

RB24V1000

LITHIUM IRON PHOSPHATE BATTERY

ELECTRICAL SPECIFICATIONS

Nominal Voltage	25.6 V
Nominal Capacity	1000 Ah
Capacity @ 25A	40 hours
Energy	25.6 kWh
Resistance	≤10 mΩ @ 50% SOC
Efficiency	99%
Self Discharge	<3% per Month
Maximum Modules in Series	1

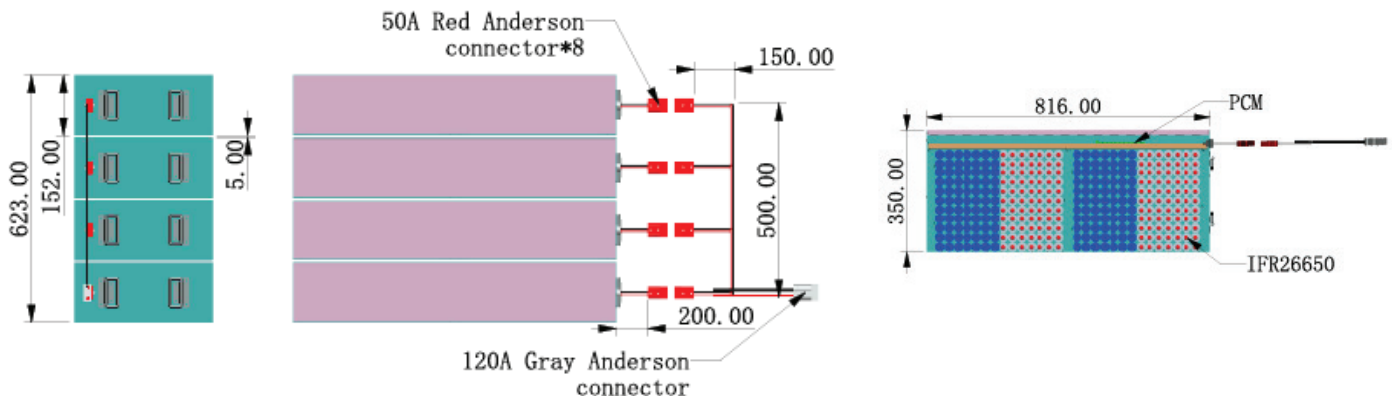
DISCHARGE SPECIFICATIONS

Maximum Continuous Discharge Current	30 A
Peak Discharge Current	40 A (7.5 s ±2.5 s)
PCM Discharge Current Cut-Off	60 A (±5 A)
Recommended Low Voltage Disconnect	22.4 V
PCM Discharge Voltage Cut-Off	22.4 V
Reconnect Voltage	24 V
Short Circuit Protection	External Short Circuit

TEMPERATURE SPECIFICATIONS

Discharge Temperature	-4 to 140 °F (-20 to 60 °C)
Charge Temperature	32 to 113 °F (0 to 45 °C)
Storage Temperature	23 to 95 °F (-5 to 35 °C)
PCM High Temperature Cut-Off	167 °F (75 °C)

DIMENSIONAL SPECIFICATIONS



MECHANICAL SPECIFICATIONS

Dimensions (L x W x H)	24.5 x 13.8 x 32.1" 623 x 350 x 816 mm
Weight	551 lbs (250 kg)
Terminal Type	M8
Terminal Torque	80 - 100 in-lbs (9 - 11 N-m)
Case Material	Steel Case
Enclosure Protection	IP56
Cell Type - Chemistry	Cylindrical - LiFePO ₄

CHARGE SPECIFICATIONS

Recommended Charge Current	≤30 A
Maximum Charge Current	30 A
Recommended Charge Voltage	28.4 V - 29.2 V
PCM Charge Voltage Cut-Off	30.4 V
Reconnect Voltage	29.2 V
Balancing Voltage	28.8 V

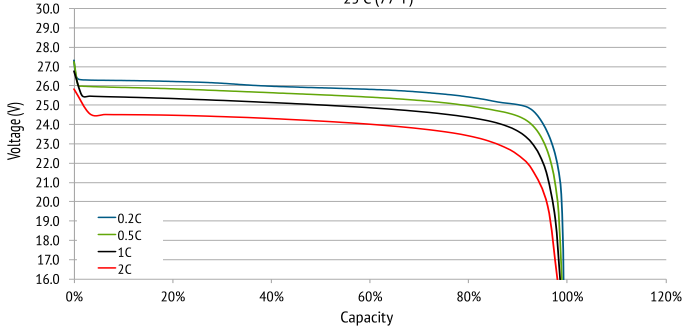
COMPLIANCE SPECIFICATIONS

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

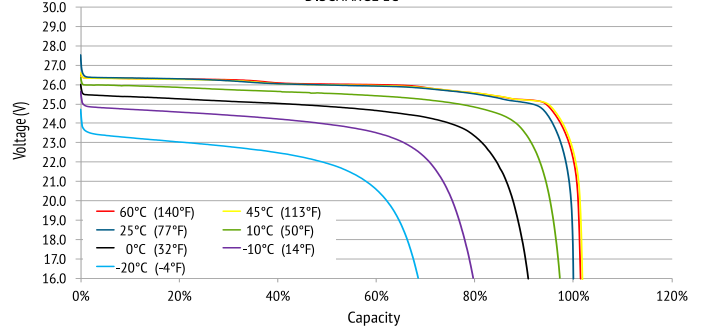


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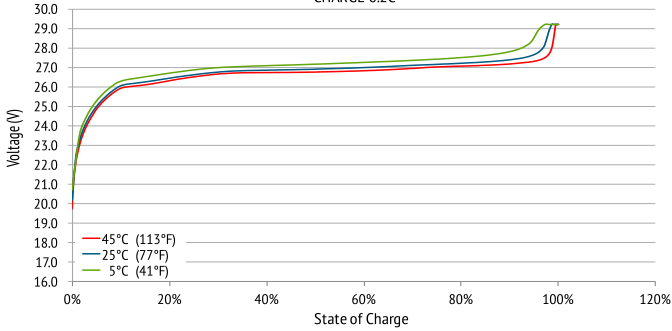
DISCHARGE VOLTAGE CHARACTERISTICS at VARIOUS RATES
25°C (77°F)



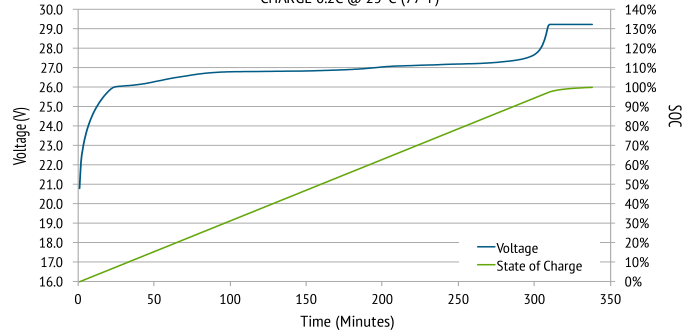
DISCHARGE VOLTAGE CHARACTERISTICS at VARIOUS TEMPERATURES
DISCHARGE 1C



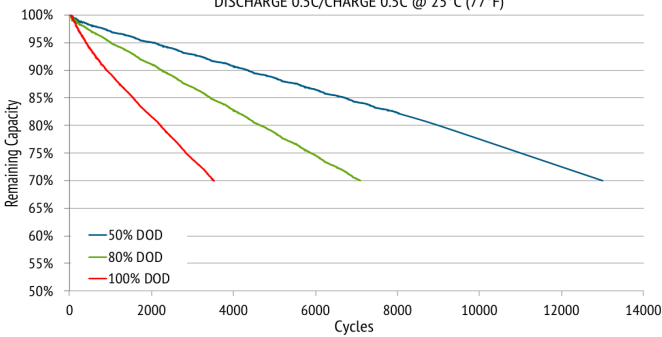
CHARGE VOLTAGE CHARACTERISTICS at VARIOUS TEMPERATURES
CHARGE 0.2C



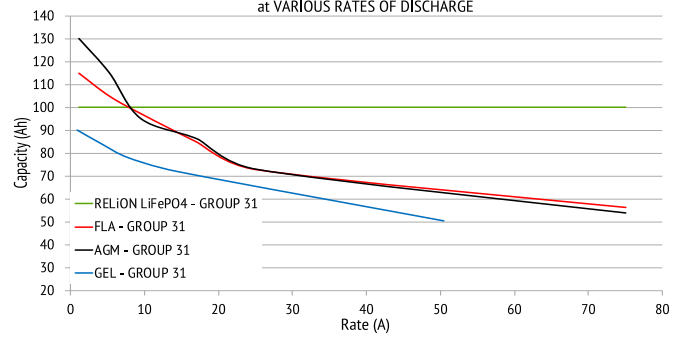
CHARGE VOLTAGE and STATE OF CHARGE (SOC)
CHARGE 0.2C @ 25°C (77°F)



CYCLE LIFE vs. DEPTH OF DISCHARGE (DOD)
DISCHARGE 0.5C/CHARGE 0.5C @ 25°C (77°F)



CAPACITY of RELION LiFePO4 vs. LEAD ACID
at VARIOUS RATES OF DISCHARGE



RB24V1000DS06.06.2018

