

#### Features Of LiFePO<sub>4</sub> Battery

Longer Cycle Life: Offers up to 10 times longer cycle life and fivetimes longer float/calendar life than lead acid battery, helping to minimize replacement cost and reduce total cost of ownership.

 ${\bf Lighter\ Weight:\ About\ 40\%\ of\ the\ weight\ of\ a\ comparable\ lead}$  acidbattery.\ A'drop\ in'\ replacement\ for\ lead\ acid\ batteries.

**Higher Power:** Delivers twice power of lead acid battery, even high discharge rate, while maintaining high energy capacity.

Wider Temperature Range: -20-60 °C

**Superior Safety:** Lithium Iron Phosphate chemistry eliminates the risk of explosion or combustion due to high impact, overcharging or short circuit situation.



# Physical Dimension-mm

#### Application

- · Solar/Wind energy Storage
- · Golf cart
- · Tools
- · Back-up Power for UPS/EPS

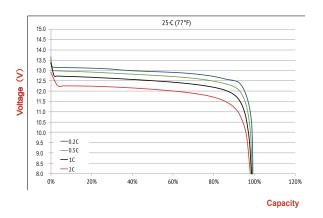
# Specification

| Electrical<br>Characteristics | Nominal Voltage            | 12.8V  |
|-------------------------------|----------------------------|--|
|                               | Nominal Capacity           | 100Ah  |
|                               | Nominal Energy             | 1280w  |
|                               | Internal Resistance ( AC ) | ≤80mΩ  |
|                               | Cycle Life                 | 2000-6000 cycles                                   |
|                               | Months Self Discharge      | 3%/months  |
|                               | Efficiency of Charge       | ≥97%   |
|                               | Efficiency of Discharge    | ≥98%   |
| Standard Charge               | Charge Voltage             | 14.6V  |
|                               | Charge Current             | 20A  |
|                               | Charge Cut-off Voltage     | 14.6V  |
| Standard Discharge            | Continuous Current         | 100A   |
|                               | Max . Pulse Current        | 120A (3S)  |
|                               | Discharge Cut-off Voltage  | 10V  |
| Environmental                 | Charge Temperature         | 0°C to 45°C(32F to 113F)@60±25%Relative Humidity   |
|                               | Discharge Temperature      | -20°C to 60°C(-4F to 140F)@60±25%Relative Humidity |
|                               | Storage Temperature        | 0°C to 40°C(32F to 104F)@60±25%Relative Humidity   |
|                               | IP Class                   | IP30   |
| Mechanical                    | Material System            | LFP  |
|                               | Plastic Case               | ABS  |
|                               | Dimensions ( in. /mm. )    | 329*172*219mm                                      |
|                               | Weight ( lbs. /kg. )       | 12.9kg   |
|                               | Others( optional )         | Bluetooth,shell color, IP rating                   |

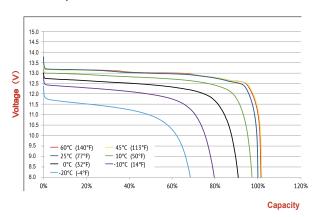
# LiFePO4 Battery(WHC12.8V100AH)



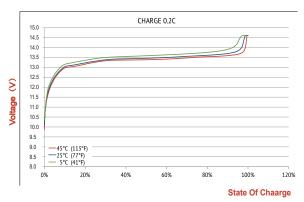
# **▶** Discharge Voltage Characteristics At Various Rates



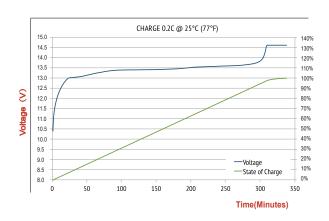
#### Discharge Voltage Characteristics At Various Temperatures



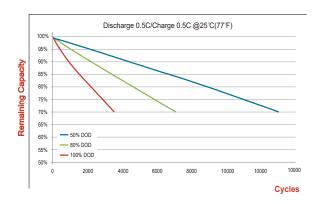
#### Charge Voltage Characteristics At Various Temperatures



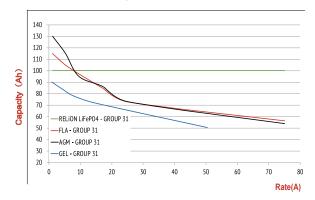
# > Charge Voltage And State Of Charge(SOC)



# > Cycle Life Vs.Depth Of Discharge(DOD)



Capacity Of Relion LiFe PO4 Vs.Lead At Various Rates Of Discharge



# **CAUTIONS** »

- Do NOT Expose The Battery To Water.
- Only Use LiFePO4 Charger.
- Do Not Short Circuit, Crush Or Disassemble.
- ▶ Do Not Expose The Battery To Fire & High Temperature.
- Store At 50% Capacity, Recharge Every 3 Months. The Storage Area Should Be Clean, Cool, Dry And Ventilated.