



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

VOLTAGE CLASS	LEAD ACID EQUIVALENT	SERIES NUMBER	CAPACITY			DIMENSIONS L x W x H in. (mm)	WEIGHT lbs. (kg.)
			ENERGY	LITHIUM BASED	LEAD ACID BASED		
24 VOLTS	12-125-17	ET24-2410-18	17.9 kWh	699 Ah	746 Ah	38.25 x 13.5 x 30.5 (972 x 343 x 775)	1650 (748)
	12-125-15	ET24-2420-13	13.4 kWh	524 Ah	559 Ah	36 x 14 x 30.5 (914 x 356 x 775)	1650 (748)
		ET24-2420-13	13.4 kWh	524 Ah	559 Ah		790 (358)
		ET24-2420-9	8.9 kWh	350 Ah	373 Ah		700 (318)
	12-125-13	ET24-2450-13	13.4 kWh	524 Ah	559 Ah	30.5 x 12.75 x 31 (775 x 324 x 787)	965 (438)
		ET24-2450-9	8.9 kWh	350 Ah	373 Ah		
36 VOLTS	18-125-11	ET36-2410-18	18.1 kWh	471 Ah	503 Ah	38.25 x 13.5 x 30.5 (972 x 343 x 775)	1650 (748)
		ET36-2410-13	13.6 kWh	353 Ah	377 Ah		
	18-125-13	ET36-2440-27	27.1 kWh	707 Ah	754 Ah	38.25 x 15.125 x 30.5 (972 x 384 x 775)	2000 (907)
		ET36-2440-22	22.6 kWh	589 Ah	628 Ah		
		ET36-2440-18	18.1 kWh	471 Ah	503 Ah		
	18-125-15	ET36-2460-27	27.1 kWh	707 Ah	754 Ah	38.25 x 17.5 x 30.5 (972 x 445 x 775)	2500 (1134)
		ET36-2460-22	22.6 kWh	589 Ah	628 Ah		
	18-125-17	ET36-2480-36	36.2 kWh	942 Ah	1005 Ah	38.25 x 20.1 x 30.5 (972 x 511 x 775)	2600 (1179)
		ET36-2480-31	31.7 kWh	825 Ah	880 Ah		
		ET36-2480-27	27.1 kWh	707 Ah	754 Ah		
	18-125-19	ET36-2490-36	36.2 kWh	942 Ah	1005 Ah	38.25 x 23 x 30.5 (972 x 584 x 775)	3100 (1406)
		ET36-2490-31	31.7 kWh	825 Ah	880 Ah		
		ET36-2490-27	27.1 kWh	707 Ah	754 Ah		
	18-85-17	ET36-2510-23	23.3 kWh	608 Ah	649 Ah	38.25 x 20 x 22.65 (972 x 508 x 575)	2000 (907)
		ET36-2510-17	17.5 kWh	456 Ah	486 Ah		
	18-85-21	ET36-2520-29	29.2 kWh	760 Ah	811 Ah	38.25 x 23.5 x 22.65 (972 x 597 x 575)	2300 (1043)
		ET36-2520-23	23.3 kWh	608 Ah	649 Ah		
	18-85-23	ET36-2540-35	35 kWh	912 Ah	973 Ah	38.25 x 26.75 x 22.65 (972 x 679 x 575)	2400 (1089)
		ET36-2540-29	29.2 kWh	760 Ah	811 Ah		
	18-85-25	ET36-2570-35	35 kWh	912 Ah	973 Ah	38.25 x 28.75 x 22.65 (972 x 730 x 575)	2800 (1270)
		ET36-2570-29	29.2 kWh	760 Ah	811 Ah		
		ET36-2570-23	23.3 kWh	608 Ah	649 Ah		
	18-85-27	ET36-2580-41	40.9 kWh	1064 Ah	1135 Ah	38.25 x 31.5 x 22.65 (972 x 800 x 575)	2900 (1315)
		ET36-2580-35	35 kWh	912 Ah	973 Ah		
18-85-29	ET36-2590-41	40.9 kWh	1064 Ah	1135 Ah	38.25 x 33.5 x 22.65 (972 x 851 x 575)	3200 (1451)	
	ET36-2590-35	35 kWh	912 Ah	973 Ah			
18-100-21	ET36-2530-29	29.2 kWh	760 Ah	811 Ah	38.25 x 24.75 x 22.65 (972 x 629 x 575)	2600 (1179)	
	ET36-2530-23	23.3 kWh	608 Ah	649 Ah			

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VOLTAGE CLASS	LEAD ACID EQUIVALENT	SERIES NUMBER	ENERGY	CAPACITY		DIMENSIONS L x W x H in. (mm)	WEIGHT lbs. (kg.)
				LITHIUM BASED	LEAD ACID BASED		
48 VOLTS	24-85-13	ET48-2510-23	23.3 kWh	456 Ah	486 Ah	38.25 x 20 x 22.65 (972 x 508 x 575)	2100 (953)
		ET48-2510-17	17.5 kWh	342 Ah	365 Ah		
	24-85-15	ET48-2520-29	29.2 kWh	570 Ah	608 Ah	38.25 x 23.5 x 22.65 (972 x 597 x 575)	2400 (1089)
		ET48-2520-23	23.3 kWh	456 Ah	486 Ah		
	24-85-17	ET48-2540-35	35 kWh	684 Ah	730 Ah	38.25 x 26.75 x 22.65 (972 x 679 x 575)	2400 (1089)
		ET48-2540-29	29.2 kWh	570 Ah	608 Ah		
	24-85-19	ET48-2550-35	35 kWh	684 Ah	730 Ah	38.25 x 29.75 x 22.65 (972 x 756 x 575)	2600 (1179)
		ET48-2550-29	29.2 kWh	570 Ah	608 Ah		
	24-85-21	ET48-2560-41	40.9 kWh	798 Ah	851 Ah	38.25 x 32.5 x 22.65 (972 x 826 x 575)	3100 (1406)
		ET48-2560-35	35 kWh	684 Ah	730 Ah		
		ET48-2560-29	29.2 kWh	570 Ah	608 Ah		
	24-125-13	ET48-2810-36	35.8 kWh	699 Ah	746 Ah	43.5 x 20 x 30.5 (1105 x 508 x 775)	3000 (1361)
		ET48-2810-31	31.3 kWh	612 Ah	653 Ah		
	24-125-15	ET48-2820-44	44.7 kWh	874 Ah	932 Ah	43.5 x 23.5 x 30.5 (1105 x 597 x 775)	3000 (1361)
		ET48-2820-40	40.3 kWh	787 Ah	839 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 forced 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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