



RB300-HP

RELION DATA SHEET

Voltage: 12.8V | Capacity: 300 Ah | Energy: 3840 Wh |

0 Wh | Group: 8D

LITHIUM IRON PHOSPHATE BATTERY LIFePO4

ELECTRICAL SPECIFICATIONS	
Nominal Voltage	12.8 V
Nominal Capacity	300 Ah
Capacity @ 25A	720 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)	

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

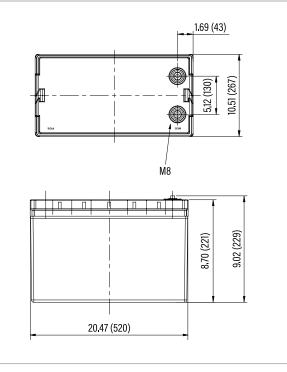
MECHANICAL SPECIFICATIONS		
Dimensions (L x W x H)	20.5 x 10.5 x 9.0" 520 x 267 x 228 mm	
Weight	82.7 lbs (37.5 kg)	
Terminal Type	M8 x 1.25 x 2mm	
Terminal Torque	80 - 100 in-lbs (9 - 11 N-m)	
Case Material	ABS	
Enclosure Protection	IP66	
Cell Type - Chemistry	Cylindrical - LiFePO ₄	

CHARGE SPECIFICATIONS

CHANGE OF ECH TOATIONS	
Recommended Charge Current	15 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	UN38.3 (battery) CE (battery) UL1642 & IEC62133 (cells)
Shipping Classification	UN 3480, CLASS 9

DIMENSIONAL SPECIFICATIONS



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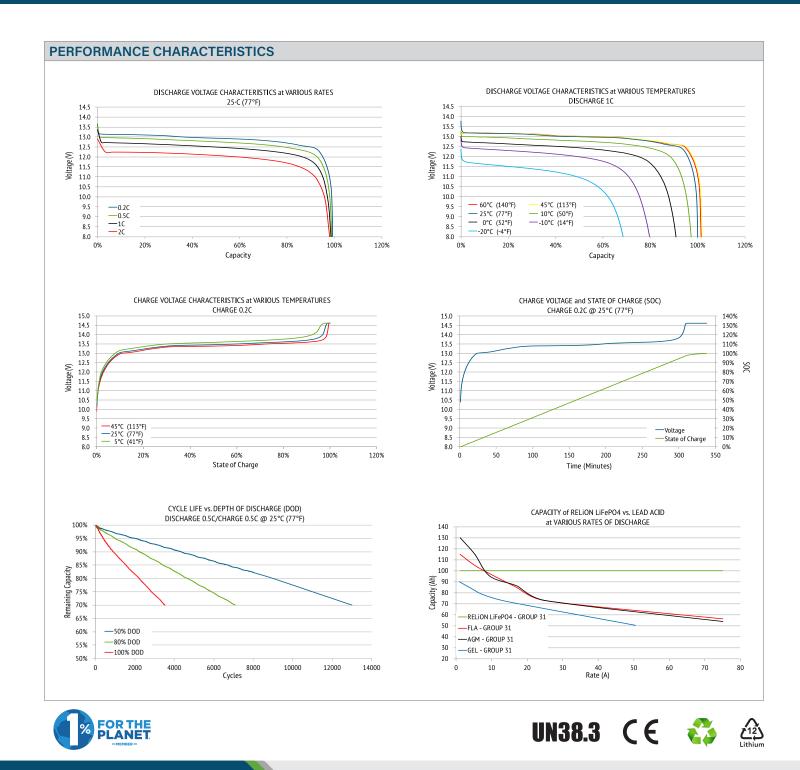


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