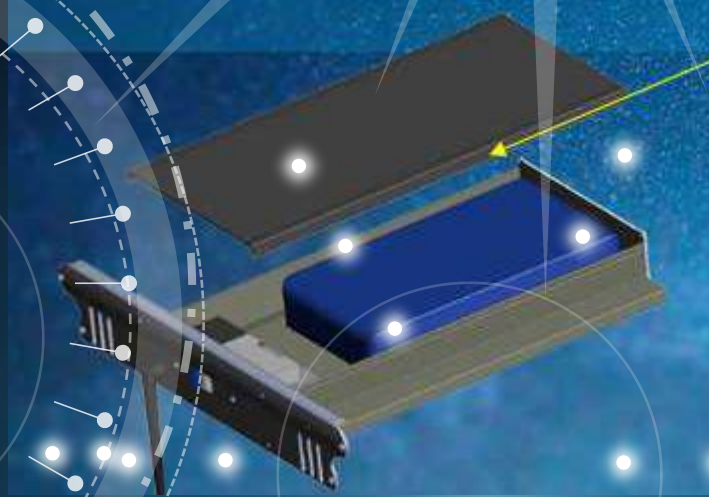


What Battery is used
For
All-in-one solar street lights ?

Yufai Aurora use LiFePO4 Battery for its all in one solar street lights



PRODUCT INTRODUCTION

- ◆ LiFePO4 Battery: 2000+ cycle life
- ◆ anti- 70℃ high temperature
- ◆ 8 years life guarantee



Best Battery Packing Solution

Lithium Iron Phosphate (LiFePO₄) is kind of Li-Ion Rechargeable Battery for high power applications, such as EV car , Power Tool and RC hobby. LiFePO₄ cells feature with high discharging current, non explosive, long cycle life (>2000@0.2C rate, IEC Standard), LiFePO₄ cell has 3.2V nominal working voltage and shall be cut-off power at 3.6-3.8V per cell during charging. LiFePO₄ battery has the lowest cost if considering its long cycle life.

Characteristic

Yufai Aurora LiFePO₄ material is safe than LiCoO₂ & LiMn₂O₄ for its stable structure can be kept very well under continuous charging & discharging situations.

The superior high temperature & storage performance make LiFePO₄ the most suitable one for Li-ion battery positive material.

Longer than 2000 cycle life is more suitable for application use.

The superexcellent high current discharge performance can be used under 7C's continuous & 70C's instant situations

Comparision

LiFe PO4 Battery



Lead Acid Battery



NiCd Battery



VS

NiMH Battery



LiCoO2 Battery



Chemistry	Voltage	Energy Density	Working Temp.	Cycle Life	Safety	Environmental
LiFePO ₄	3.2V	>120 <u>wh/kg</u>	-20-70 °C	>2000	Safe	Good
Lead acid	2.0V	> 35wh/kg	-20 - 40°C	>200	Normal	Not good
<u>NiCd</u>	1.2V	> 40wh/kg	-20 - 50 °C	>1000	Normal	Bad
<u>NiMH</u>	1.2V	>80 <u>wh/kg</u>	-20 - 50 °C	>500	Normal	Good
LiCoO ₂	3.7V	>200 <u>wh/kg</u>	-20 - 60 °C	> 500	Unsafe w/o PCM	OK

LiCoO₂ and LiMn₂O₄ -After “Short Circuit Testing”

Exploded and Burned



Yufai LiFE PO4 Battery After “Short circuit Testing”

Not exploded, Safe





A safe battery, you can enjoy a bright and peaceful environment, however if the battery is not safe, it is dangerous like a timing bomb.

Recent years, there are many explosion accidents we can see the news everywhere, it is the problem of battery which is caused by high temperature and other reasons, so choose a safe and clean battery, Yufai Aurora use LiFePO₄ Battery, because we focus on safety lighting.



Let's See Following Chart

Yufai Smart Maintenance System Temperature Tracking, dated on 2016-10-05- the teperature inside up to 64 degree,the LiFe PO4 battery still working and safe.



Data Type:

Temperature Chart

Graph Type:

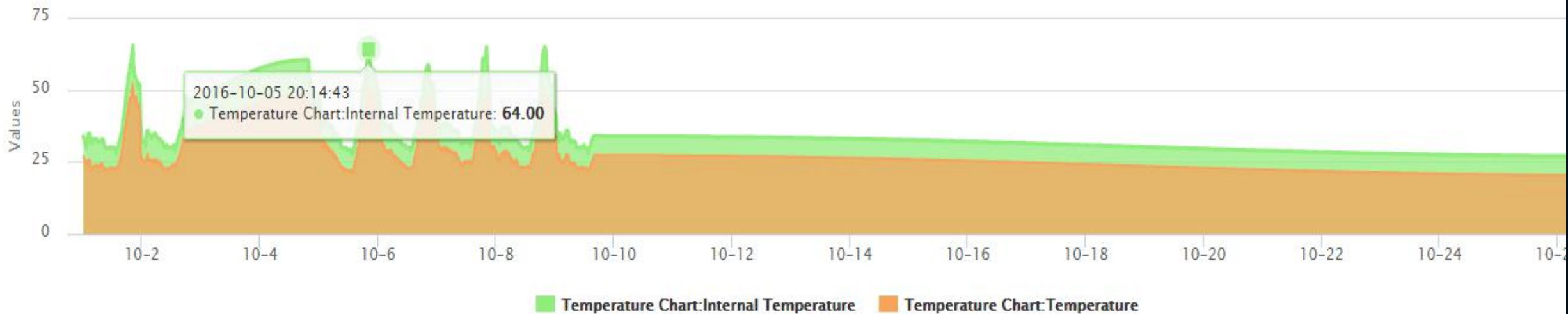
Line Chart

Time:

2016-10-01



2016-10-28





Yufai Aurora ALL in one solar street lights are tested in the Real projects, **Safe** and **Durable** with LiPO4 Battery



Summer 70 Degree high temperature inside the Lamp





Thank you!

Wish you have a nice day