

LITHIUM IRON PHOSPHATE BATTERY

ELECTRICAL PERFORMANCE

Nominal Voltage	12.8 V
Nominal Capacity	50 Ah
Capacity @ 20A	150 min
Energy	640 Wh
Resistance	≤50 mΩ @ 50% SOC
Self Discharge	<3% / Month
Cells	Cylindrical

CHARGE PERFORMANCE

Recommended Charge Current	2.5 A - 25 A
Maximum Charge Current	50 A
Recommended Charge Voltage	14.2 V - 14.6 V
BMS Charge Cut-Off Voltage	15.6 V (3.9 ±0.025 vpc) (1.1 ±0.4 s)
Reconnect Voltage	15.2 V (3.8 ±0.05 vpc)
Balancing Voltage	14.4 V (3.6 ±0.025 vpc)
Maximum Batteries in Series	4

DISCHARGE PERFORMANCE

Maximum Continuous Discharge Current	50 A
Peak Discharge Current	100 A (7.5 s ±2.5 s)
BMS Discharge Cut-Off Current	170 A ±20 A (10 ±5 ms)
Recommended Low Voltage Disconnect	11 V
BMS Discharge Cut-Off Voltage	8 V (2.0 ±0.08 vpc) (140 ±60 ms)
Reconnect Voltage	9.2 V (2.3 ±0.1 vpc)
Short Circuit Protection	200 ~ 600 μs



MECHANICAL PERFORMANCE

Dimension (L x W x H)	198 x 166 x 176 mm 7.8 x 6.5 x 6.9"
Approx. Weight	13.9 lbs (6.3 kg)
Terminal Type	T11
Terminal Torque	80 ~ 100 in-lbs (9 ~ 11 N-m)
Case Material	ABS
Enclosure Protection	IP65

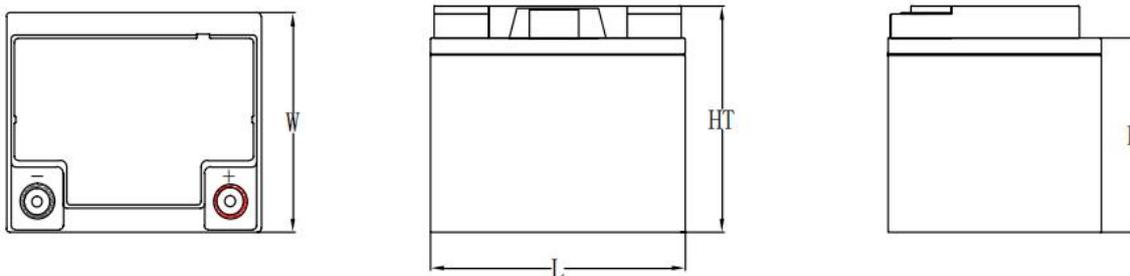
TEMPERATURE PERFORMANCE

Discharge Temperature	-4 ~ 131 °F (-20 ~ 55 °C)
Charge Temperature	32 ~ 113 °F (0 ~ 45 °C)
Storage Temperature	23 ~ 95 °F (-5 ~ 35 °C)
BMS High Temperature Cut-Off	149 °F (65 °C)
Reconnect Temperature	131 °F (55 °C)

COMPLIANCE

Certifications	CE (battery) UN38.3 (battery) UL1642 & IEC62133 (cells)
Shipping Classification	UN 3480, CLASS 9

OUTLINE DIMENSION

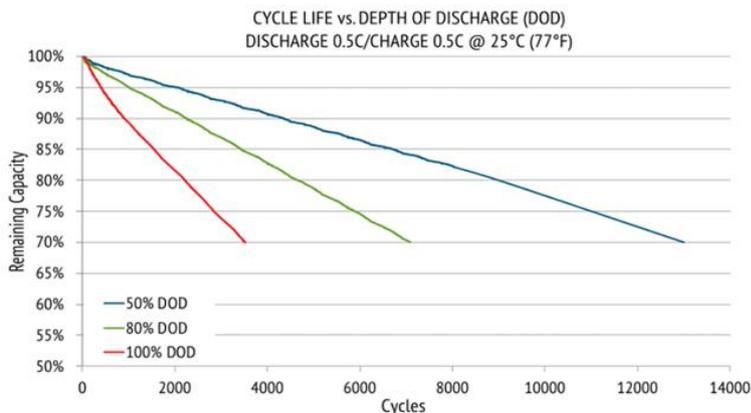
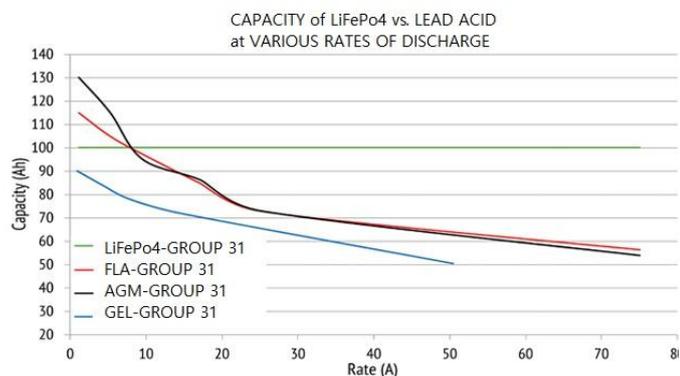
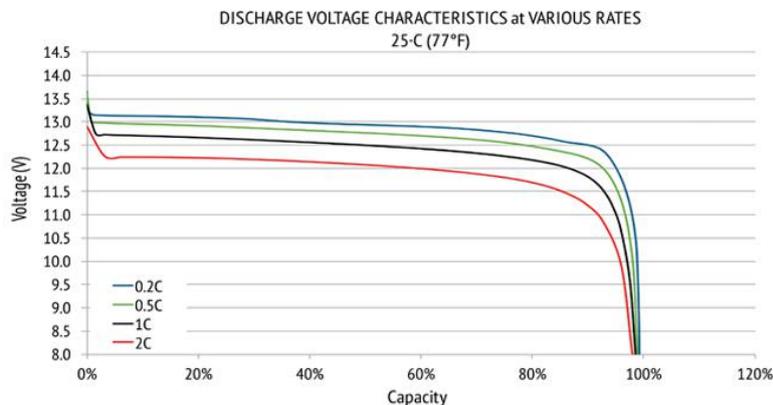
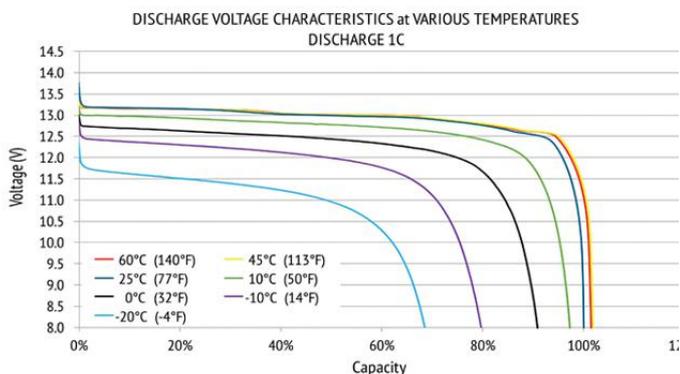


L mm(")	W mm(")	H mm(")	HT mm(")
198 (7.8)	166 (6.5)	146 (5.7)	176 (6.9)

Performance may vary depending on application. All specifications are subject to change without prior notice to the user. This data is for evaluation purposes only. No guarantee is intended or implied by this data. For clarification and updated information, please contact us.



PERFORMANCE CHARACTERISTICS



FEATURES & BENEFITS

High cycle life
 >3500 cycles @80% DoD for effectively lower total cost of ownership.

Longer service life
 Low maintenance batteries with stable chemistry.

Built in circuit protection
 Battery Management System (BMS) is incorporated against abuse.

Better storage
 up to 6 months thanks to its extremely low self discharge (LSD) rate and no risk of sulphation.

Quickly recharge
 Save time and increase productivity with less down time thanks to superior charge/discharge efficiency.

Extreme heat tolerance
 Suitable for use in a wider range of applications where ambient temperature is unusually high: up to +60°C.

Lighter Weight
 Lithium batteries provide more Wh/Kg while also being up to 1/3 the weight of its SLA equivalent.

APPLICATIONS

Lithium Iron Phosphate can be used in most applications that use Lead Acid, GEL or AGM type batteries. Suitable applications include:

- Caravan
- Marine
- Golf Car
- Buggies
- Solar Storage
- AGV
- Remote Monitoring
- Switching applications and more

CAUTIONS

- Do NOT short circuit, reverse polarity, crush or disassemble.
- Do NOT heat or incinerate.
- Do NOT immerse in any liquid.
- Store at 30~50% SOC. Recharging every 3 months is recommended. The storage area should be clean, cool, dry and ventilated.

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