





RB52-LT

Voltage: 12.8V | Capacity: 52 Ah | Energy: 665 Wh

LITHIUM IRON PHOSPHATE BATTERY LiFePO4

ELECTRICAL SPECIFICATIONS		
Nominal Voltage	12.8 V	
Nominal Capacity	52 Ah	
Capacity @ 25A	120 min	
Resistance	≤50 mΩ @ 50% SOC	
Efficiency	99%	
Self Discharge	<3% per Month	
Maximum Modules in Series	1	

DISCHARGE SPECIFICATIONS		
Maximum Continuous Discharge Current	50 A	
Peak Discharge Current	100 A (7.5 s ±2.5 s)	
BMS Discharge Current Cut-Off	150 A ±20 A (10 ±5 ms)	
Recommended Low Voltage Disconnect	11 V	
BMS Discharge Voltage Cut-Off	9.2 V (2.3 ±0.1 vpc) (140 ±60 ms)	
Reconnect Voltage	10 V (2.5 ±0.1 vpc)	
Short Circuit Protection	200-600 μs	

TEMPERATURE SPECIFICATIONS		
Discharge Temperature	-4 to 140 °F (-20 to 60 °C)	
Charge Temperature*	-4 to 113 °F (-20 to 45 °C)	
Storage Temperature	23 to 95 °F (-5 to 35 °C)	
BMS High Temperature Cut-Off	176 °F (80 °C)	
Reconnect Temperature	122 °F (50 °C)	

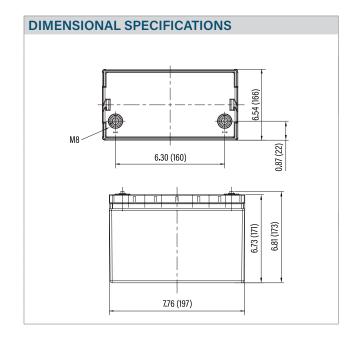
^{*}Refer to charge currents below 32°F (0°C)

MECHANICAL SPECIFICATIONS		
Dimensions (L x W x H)	7.8 x 6.5 x 6.8" 197 x 166 x 173 mm	
Weight	14.1 lb (6.38 kg)	
Terminal Type	M8 x 1.25 x 12mm	
Terminal Torque	80 - 100 in-lbs (9 - 11 N-m)	
Case Material	ABS	
Enclosure Protection	IP66	
Cell Type - Chemistry	Cylindrical - LiFePO ₄	

CHARGE SPECIFICATIONS		
Recommended Charge Current	2.5 A - 25 A	
Maximum Charge Current	50 A	
Charge Current 14 to 32 °F (-10 to 0 °C)	≤0.1 C	
Charge Current -4 to 14 °F (-20 to -10 °C)	≤0.05 C	
Recommended Charge Voltage	14.2 V - 14.6 V	
BMS Charge Voltage Cut-Off	15.4 V (3.85 ±0.025 vpc) (1.1 ±0.4 s)	
Reconnect Voltage	14.6V (3.65 ±0.05 vpc)	
Balancing Voltage	14.4 V (3.6 ±0.025 vpc)	

HEATING ELEMENT SPECIFICATIONS:		
Heating Temperature Range	-4 to 41 °F (-20 to 10 °C)	
Heating Time Approximately	1 hr @ 4 A	

COMPLIANCE SPECIFICATIONS		
Certifications		UN38.3 & CE (battery) UL1642 (cells) (File# MH64523) IEC62133 (cells)
Shipping Classi	fication	UN 3480, CLASS 9









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