



RB60

Voltage: 12.8 V | Capacity: 60 Ah | Energy: 768 Wh | Group: 24

LITHIUM IRON PHOSPHATE BATTERY **LiFePO4**

ELECTRICAL SPECIFICATIONS

| | |
|---------------------------------------|------------------|
| Nominal Voltage | 12.8 V |
| Nominal Capacity | 60 Ah |
| Capacity @ 25 A | 144 min |
| Resistance | ≤40 mΩ @ 50% SOC |
| Efficiency | 99% |
| Self Discharge | <3% per Month |
| Maximum Batteries Connected in Series | 3 |

DISCHARGE SPECIFICATIONS

| | |
|--|--|
| Maximum Continuous Discharge Current | 60 A |
| Peak Discharge Current | 140 A (1.5 s ±0.5 s) |
| Discharge Over-Current Protection | 190 A (9 ms ±1 ms) |
| Recommended Low Voltage Disconnect | 10.0 V |
| Discharge Under-Voltage Protection | 9.3 V (2.325 ±0.1 vpc) (144 ms ±30 ms) |
| Reconnect Voltage | 10.5 V (2.625 ±0.24 vpc) |
| Short Circuit Protection Response Time | 100uS |

TEMPERATURE SPECIFICATIONS

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|---------------------------------|-----------------------------|
| Discharge Temperature | -4 to 140 °F (-20 to 60 °C) |
| Charge Temperature | 32 to 113 °F (0 to 45 °C) |
| Recommended Storage Temperature | 23 to 95 °F (-5 to 35°C) |
| BMS High Temperature Cut-Off | 167 °F (75 °C) |
| Reconnect Temperature | 122°F (50 °C) |

MECHANICAL SPECIFICATIONS

| | |
|--|---|
| Dimensions (L x W x H) | 10.2 x 6.7 x 8.4" 260 x 172 x 213.1 mm |
| Weight | 15.9 lbs (7.20 kg) |
| Terminal Type | M8 x 1.25 |
| Terminal Torque | 80 - 100 in-lbs (9 - 11 N-m) |
| Case Material | ABS & Polycarbonate blend (UL94-V0 flame rating) |
| Enclosure Protection (Waterproof Rating) | IP67 |
| Cell Type - Chemistry | Cylindrical - LiFePO4 |

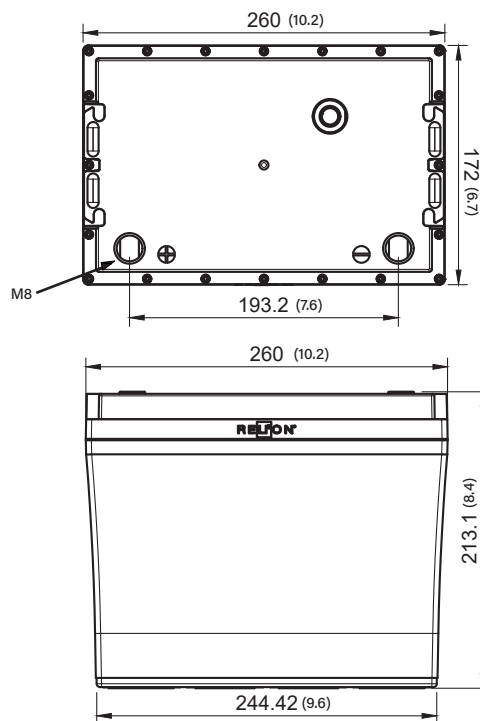
CHARGE SPECIFICATIONS

| | |
|--|--|
| Recommended Charge Current | 12 A |
| Maximum Continuous Charge Current | 60 A |
| Charge Current 14 to 32°F (-10 to 0°C) | ≤0.1 C (6 A) |
| Charge Current -4 to 14°F (-20 to -10°C) | ≤0.05 C (3 A) |
| Recommended Charge Voltage | 14.2 V - 14.6 V |
| BMS Charge Voltage Cut-Off | 15.4 V (3.85 ±0.025 vpc) (1.2 s ±0.3 s) |
| Reconnect Voltage | 14.5 V (3.62 ±0.05 vpc) |
| Balancing Voltage | 14.4 V (3.6 ±0.025 vpc) |

COMPLIANCE SPECIFICATIONS

| | |
|-------------------------|---|
| Certifications | UN38.3, CE & UKCA (battery) UL1642 (cells) (File# MH64523) IEC62133 (cells) |
| Shipping Classification | UN 3480, CLASS 9 |

DIMENSIONAL SPECIFICATIONS





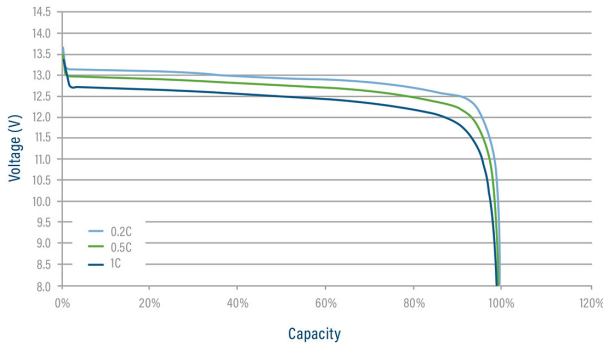
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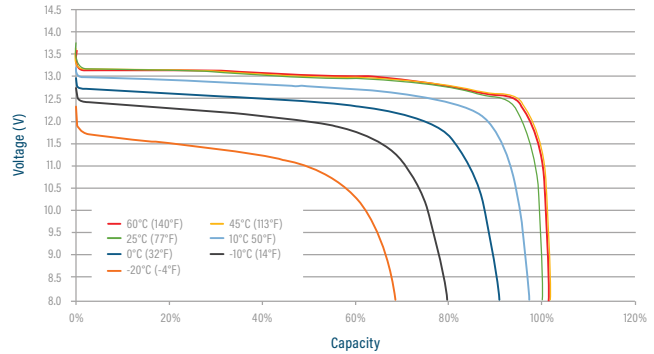
LITHIUM IRON PHOSPHATE BATTERY **LiFePO4**

TYPICAL LITHIUM IRON PHOSPHATE CHARACTERISTICS*

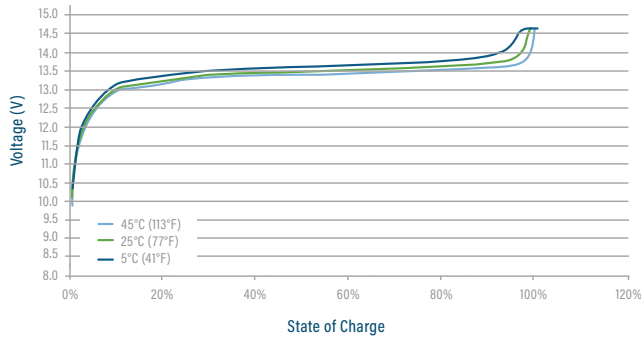
DISCHARGE VOLTAGE CHARACTERISTICS AT VARIOUS RATES
25°C (77°F)



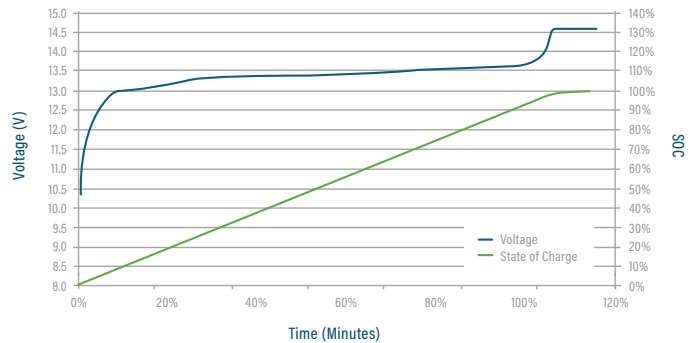
DISCHARGE VOLTAGE CHARACTERISTICS AT VARIOUS TEMPERATURES
DISCHARGE 1C



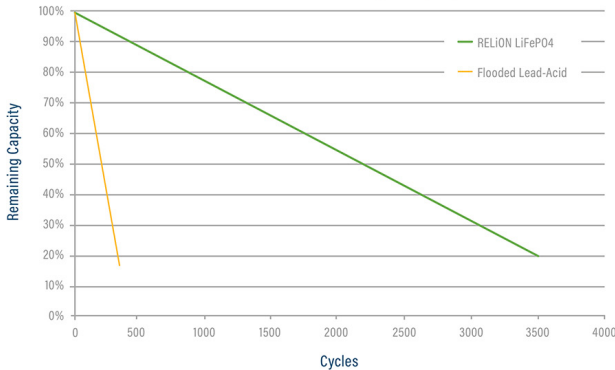
CHARGE VOLTAGE CHARACTERISTICS AT VARIOUS RATES
CHARGE 0.2C



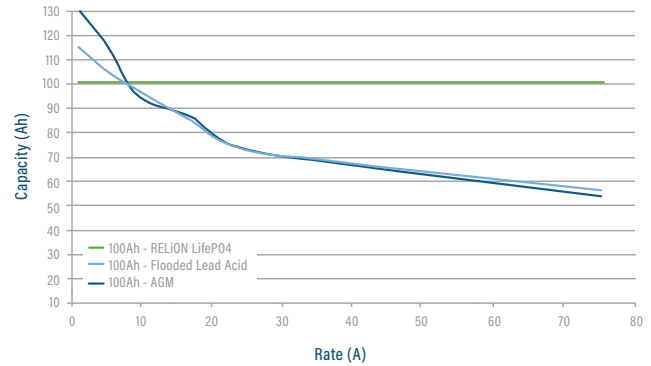
CHARGE VOLTAGE AND STATE OF CHARGE (SOC)
CHARGE 0.2C @ 25°C (77°F)



CYCLE LIFE VS. DEPTH OF DISCHARGE (DOD) AT 80%
DISCHARGE 0.5C/CHARGE 0.5C @ 25°C (77°F)



CAPACITY OF RELiON LiFePO4 vs. LEAD ACID
at VARIOUS RATES OF DISCHARGE



*Performance between applications and batteries may vary. All results should be independently verified by customer.

