30.5 (508 x 1105 x 775)	3,000 (1,361)
		ET48-2810-13	13.4 kWh / 262 Ah		
	24-125-15	ET48-2820-18	17.9 kWh / 350 Ah	23.5 x 43.5 x 30.5 (597 x 1105 x 775)	3,000 (1,361)
ET48-2820-13		13.4 kWh / 262 Ah			

VOLTAGE CLASS	NOMINAL VOLTAGE	RECOMMENDED CHARGE VOLTAGE	MAXIMUM CHARGE VOLTAGE
24 V	25.6 V	28.8 V	29.6 V
36 V	38.4 V	43.2 V	44.4 V
48 V	51.2 V	57.6 V	59.2 V

* All data subject to change without notice.



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 force air cooling and heating elements standard on all batteries
Charger*	Compatible with lithium-ion chargers and most programmable lead acid chargers without equalization steps*
Short Circuit Protection	Included
Certification	Designed to comply with UL 2580 and 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
Operating Temperature Range	-40° to 55°C (-40° to 131°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**	3,000 cycles
Full Charge Time*	1 hour @ 1.0 C
Peak Charge Rate*	1.0 C
Peak Discharge Rate*	1.5 C

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

** See User's Manual for complete details.

NEED MORE INFORMATION? CONTACT OUR SALES TEAM

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