# LITHIUM IRON PHOSPHATE BATTERY

ELECTRICAL PERFORMANCE	
Nominal Voltage	12.8 V
Nominal Capacity	200 Ah
Capacity @ 40 A	300 min
Energy	2560 Wh
Resistance	≤25 mΩ
Self Discharge	<3% / Month
Cells	Square Cell 3.2V100Ah

CHARGE PERFORMANCE	
Recommended Charge Current	20 A
Maximum Charge Current	100 A
Recommended Charge Voltage	14.6 V
BMS 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

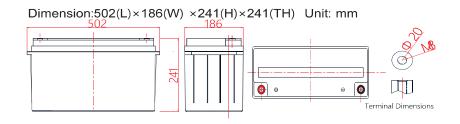
DISCHARGE PERFORMANCE		
Continuous Discharge Current	100A	
Max Discharge Current	100 A	
BMS Discharge Cut-Off Current	300 A (5 ~15 ms)	
Recommended Low Voltage Disconnect	10 V	
BMS Discharge Cut-Off Voltage	>8.4V (50 ~ 150 ms)	
Reconnect Voltage	>10 V	
Short Circuit Protection	200 ~ 600 μs	



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)	
BMS High Temperature Cut-Off	149 °F (65 °C)	
Reconnect Temperature	118 °F (48 °C)	

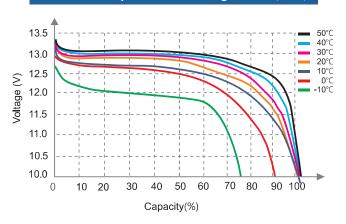
COMPLIANCE	
Certifications	CE UN38.3 UL1642 & IEC62133
Shipping Classification	UN 3480, CLASS 9

## **OUTLINE DIMENSION**

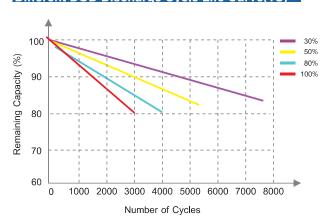


#### PERFORMANCE CHARACTERISTICS

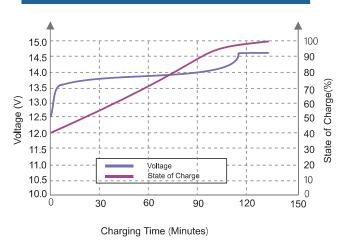
### **Different Temperature Discharge Curve(0.5C)**



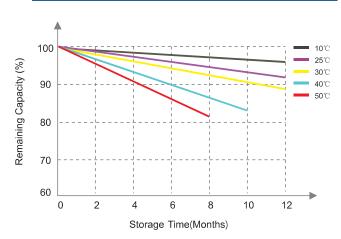
### Different DOD Discharge Cycle Life Curve(1C)



# State of Charge Curve(0.5C, 25℃)



## **Different Temperature Self Discharge Curve**



### **FEATURES**



# High cycle life

 $>\!4000$  cycles @80% DoD for effectively lower total cost of ownership.



#### Longer service life

Low maintenance batteries with stable chemistry. Easily monitor state of charge (SoC) of smart models.



#### **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 StorageRemote 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.