

# LITHIUM IRON PHOSPHATE BATTERY

## 51.2V 300AH LiFePO4 Battery

### ELECTRICAL SPECIFICATION

Nominal Voltage	51.2V
Nominal Capacity	300AH
Energy	15360Wh
Resistance	≤100mΩ
Efficiency	99%
Self Discharge	<3% per month

### DISCHARGE SPECIFICATIONS

Max. Cont.Discharge	200A
Peak Discharge Current	100A
Recommend Cut-off voltage	45.6V

### MECHANICAL SPECIFICATIONS

Dimensions	660*820*140mm
Weight	120.77KG
Case Material Enclosure	Metal
Protection Cell Type	IP21
Prismatic	16S3P
Toral cell	48PIECES

### FEATURE & BENIFITS

- High Cycle Life: >6000 cycle time, 80%D.O.D for effectively lower cost of ownership
- Built-in BMS Protection: Battery Management System are incorporated to protect battery from

OVER CHARGING, OVER DISCHARGING, SHORT CIRCUIT

- LIGHT WEIGHT: Dry power lithium batteries has higher energy density, wh/kg also being up to 1/3 of SLA battery
- WIDE OPERATING TEMPERATURE RANGE: Suitable for users in a wider range of application where ambient temperature is unusually high: up to +60°C
- STEADY OUTPUT VOLTAGE, VIBRATION &SHOCK RESISTANT, NO MEMORY EFFECT, PRESSURE RESISTANT CELLS



### CHARGE SPECIFICATION

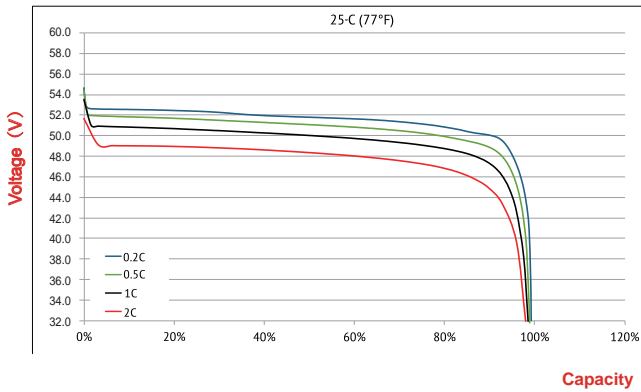
Recommended Charge Current	100A
Max. Charge Current	200A
Recommended Charge Voltage	56.16V
Charge Current (-20 to -10 °C)	≤0.05 C

### TEMPERATURE SPECIFICATION

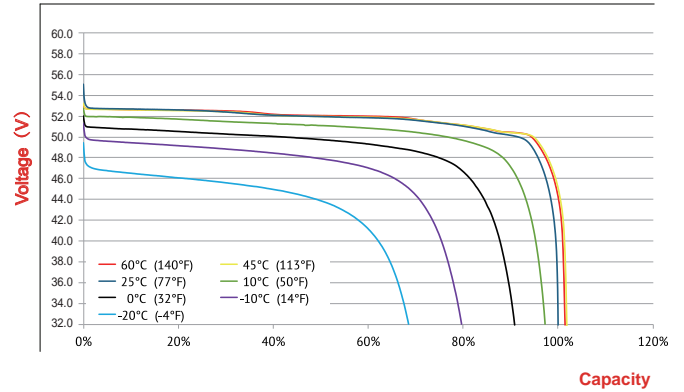
Discharge Temperature	-20°C to 60°C
Charge Temperature	0°C to 45°C
Storage Temperature	0°C to 40°C
BMS High Temperature	80°C
Reconnect Temperature	50°C

## PERFORMANCE CHARACTERISTIC

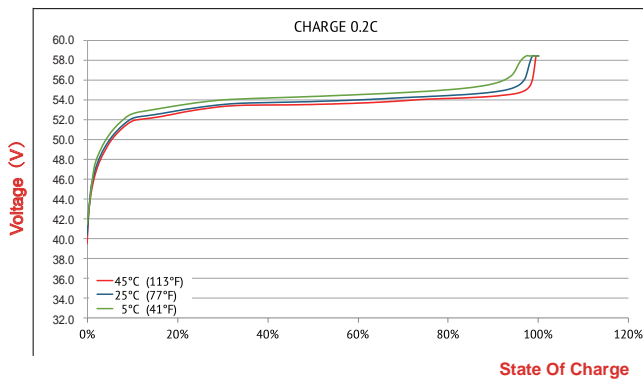
### Discharge Voltage Characteristics At Various Rates



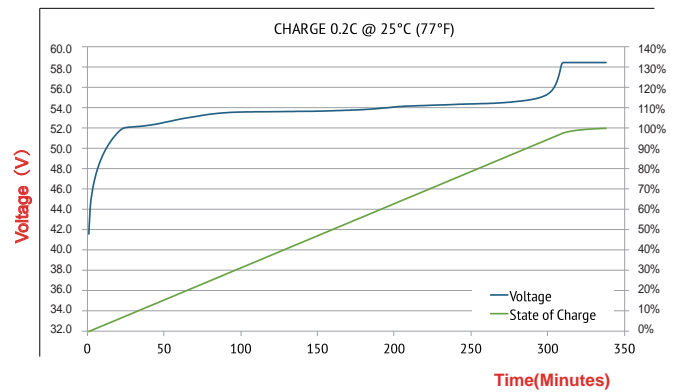
### Discharge Voltage Characteristics At Various Temperatures



### Charge Voltage Characteristics At Various Temperatures



### Charge Voltage And State Of Charge(SOC)



## SUITABLE APPLICATIONS

- Lithium Iron Phosphate can be used in any application that would normally use Lead Acid, GEL, or AGM type batteries
- LiFePO4 in 4S=12.8V and 8S=25.6V is closed to Lead Acid equivalents of the Lithium rechargeable types
- Suitable applications included caravan, marine, golf carts, solar storage, remote monitoring, switching applications

## CAUTIONS

- Do NOT expose the battery to water
- Do NOT expose the battery to fire & high temperature
- Do NOT short circuit, crush or disassemble
- Only use LiFePO4 charger
- Store at 50% capacity, recharge every 3 months. The storage area should be clean, cool, dry and ventilated.