# **LITHIUM IRON PHOSPHATE BATTERY**

# 51.2V 100AH LiFePO4 Battery

ELECTRICAL SPECIFICATION	
Nominal Voltage	51.2V
Nominal Capacity	100AH
Capacity @20A	10HR
Energy	5120Wh
Resistance	≤100mΩ
Efficiency	99%
Self Discharge	<3% per month



DISCHARGE SPECIFICATIONS	
Max. Cont.Discharge	100A
Peak Discharge Current	50A
Recommend Cut-off voltage	45.6V

CHARGE SPECIFICATION	
Recommended Charge Current	50A
Max. Charge Current	100A
Recommended Charge Voltage	56.16V
Charge Current (-20 to -10 °C)	≤0.05 C

MECHANICAL SPECIFICATIONS		
Dimensions	442*500*140mm	
Weight	45.88KG	
Case Material Enclosure	Metal	
Protection Cell Type	IP21	
Prismatic	16S1P	
Toral cell	16PIECES	

TEMPERATURE SPECIFICATION		
Discharge Temperature	-20°C to 60°C	
Charge Temperature	0°C to 55°C	
Storage Temperature	-20°C to 40°C	
BMS High Temperature	80°C	
Reconnect Temperature	50°C	

## **FEATURE & BENIFITS**

- High Cycle Life: >3000 cycle time, 100%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

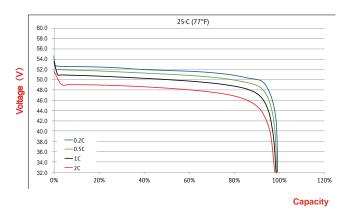
- LIGHT WEIGHT: Dry power lithium batteries has higher energy density, wh/kg also being up to 1/3 of SLA battery
- WIDE OPERATING TEMPERATURE RANGE: Suitable for users in a wider range of application where ambient

temperature is unusually high: up to +60°C

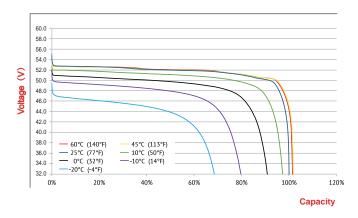
• STEADY OUTPUT VOLTAGE, VIBRATION & SHOCK RESISTANT, NO MEMORY EFFECT, PRESSURE RESISTANT CELLS

## **PERFORMANCE CHARACTERISTIC**

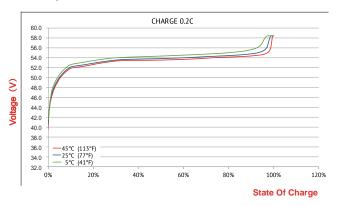
#### **▶** Discharge Voltage Characteristics At Various Rates



#### 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.