Lithium ion battery manual

LiFePO4 36V9Ah and 36V11Ah

Introduction

For proper use, maintenance and storage of this lithium ion battery it is important that you read and understand all instructions given in this manual

Characteristics

This battery consists of high performance cells and American designed CPU which is used as the main controller for the CMOS chip – the essential part of the electronic Battery Management System (BMS). The battery has the following characteristics:

1. The battery is provided with high capacity, good performance, long cycle life and excellent safety and reliability.
2. The battery provides novel intelligent protection functions such as secondary high-current protection, third grade protection for short circuit, restraining high voltage pulse, temperature sensor, over-voltage protection, and automatic reactivation by releasing protection.
3. The new protection control circuit of the battery also includes a plug-in for reading and writing data to set parameters freely which can satisfy special customer requirement
4. The MOS tube of lower impedance and high current…..
5. The interior configuration of cells…
6. The sandwich configuration made up of high strength and anti-burning board protects the battery from exterior physical rough handling which enhance safety performance, dissipate heat from cells effectively which prolong the cycle life of the battery

Warnings

1. Remove the battery from the user device when the battery is not in use for a long time.
2. Use the special charger supplied with the battery to ensure safety and proper battery charging
3. Handle the battery physically with care – do not drop, throw or strike the battery hard against surfaces
4. Do not immerse the battery in water or allow it to get soaked wet
5. Do not put the battery into fire and keep the battery away from sources of intense heat
6. Keep the battery away from children
7. Do not change the connectors of the battery for charge and discharge
8. Never disassemble the battery
9. Never connect the battery directly to the power supply
10. Never short circuit the battery by connecting wires or other metal objects at the charge and discharge points

Instructions

A. Charge

1. The temperature range for charge is 0 - 45°C
2. The battery should be charged in a clean well-ventilated room away from fire.
3. Charge the battery in the same environment as it is stored to prevent moisture from dew when exposed to warm environment after being stored cold
4. Keep away from children when the charger is working to avoid danger
5. Stop charging at once if the battery releases smells and odor that indicates short circuit, fire, discoloring or smoke is detected
6. Do not connect the battery and charger to the power supply for longer periods

B. Discharge

1. The temperature range for discharge is -20 - 55°C
2. The battery should be charged in time after discharge
3. Avoid to discharge at heavy continues current since it will affect the battery´s life time or damage the battery
4. Avoid flooding the battery by rain when using the battery in rainy weather since it might cause danger for the protection circuit
5. The discharge performance will be shortened to a certain extend at low temperatures so the use time will be shortened in cold weather
6. Remove the battery from the device when the battery is not in use for a long time
7. Never store the battery at low voltage levels after having discharged the battery

C. Storage

1. Battery storage condition: 0 - 30°C, relative humidity: <75%. The battery should be stored in a clean well-ventilated place without contact with corrosive substance and far away from heat sources.
2. The battery should be stored 50% charged for a period of no more than 60 days
3. The capacity will decline when stored so the batter should be charged fully before use again
4. The battery should be charged 1-2 hours every 60 days during long term storage

D. Transport

1. The battery should be packed with insulation and shockproof materials to avoid damage from shock and collision on the way
2.