





## **RB100-HP**



Voltage: 12.8V | Capacity: 100 Ah | Energy: 1280 Wh | Group: 3

LITHIUM IRON PHOSPHATE BATTERY



ELECTRICAL SPECIFICATIONS		
Nominal Voltage	12.8 V	
Nominal Capacity	100 Ah	
Capacity @ 25A	240 min	
Resistance	≤30 mΩ @ 50% SOC	
Efficiency	99%	
Self Discharge	<3% per Month	
Maximum Modules in Series	1 (Single Use)	

DISCHARGE SPECIFICATIONS		
Maximum Continous Discharge Current	100 A	
Peak Discharge Current	800 A (2 s)	
BMS Discharge Current Cut-Off	1000 A ±100 A (2.2 ±1 ms)	
Recommended Low Voltage Disconnect	11 V	
BMS Discharge Voltage Cut-Off	9.2 V (2.3 ±0.08 vpc) (4.2 ±0.5 s)	
Reconnect Voltage	10 V (2.5 ±0.1 vpc)	
Short Circuit Protection	200-600 μs	

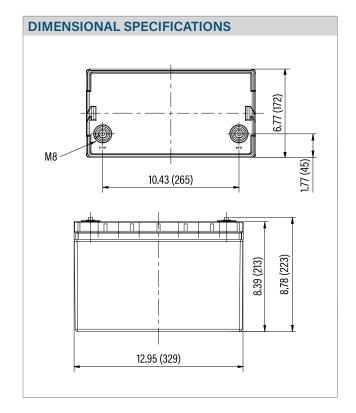
TEMPERATURE SPECIFICATIONS		
Discharge Temperature	-4 to 140 °F (-20 to 60 °C)	
Charge Temperature*	-4 to 113 °F (-20 to 45 °C)	
Storage Temperature	23 to 95 °F (-5 to 35 °C)	
BMS High Temperature Cut-Off	176 °F (80 °C)	
Reconnect Temperature	122 °F (50 °C)	

<sup>\*</sup>Refer to charge currents below 32°F (0°C)

MECHANICAL SPECIFICATIONS		
Dimensions (L x W x H)	13 x 6.8 x 8.8" 329 x 172 x 223 mm	
Weight	29.8 lbs (13.5 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 <sub>4</sub>	

CHARGE SPECIFICATIONS		
Recommended Charge Current	5 A - 50 A	
Maximum Charge Current	100 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 ±0.2 s)	
Reconnect Voltage	14.6 V (3.65 ±0.05 vpc)	
Balancing Voltage	14.4 V (3.6 ±0.025 vpc)	

COMPLIANCE SPECIFICATIONS	
Certifications	CE (battery) UL1642 & IEC62133 (cells)
Shipping Classification	UN 3480, CLASS 9









## **RB100-HP**

Voltage: 12.8V | Capacity: 100 Ah | Energy: 1280 Wh | Group: 31

LITHIUM IRON PHOSPHATE BATTERY LIFEPO4

