

LITHIUM IRON PHOSPHATE BATTERY

ELECTRICAL PERFORMANCE

Nominal Voltage	12.8 V
Nominal Capacity	100 Ah
Capacity @ 20A	300 min
Energy	1280 Wh
Resistance	≤50 mΩ @ 50% SOC
Self Discharge	<3% / Month
Cells	FR26650EC

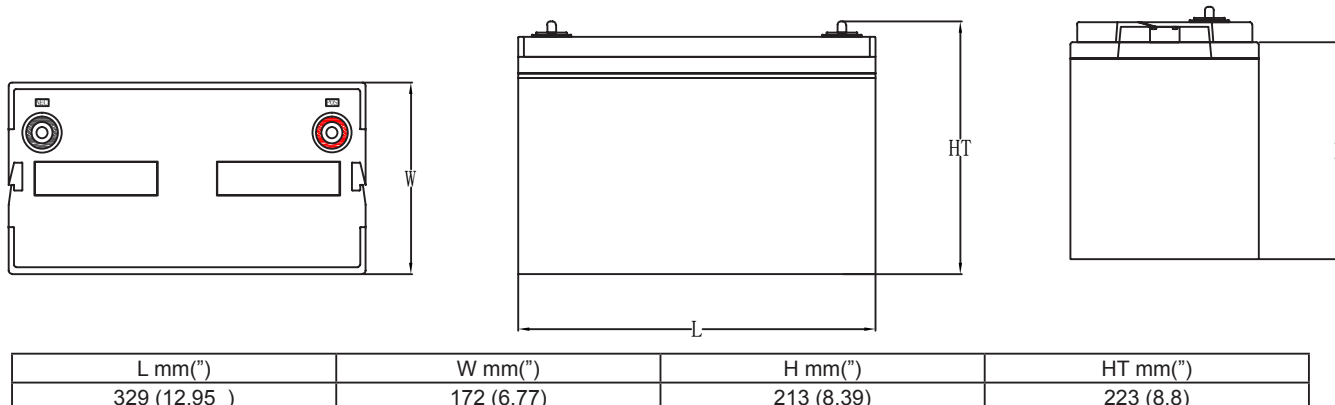
CHARGE PERFORMANCE

Recommended Charge Current	>20 A
Maximum Charge Current	100 A
Recommended Charge Voltage	14.6 V
BMS Charge Cut-Off Voltage	<15.6 V (3.9V/Cell)
Reconnect Voltage	>14.4 V (3.6V/Cell)
Balancing Voltage	<14.4 V (3.6V/Cell)
Maximum Batteries in Series	1 (Single-Use)

DISCHARGE PERFORMANCE

Maximum Continuous Discharge Current	100 A
Peak Discharge Current	200 A (5~10s)
BMS Discharge Cut-Off Current	300 A ± 30 A (31 ms)
Recommended Low Voltage Disconnect	11 V
BMS Discharge Cut-Off Voltage	>8.0 V (2 ~ 3 ms) (2.0V/Cell)
Reconnect Voltage	>10 V
Short Circuit Protection	200 ~ 800 μs

OUTLINE DIMENSION



MECHANICAL PERFORMANCE

Dimension (L x W x H)	329 x 172 x 223 mm 12.95 x 6.77 x 8.8"
Approx. Weight	28.2 lbs (12.8 kg)
Terminal Type	M8
Terminal Torque	80 ~ 100 in-lbs (9 ~ 11 N-m)
Case Material	ABS
Enclosure Protection	IP65

TEMPERATURE PERFORMANCE

Discharge Temperature	-4 ~ 167 °F (-20 ~ 75 °C)
Charge Temperature	-4 ~ 149 °F (-20 ~ 65 °C)
Storage Temperature	23 ~ 95 °F (-5 ~ 35 °C)
BMS High Temperature Cut-Off	149 °F (65 °C)
Reconnect Temperature	122 °F (50 °C) (Charge) 131 °F (55 °C) (Discharge)

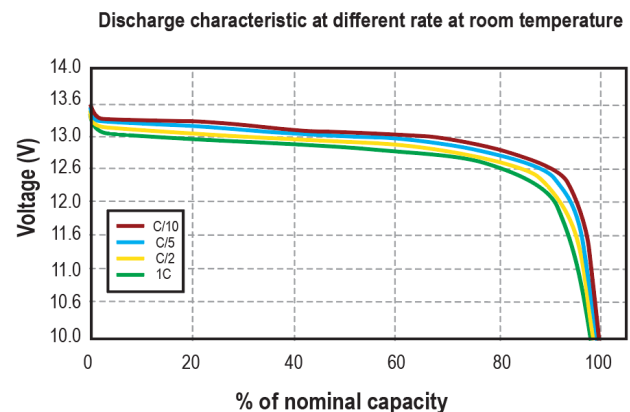
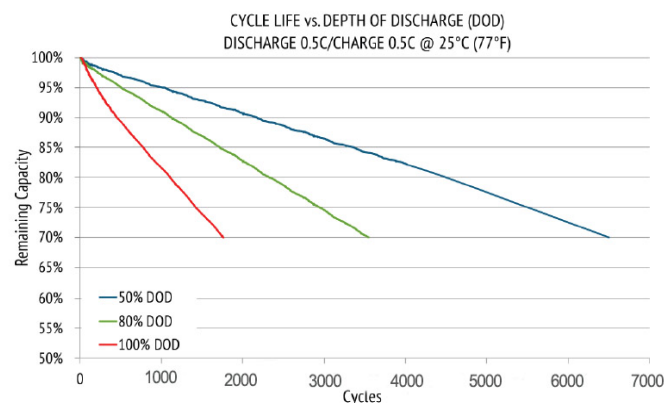
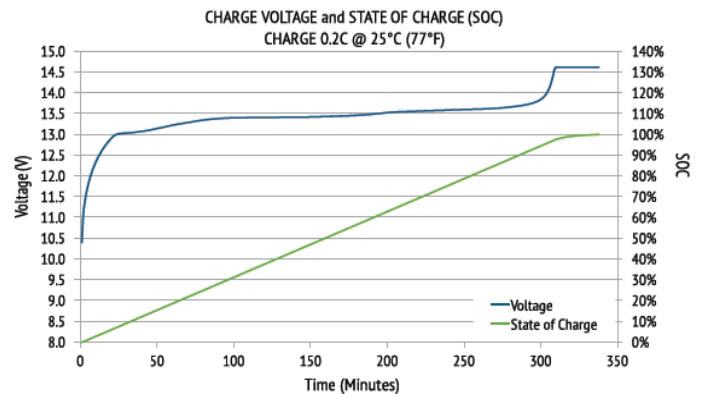
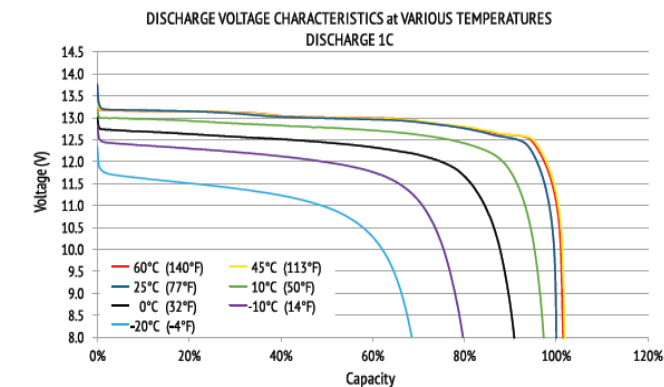
HEATING ELEMENT PERFORMANCE

Heating Temperature Range	-4 to 50 °F (-20 to 10 °C)
Heating Time	Approximately 1 hr @ 10 A
PCM Heating Element Cut-Off	158 °F (70 °C)

COMPLIANCE

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

PERFORMANCE CHARACTERISTICS



FEATURES & BENEFITS



High cycle life

>2000 cycles @80% DoD for effectively lower total cost of ownership.



Longer service life

Low maintenance batteries with stable chemistry. Easily monitor battery status via mobile APP.



Built in circuit protection

Battery Management Systems (BMS) are 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.



Lightweight

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
- Remote Monitoring
- Switching applications and more

CAUTIONS

- Do NOT short circuit, 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.

