

# SPECIFICATION OF DIE-CASTING INTEGRATED SOLAR STREET LIGHT



## Overview

### Design Principle

It integrates solar cells, lithium batteries, LED light sources, human body infrared sensors, solar energy system controllers, aluminum frames and mounting fixtures. Also optimizing the electronic circuits, the advantage is easy to transport, installation, convenient maintain etc..

### Operating Principle

Through the light control + time control and PIR human infrared sensing working mode, the solar panel receives light during the day to charge the lithium battery. When the controller detects that the input voltage of the solar panel is lower than 5V, the controller starts to supply power to the LED light source. When the input voltage of the solar panel is higher than 5V, the controller will cut off the output power of the LED light source automatically, so as to achieve the purpose of light on at night, light off at day automatically.

# Feature

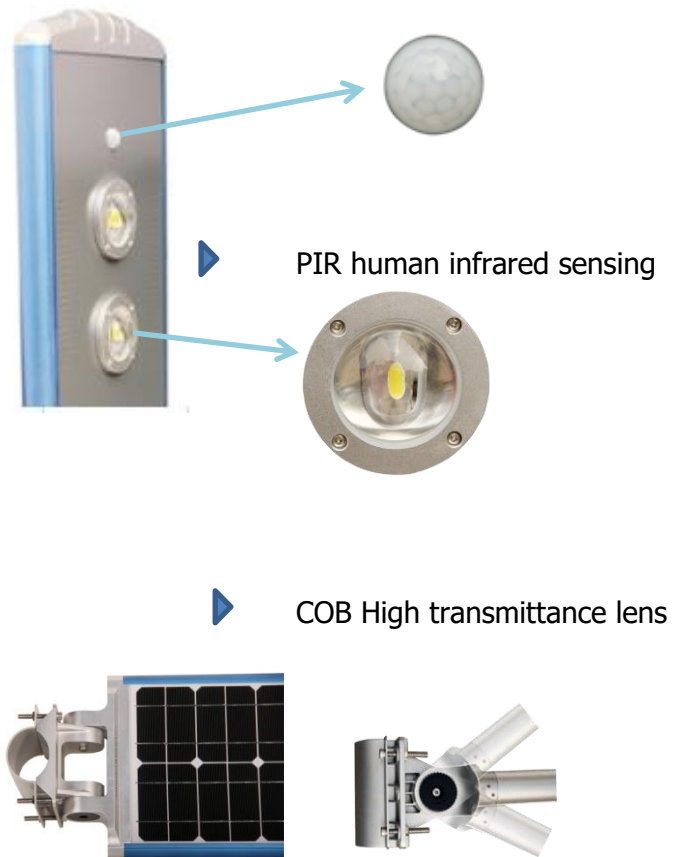
## ★ Bridgelux LED chips from USA

The die-casting integrated solar street light uses the US Bridgelux LED source to provide superior lumen output, 120 lm/W (lumen/watt), long-lasting stability and excellent visual sense.

Each Bridgelux LED has anti-static protection components to minimize LED damage caused by static electricity.

## ★ PIR human infrared sensing

The use of human body infrared sensor control technology, energy storage during the day, high brightness when human comes, dim when nobody around. The LED lights will work at night automatically. The smart sensor module controls the working status of the lamps. The full power lighting mode is provided when the person comes. The energy saving mode is provided when the person leaves. The factory default working mode: light on at night, light off at day automatically. (You can also customize the working mode according to the customer's requirements).



## ★ Angle of installation is adjustable

The use of die-casting special fasteners, humanized adjustable angle of 30° -150° according to the use of project areas in different latitude and longitude countries.

## ★ High Capacity Lithium Battery

Using A level lithium iron battery, charge and discharge cycle 2000 times, the company has professional battery burn-in equipment test after 24 hours then assembly production, greatly reducing the product failure rate in the using process, we do each detail is to improve product quality and minimize the failure rate.

## ★ Integration Design

Solar panels convert sunlight into electricity and store it in lithium batteries via charge and discharge controllers.



High Efficiency Mono Solar Panel



LiFePO4 Battery

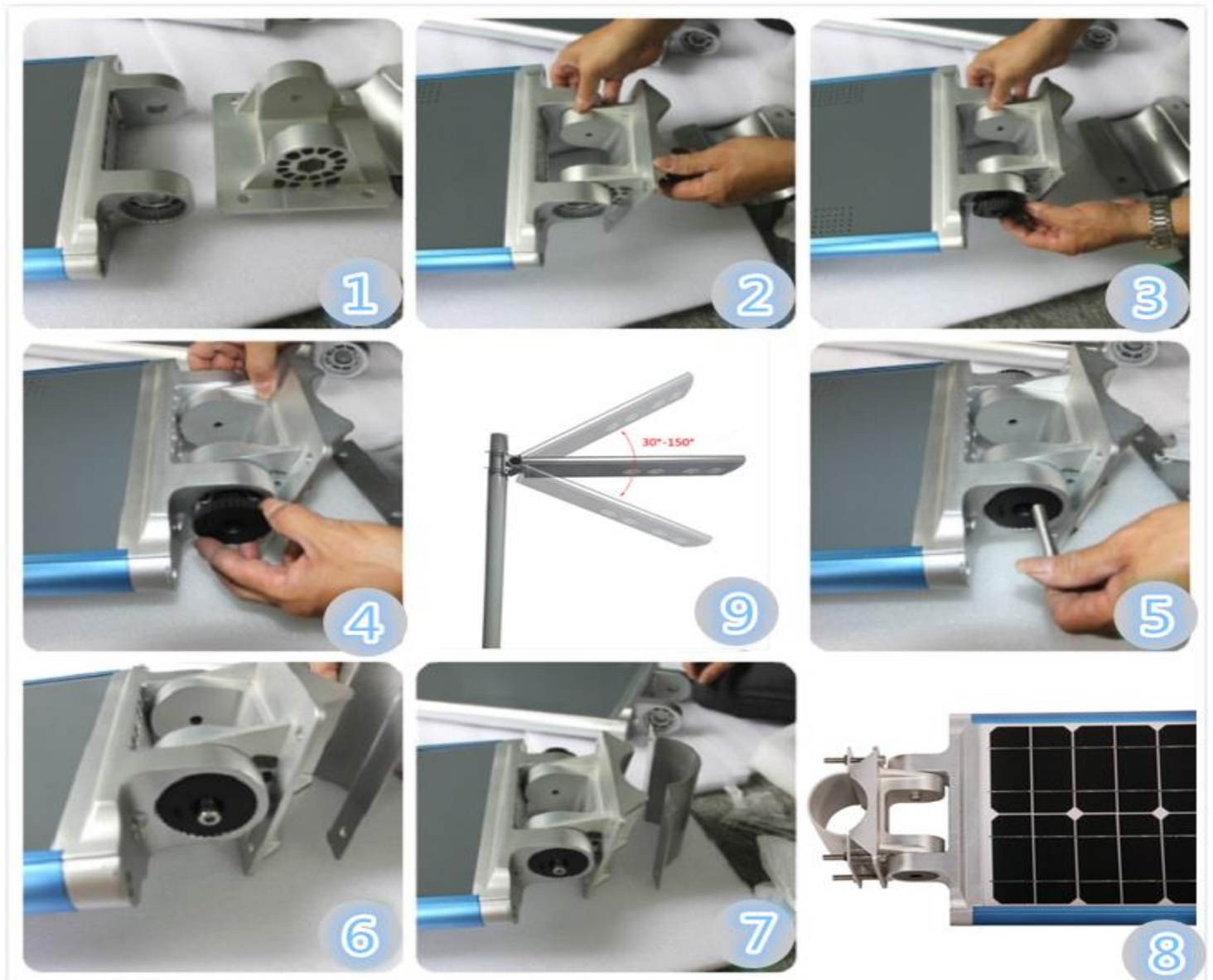


MPPT Solar Controller

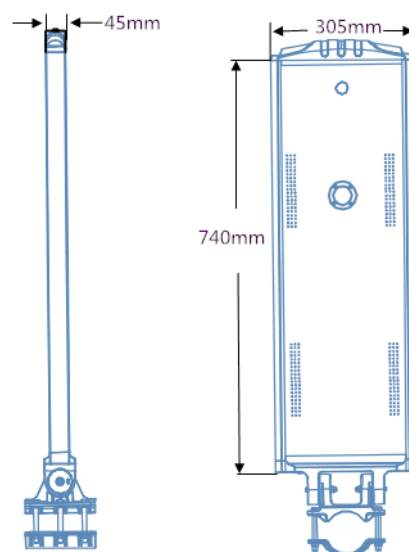
# Installation Guide

- (1) Choose the best location for lighting to make the base of the pole firstly, the pole is recommended to use the height of 5-9 meters, the upper diameter of 60-110mm, the thickness of pole is greater than 2.3mm outdoor anti-rust paint iron or hot dip galvanized steel pipe material.
- (2) Open the package and check whether the accessories are complete.
- (3) Before installing, adjust the angle according to you need to set, and use a special plug to fix the position of the lamp cap and fasteners before continuing to tighten the screws.
- (4) The integrated lamp and the lamp post are fixed to each other, and it is necessary to tighten the hoop with screws.
- (5) After confirming that the screw is fully tightened between the lamp and the lamp post, press the switch on the rear of the lamp and stand up the pole, then the lamp will work automatically. light on at night, light off at day automatically.

## ★ Installation Steps



# AL-T020 REFINEMENT SERIES 20W AIO SOLAR STREET LIGHT



## Parameter

### Electrical Parameter:

Item No.:	AL-T020
LED Brand:	Bridgelux COB encapsulation
LED Power:	20W
Solar Panel:	35W/18V
Lithium Battery:	12AH/12.8V
Operating Time(full power):	10hrs
Operating Time(save mode):	≥ 48hrs
Charging Time:	6-8hrs
Operating Temperature:	-20°C ~ +60°C
Illuminance:	10LUX

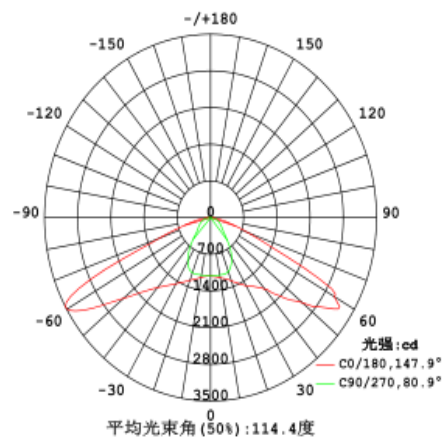
### Photometric Parameter:

Luminous Flux:	2500LM-2800LM
Grading Type:	1S
CCT:	2700K-6500K

### Physical Parameter:

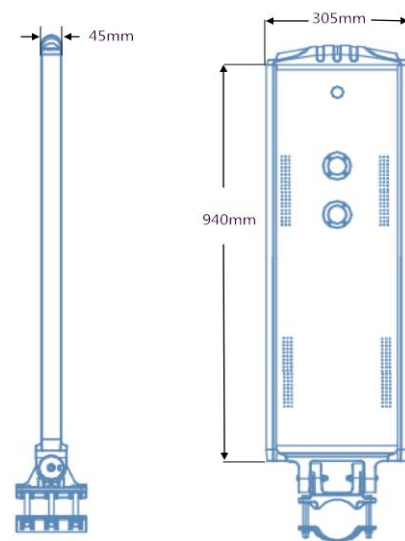
Mounting Height:	4M-5M
Mounting Distance:	15M
Product Size:	740*305*45MM
N.W.:	7.8KG

1S



Packaging Type: 1set/2ctns  
 Carton Size: 900\*390\*220MM  
 Accessories Size: 180\*170\*150MM  
 G.W.: 9.5KG

# AL-T030 REFINEMENT SERIES 30W AIO SOLAR STREET LIGHT



## Parameter

### Electrical Parameter:

Item No.:	AL-T030
LED Brand:	Bridgelux COB encapsulation
LED Power:	30W
Solar Panel:	50W/18V
Lithium Battery:	18AH/12.8V
Operating Time(full power):	10hrs
Operating Time(save mode):	≥ 48hrs
Charging Time:	6-8hrs
Operating Temperature:	-20℃ ~ +60℃
Illuminance:	10LUX

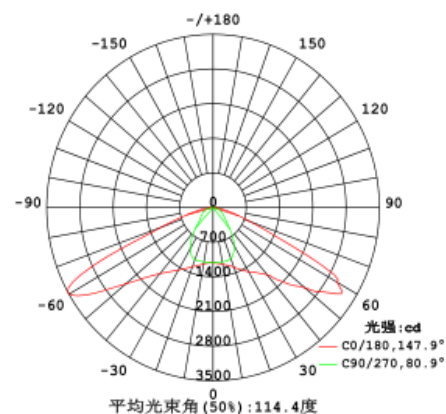
### Photometric Parameter:

Luminous Flux:	3500LM-4500LM
Grading Type:	1S
CCT:	2700K-6500K

### Physical Parameter:

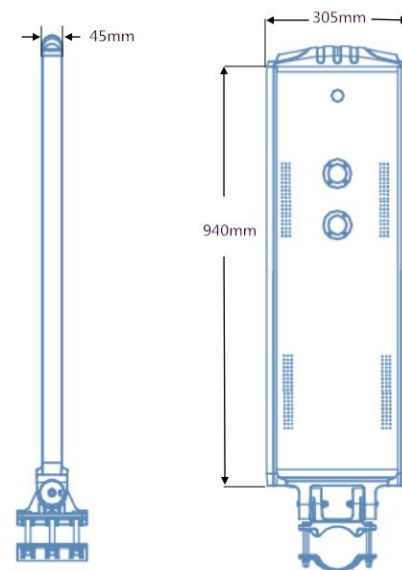
Mounting Height:	6M-7M
Mounting Distance:	25M
Product Size:	940*305*45MM
N.W.:	11KG

1S



Packaging Type: 1set/2ctns  
 Carton Size: 1100\*390\*220MM  
 Accessories Size: 180\*170\*150MM  
 G.W.: 13KG

# AL-T040 REFINEMENT SERIES 40W AIO SOLAR STREET LIGHT



## Parameter

### Electrical Parameter:

Item No.:	AL-T040
LED Brand:	Bridgelux COB encapsulation
LED Power:	40W
Solar Panel:	55W/18V
Lithium Battery:	21AH/12.8V
Operating Time(full power):	10hrs
Operating Time(save mode):	≥ 48hrs
Charging Time:	6-8hrs
Operating Temperature:	-20°C ~ +60°C
Illuminance:	10LUX

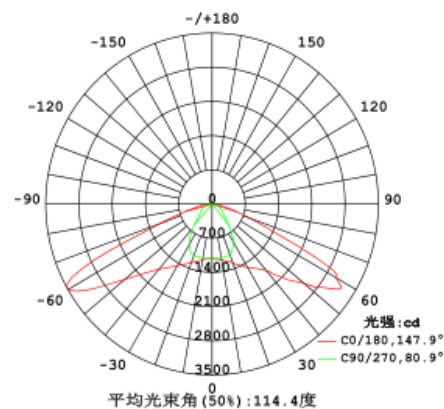
### Photometric Parameter:

Luminous Flux:	4500LM-5500LM
Grading Type:	1S
CCT:	2700K-6500K

### Physical Parameter:

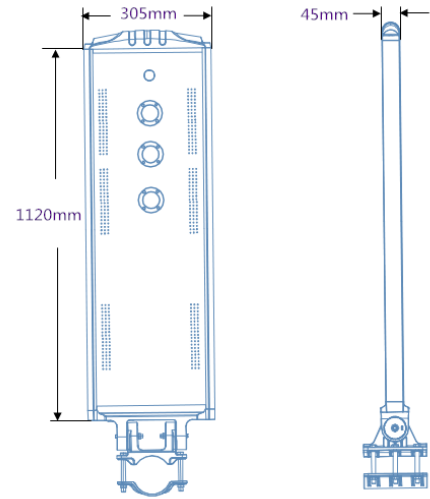
Mounting Height:	6M-7M
Mounting Distance:	25M
Product Size:	940*305*45MM
N.W.:	11KG

1S



Packaging Type: 1set/2ctns  
 Carton Size: 1100\*390\*220MM  
 Accessories Size: 180\*170\*150MM  
 G.W.: 13KG

# AL-T050 REFINEMENT SERIES 50W AIO SOLAR STREET LIGHT



## Parameter

### Electrical Parameter:

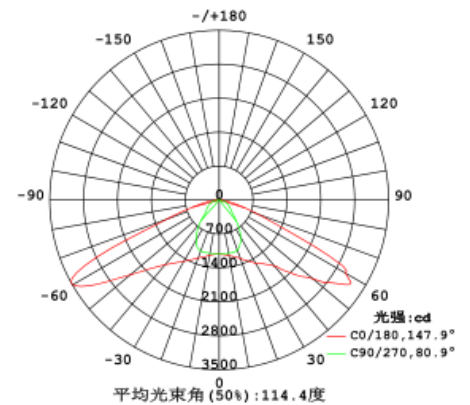
Item No.:	AL-T050
LED Brand:	Bridgelux COB encapsulation
LED Power:	50W
Solar Panel:	70W/18V
Lithium Battery:	27AH/12.8V
Operating Time(full power):	10hrs
Operating Time(save mode):	≥ 48hrs
Charging Time:	6-8hrs
Operating Temperature:	-20°C ~ +60°C
Illuminance:	10LUX

### Photometric Parameter:

Luminous Flux:	5000LM-5500LM
Grading Type:	1S
CCT:	2700K-6500K

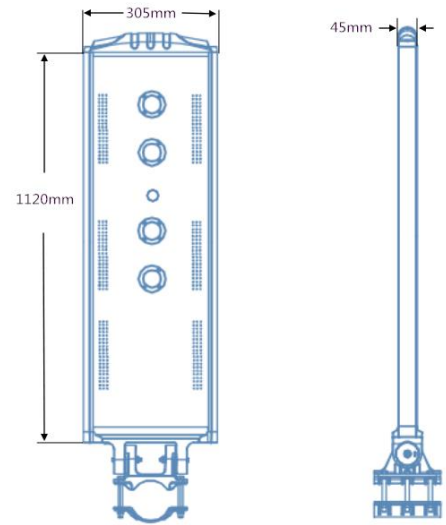
### Physical Parameter:

Mounting Height:	6M-7M
Mounting Distance:	25M
Product Size:	1120*305*45MM
N.W.:	13KG



Packaging Type: 1set/2ctns  
 Carton Size: 1280\*390\*220MM  
 Accessories Size: 180\*170\*150MM  
 G.W.: 15KG

# AL-T060 REFINEMENT SERIES 60W AIO SOLAR STREET LIGHT



## Parameter

### Electrical Parameter:

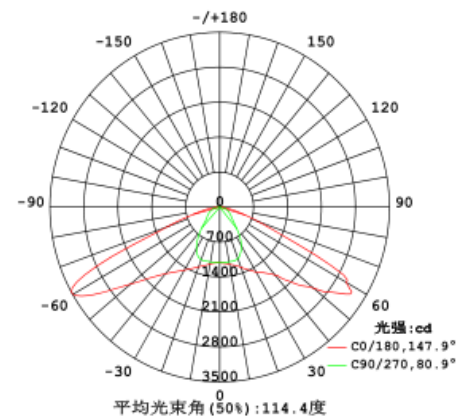
Item No.:	AL-T060
LED Brand:	Bridgelux COB encapsulation
LED Power:	60W
Solar Panel:	75W/18V
Lithium Battery:	33AH/12.8V
Operating Time(full power):	10hrs
Operating Time(save mode):	≥ 48hrs
Charging Time:	6-8hrs
Operating Temperature:	-20°C ~ +60°C
Illuminance:	10LUX

### Photometric Parameter:

Luminous Flux:	6500LM-7500LM
Grading Type:	1S
CCT:	2700K-6500K

### Physical Parameter:

Mounting Height:	8M-9M
Mounting Distance:	25M
Product Size:	1120*305*45MM
N.W.:	13KG



Packaging Type: 1set/2ctns  
 Carton Size: 1280\*390\*220MM  
 Accessories Size: 180\*170\*150MM  
 G.W.: 15KG