



# 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

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 6.6 x 8.2" 260 x 168 x 210 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
Enclosure Protection	IP66
Cell Type - Chemistry	Cylindrical - LiFePO4

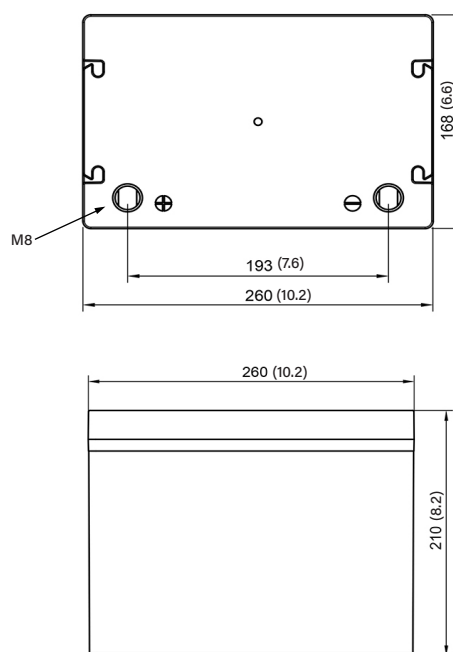
## CHARGE SPECIFICATIONS

Recommended Charge Current	12 A
Maximum Continuous Charge Current	60 A
Charge Current 14 to 32°F (-10 to 0°C)	≤0.1 C (10 A)
Charge Current -4 to 14°F (-20 to -10°C)	≤0.05 C (5 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





# RB60

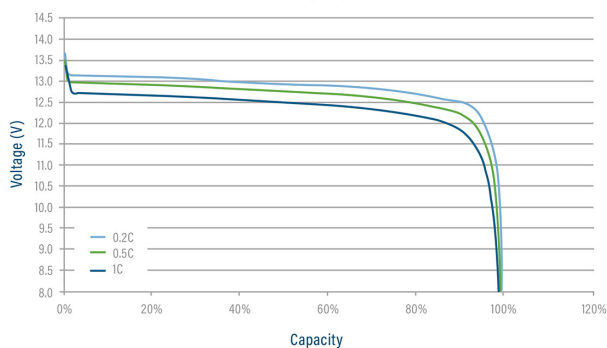
IEEE/UL Battery  
Sizing by  
**MooreU**  
610-952-6067  
www.mooreu.com

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

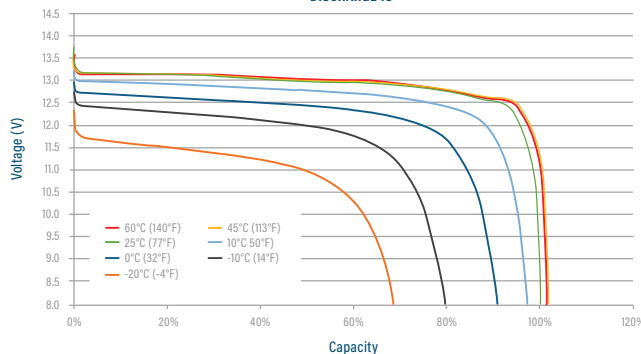
LITHIUM IRON PHOSPHATE BATTERY **LiFePO4**

## TYPICAL LITHIUM IRON PHOSPHATE CHARACTERISTICS\*

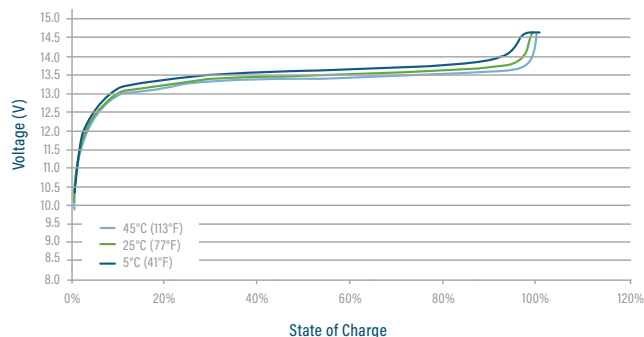
DISCHARGE VOLTAGE CHARACTERISTICS AT VARIOUS RATES  
25°C (77°F)



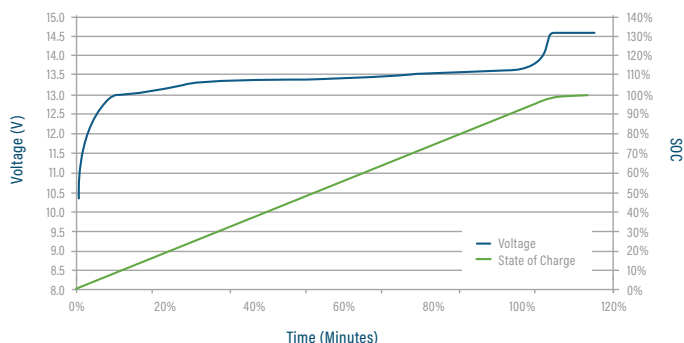
DISCHARGE VOLTAGE CHARACTERISTICS AT VARIOUS TEMPERATURES  
DISCHARGE 1C



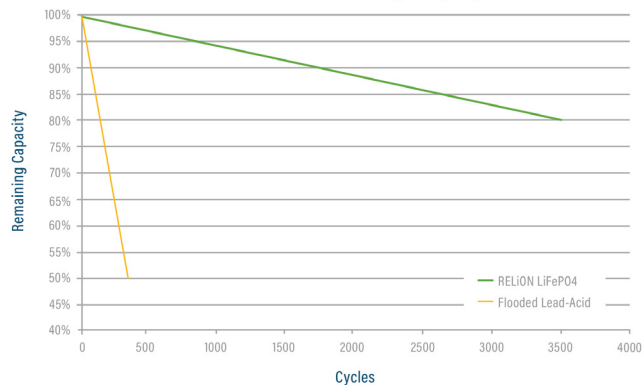
CHARGE VOLTAGE CHARACTERISTICS AT VARIOUS RATES  
CHARGE 0.2C



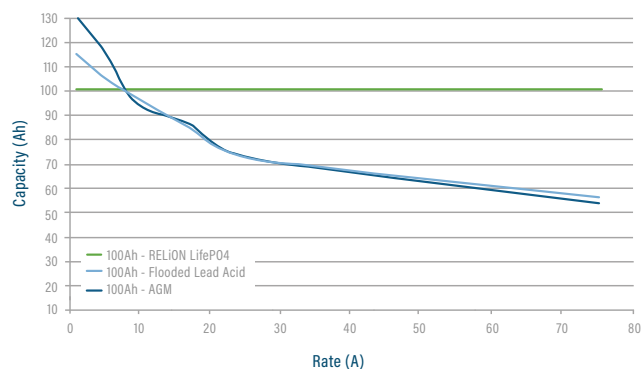
CHARGE VOLTAGE AND STATE OF CHARGE (SOC)  
CHARGE 0.2C @ 25°C (77°F)



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.

