



**FANTASY LIGHTS GROUP<sup>®</sup>**



LiFePO4  
Battery



Intelligent  
Control



High brightness  
LED



Biodiversity  
Protection



IP65  
Waterproof



Designed  
Aesthetically



Remote  
Control



Hybrid function  
(Solar & Grid)

**AIT Solar  
LED Street Light**

**THOR**



## THOR | AIT Solar LED Street Light

THOR solar led street light head was developed to the fulfil application of true solar led street light for highway lighting and main road lighting which requires ultra-high brightness and continuous long period output.

The LiFePO4 battery pack and high-efficiency MPPT solar charge controller are built inside of the light fixture. The lifetime of liFePO4 battery pack is more than 2000 cycles with D.O.D 100%, while D.O.D of the default setting of THOR light is only 60% which means the lifetime is more than 3000 cycles about 8~10 years. As our default setting, THOR light can working high full power for first 6 hours and with 50% power for another 6 hours as full night operation in order to save more solar power in battery and also it helps to extend the lifetime of the battery. The max input current is 15A~20A, it guarantees the whole system could work with very stable performance even in very challenging conditions. the lighting power and program could be adjusted easily with remote control.



### High Brightness LED

High brightness led enhances visibility and safety while providing energy-efficient



### LiFePo4 Battery

Grade A+ Battery cell with high uniformity of internal resistance and charging and discharging.



### MPPT Charge Controller

maximizes energy efficiency ensuring longer battery life and consistent illumination without blackout.



### Programmable by Remote

The lighting program can be modified anytime by remote control according to customers' requirement.



### Robust Design

Robust design of light fixture provides superior durability, corrosion resistance, and heat dissipation.



### Hybrid function (Solar & Grid)

Solar energy can be mixed with the power grid to ensure stable operation of street lights under any weather conditions

# Key components



Optical lens



LiFePO4 Battery



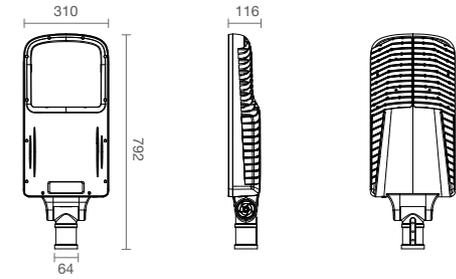
Die-cast aluminum housing



Adjustable installation bracket

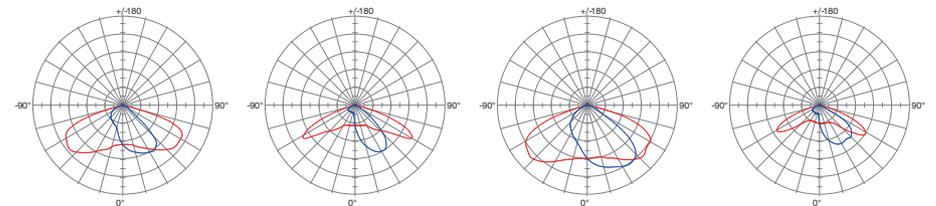
Remark:  
The designs and specifications in this spec sheet are subject to change without prior notice for product improvement.

## PRODUCT SIZE



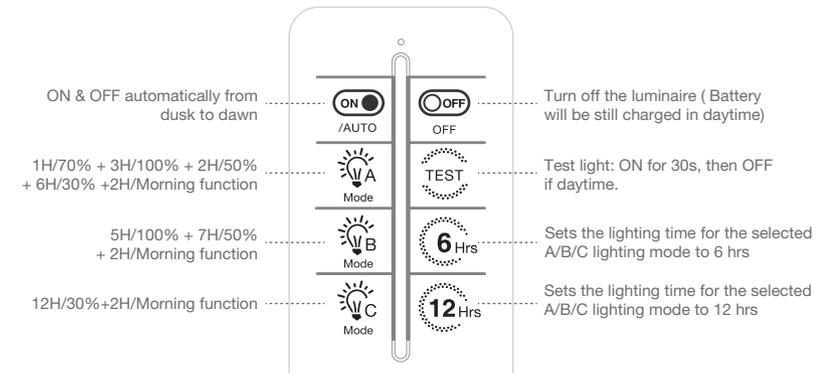
unit:mm

## LED OPTICS OPTIONAL



Type-T2                      Type-T2-M                      Type-T3                      Type-T3-M  
 Luminaire                      C0/C180: —                      C90/C270: —

## REMOTE CONTROL



### Note :

1. Turn on switch button in the solar light before use.
2. Default lighting mode: A.
3. Modes A/B/C programs could be changed prior to notice, pls be subject to the sticker at backside of remote.
4. Press OFF to turn off light (Charging will be still functional), Press ON restores last setted mode.
5. 6Hrs/12Hrs : Set duration for current mode (A/B/C). Press mode button (A/B/C) again to reset to default time.

## Regular Solar Panel Street Light

100W | 14,800lm



### Light Head

Luminous flux	14,800lm
Peak LED power	100W
CRI	>70
CCT range (dual color)	3000K / 4000K / 5000K / 6000K
LED lifetime	>100,000 hours
Light dimension	792*310*116mm
Warranty	3 years

### MPPT Controller

System voltage	24V
Regular solar panel	400W/36W
Vertical solar module	1200W/36V
MPPT tracking efficiency	98%
Max load power	160W
Operating temperature	-35 °C ~ 65 °C
IP rate	IP68

### Solar Panel

Peak Power	200W
Max. power voltage	36V
Solar cells efficiency	22.3%
Cable & connector	0.9M solar cable + MC4 connectors
Operating Temperature	-40 °C ~ 85 °C
Lifetime	>20 years
Waranty	3 years

### LiFePO4 Battery

Battery type	LifePO4 6000mA 3.2V 32700
Battery capacity	921WH 25.6V
Battery lifetime	4000 cycles @ D.O.D 50%
Charge mode	C.C + C.V
Storage Temperature	+5 °C ~ +35 °C
Operating Temperature	-10°C~65°C
Warranty	3 Years

## Regular Solar Panel Street Light

120W | 16,800lm



### Light Head

Luminous flux	16,800lm
Peak LED power	120W
CRI	>70
CCT range (dual color)	3000K / 4000K / 5000K / 6000K
LED lifetime	>100,000 hours
Light dimension	792*310*116mm
Warranty	3 years

### MPPT Controller

System voltage	24V
Regular solar panel	400W/36W
Vertical solar module	1200W/36V
MPPT tracking efficiency	98%
Max load power	160W
Operating temperature	-35 °C ~ 65 °C
IP rate	IP68

### Solar Panel

Peak Power	240W
Max. power voltage	36V
Solar cells efficiency	22.3%
Cable & connector	0.9M solar cable + MC4 connectors
Operating Temperature	-40 °C ~ 85 °C
Lifetime	>20 years
Waranty	3 years

### LiFePO4 Battery

Battery type	LifePO4 6000mA 3.2V 32700
Battery capacity	1075WH 25.6V
Battery lifetime	4000 cycles @ D.O.D 50%
Charge mode	C.C + C.V
Storage Temperature	+5 °C ~ +35 °C
Operating Temperature	-10°C~65°C
Warranty	3 Years

## Vertical Solar Cylinder Street Light

100W | 14,800lm



### Light Head

Luminous flux	14,800lm
Peak LED power	100W
CRI	>70
CCT range (dual color)	3000K / 4000K / 5000K / 6000K
LED lifetime	>100,000 hours
Light dimension	792*310*116mm
Warranty	3 years

### MPPT Controller

System voltage	24V
Regular solar panel	400W/36W
Vertical solar module	1200W/36V
MPPT tracking efficiency	98%
Max load power	160W
Operating temperature	-35 °C ~ 65 °C
IP rate	IP68

### Vertical Solar Cylinder

Peak Power	80W
Max. power voltage	6V
Solar cells efficiency	22.2%
Cable & connector	2.5mm <sup>2</sup> with Mc4 plugs
Operating Temperature	-20 °C ~ +70 °C
Lifetime	>20 years
Waranty	3 years

### LiFePO4 Battery

Battery type	LifePO4 6000mA 3.2V 32700
Battery capacity	921WH 25.6V
Battery lifetime	4000 cycles @ D.O.D 50%
Charge mode	C.C + C.V
Storage Temperature	+5 °C ~ +35 °C
Operating Temperature	-10°C~65°C
Warranty	3 Years

## Vertical Solar Cylinder Street Light

120W | 16,800lm



### Light Head

Luminous flux	16,800lm
Peak LED power	120W
CRI	>70
CCT range (dual color)	3000K / 4000K / 5000K / 6000K
LED lifetime	>100,000 hours
Light dimension	792*310*116mm
Warranty	3 years

### MPPT Controller

System voltage	24V
Regular solar panel	400W/36W
Vertical solar module	1200W/36V
MPPT tracking efficiency	98%
Max load power	160W
Operating temperature	-35 °C ~ 65 °C
IP rate	IP68

### Vertical Solar Cylinder

Peak Power	100W
Max. power voltage	6V
Solar cells efficiency	22.2%
Cable & connector	2.5mm <sup>2</sup> with Mc4 plugs
Operating Temperature	-20 °C ~ +70 °C
Lifetime	>20 years
Waranty	3 years

### LiFePO4 Battery

Battery type	LifePO4 6000mA 3.2V 32700
Battery capacity	1075WH 25.6V
Battery lifetime	4000 cycles @ D.O.D 50%
Charge mode	C.C + C.V
Storage Temperature	+5 °C ~ +35 °C
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