

## LITHIUM IRON PHOSPHATE BATTERY

ELECTRICAL PERFORMANCE	
Nominal Voltage	12.8 V
Nominal Capacity	100 Ah
Capacity @ 20A	300 min
Energy	1280 Wh
Resistance	≤20 mΩ @ 50% SOC
Self Discharge	<3% / Month
Cells	Square Cell 3.2V100Ah

CHARGE PERFORMANCE	
Recommended Charge Current	20 A
Maximum Charge Current	50 A
Recommended Charge Voltage	14.6 V
Charge Cut-Off Voltage	<15.2 V (0.5 ~ 1.5 s)
Reconnect Voltage	>14.4 V
Balancing Voltage	<14 V
Maximum Batteries in Series	4

DISCHARGE PERFORMANCE	
Continuous Discharge Current	50 A
Maximum continuous Discharge Current	150 A
Peak Discharge Cut-Off Current	300 A(5 ~15 ms)
Recommended Low Voltage Disconnect	10 V
Discharge Cut-Off Voltage	>8.4 V (50 ~ 150 ms)
Reconnect Voltage	>10 V
Short Circuit Protection	200 ~ 600 μs

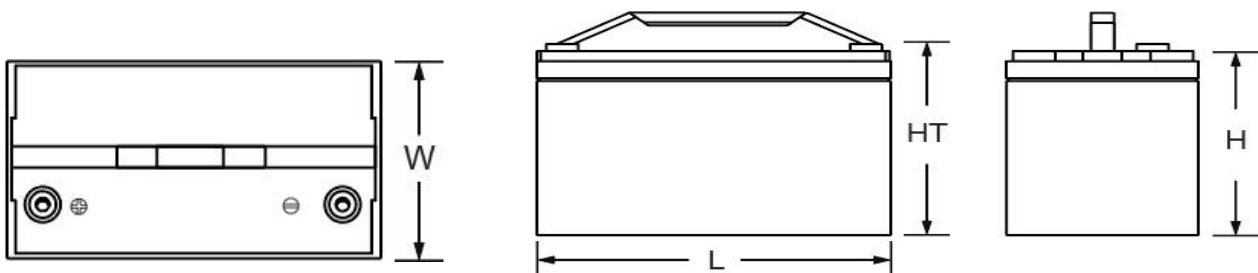


MECHANICAL PERFORMANCE	
Dimension (L x W x H)	330 x 172 x 215 mm 12.99 x 6.77 x 8.46"
Approx. Weight	10.5 kg
Terminal Type	M8
Terminal Torque	80 ~ 100 in-lbs (9 ~ 11 N-m)
Case Material	ABS
Enclosure Protection	IP65

TEMPERATURE PERFORMANCE	
Discharge Temperature	-4 ~ 140 °F (-20 ~ 60 °C)
Charge Temperature	32 ~ 113 °F (0 ~ 45 °C)
Storage Temperature	23 ~ 95 °F (-5 ~ 35 °C)
High Temperature Cut-Off	149 °F (65 °C)
Reconnect Temperature	118 °F (48 °C)

COMPLIANCE	
Certifications	CE UN38.3 UL1642 & IEC62133
Shipping Classification	UN 3480, CLASS 9

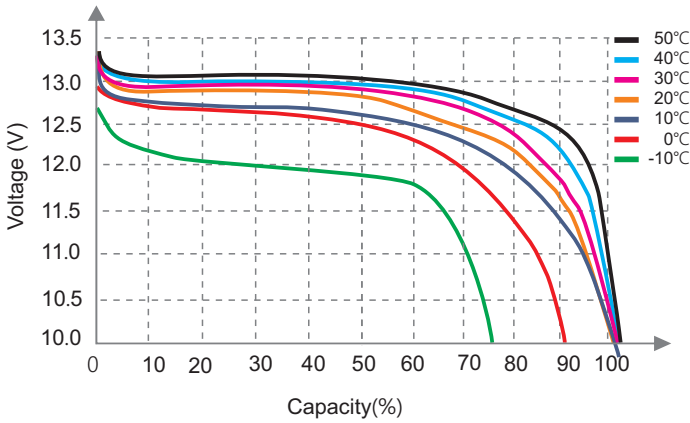
## OUTLINE DIMENSION



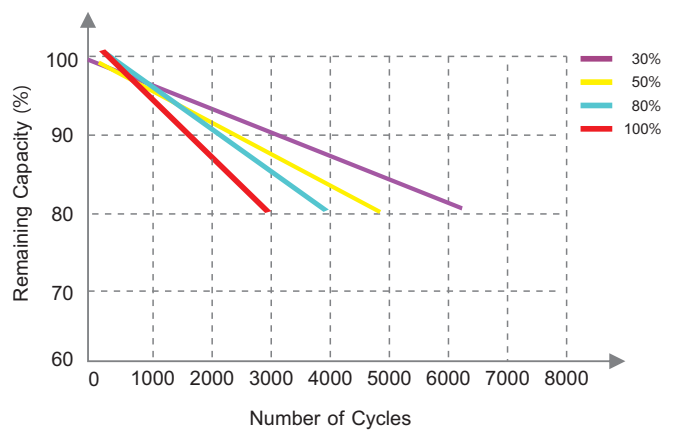
L mm(")	W mm(")	H mm(")	HT mm(")
330 (12.99)	172 (6.77)	223(8.8)	

PERFORMANCE CHARACTERISTICS

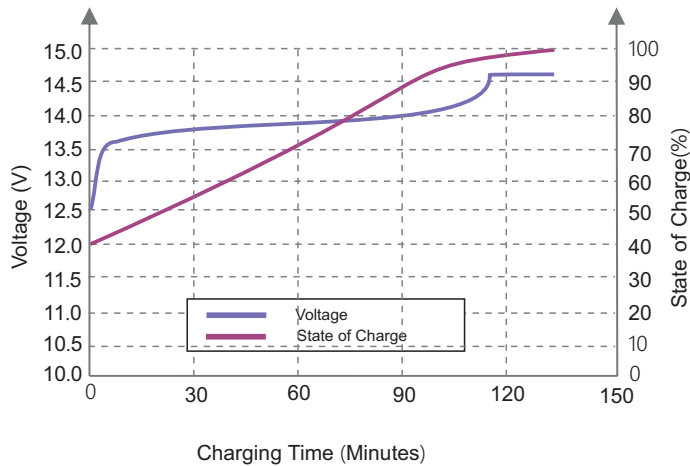
Different Temperature Discharge Curve (0.5C)



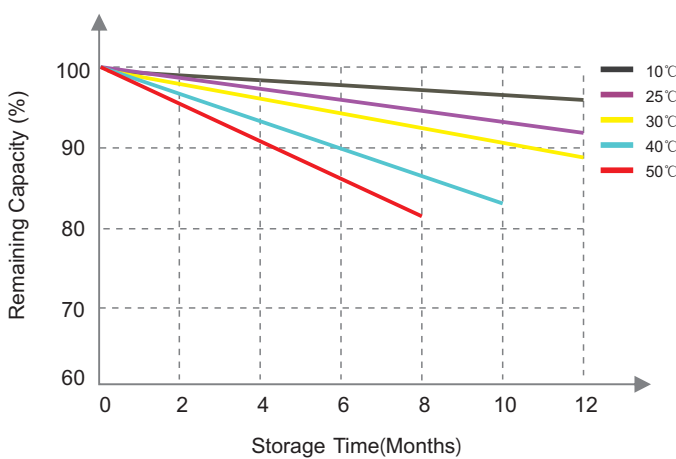
Different DOD Discharge Cycle Life Curve (1C)



State of Charge Curve (0.5C, 25°C)



Different Temperature Self Discharge Curve



FEATURES

- High cycle life**  
 > 3000 cycles @ 100% DoD for effectively lower total cost of ownership.
- Longer service life**  
 Low maintenance, stable chemical materials, monitoring the activity status of the battery smart mode.
- Built in circuit protection**  
 Battery Management Systems (BMS) are incorporated against abuse.
- Better storage**  
 Up to 6 months due to the extremely low-self discharge (LSD) rate and no risk of sulfation.
- Quickly recharge.**  
 Save time and increase productivity with less down time due 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 50% capacity. Recharge every 3 months. The storage area should be clean, cool, dry and ventilated.