

# ALL-IN-ONE Solar Street Light

30W/60W/90W/120W/150W

● ● ● ● ● [www.alltopgroup.com](http://www.alltopgroup.com)



## ADVANTAGES

### **Energy-saving and environmentally-friendly**

The solar street light converts the sunlight into electricity without electricity consumption. It produces no pollution and no radiation, which conforms to the present environmental protection concept.

### **Safe and durable**

The traditional street light may have hidden safety hazards due to construction quality, material aging and power supply disorder; while the solar street light does not utilize the alternating current so that it will not have hidden safety hazards. Nowadays, most solar modules in the market have stable performance for at least ten years due to the mature manufacturing technology. They can generate electricity for twenty-five years or even longer.

### **High technology and low maintenance costs**

Regulated by solar charge controller, the solar street light can adjust the light intensity according to the natural brightness and people's demand. In the remote regions, the maintenance cost for traditional street light is high. However, the solar street light only needs cyclical inspection, thus the maintenance cost is relatively low.

### **Wide range of installation and application**

The installation of solar street lights is almost not subject to geographical restrictions. Whether it is mountainous areas, grasslands, or fields, solar street lights can be installed wherever there is sunlight. Embellishment, industrial development zone, industrial and mining enterprise street lights, outdoor lighting of various colleges and universities.



## PRODUCT DETAILS

### Motion Sensor

The light will work automatically at night. When people come, the light will working at 100% power, after people gone, the light will working at 30% power.

### LED Chip

Built-in LED chip, enable solar street lights to emit high brightness with low heat even after long time usage.

### Battery

Using LiFePO4 battery, the battery has undergone strict safety testing, and the charging speed is fast, high temperature resistant, green environmental protection, non-toxic and pollution-free. Long service life, can be cycled more than 2000 times.

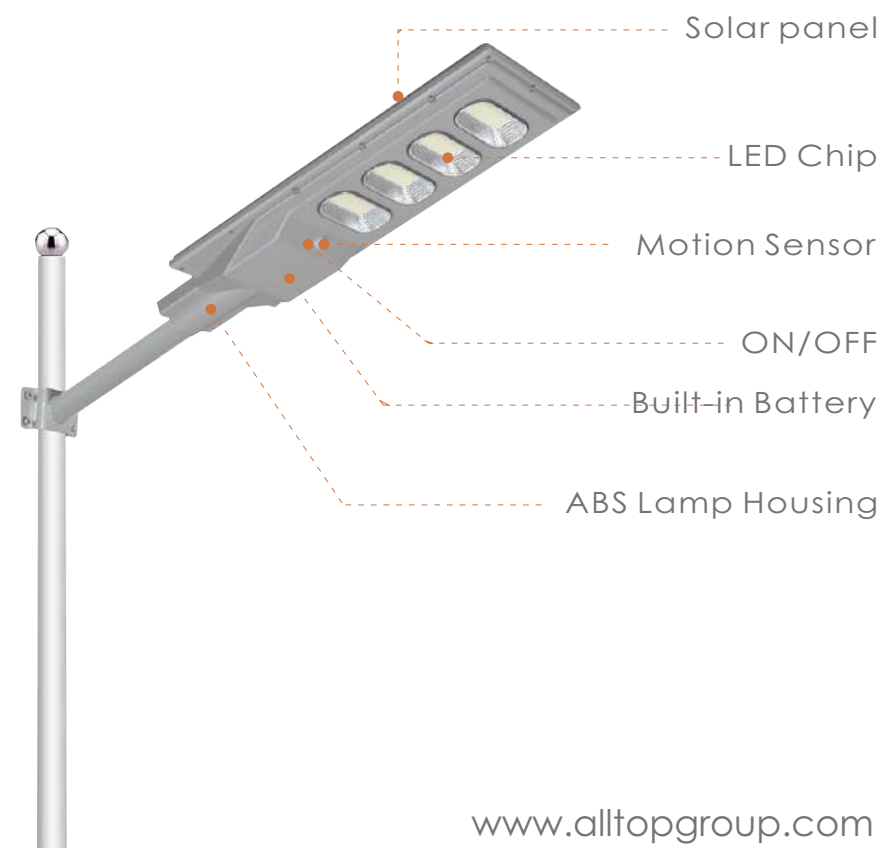


### ABS Lamp Housing

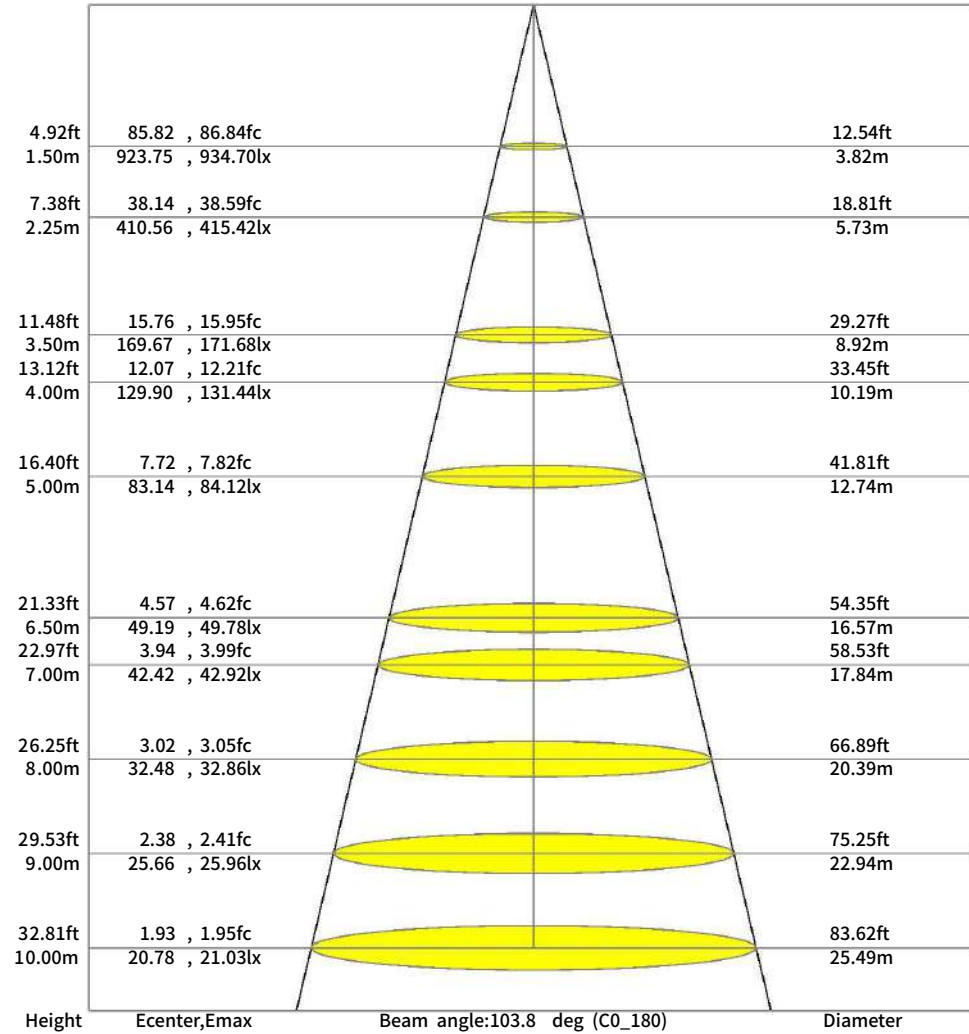
The lamp body is made of ABS, which has good heat resistance, corrosion resistance, and excellent impact strength, which can be used at extremely low temperatures. In addition, ABS has good electrical insulation and is almost unaffected by temperature, humidity and frequency, so it can be used in most environments.

### Solar Panel

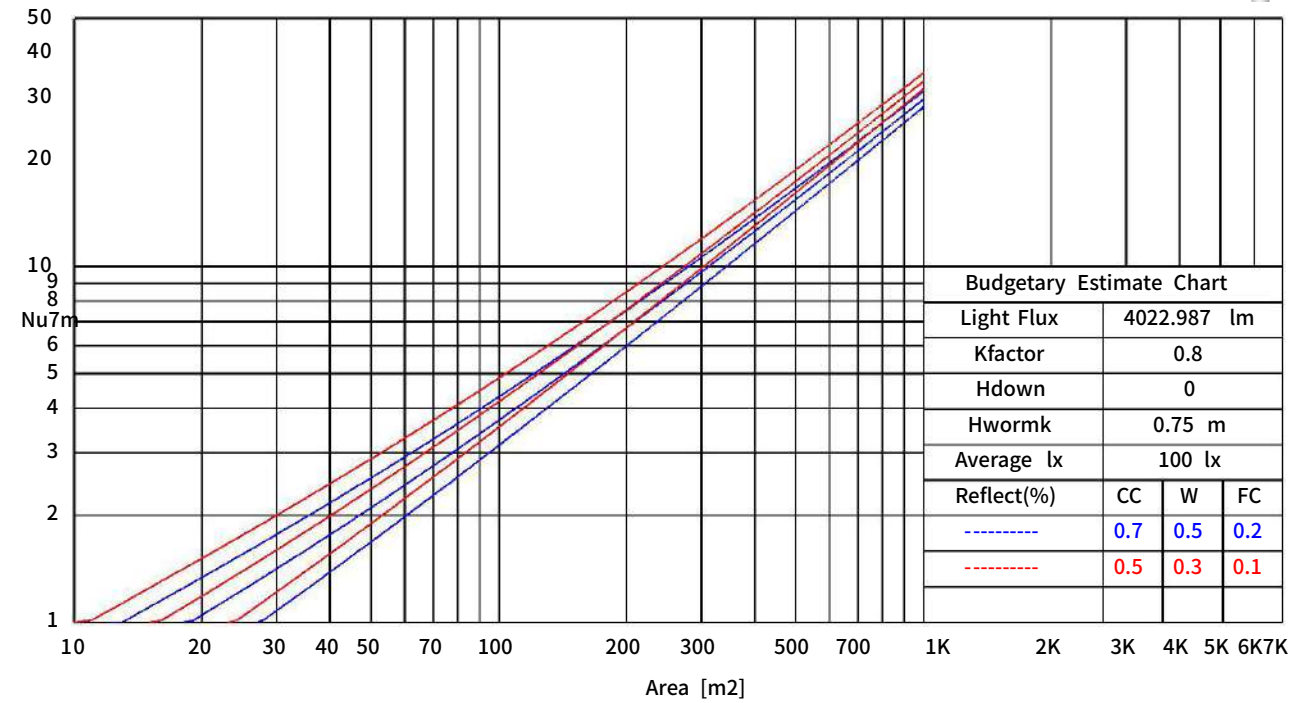
High quality polycrystalline silicon material, high charging efficiency, long lifespan



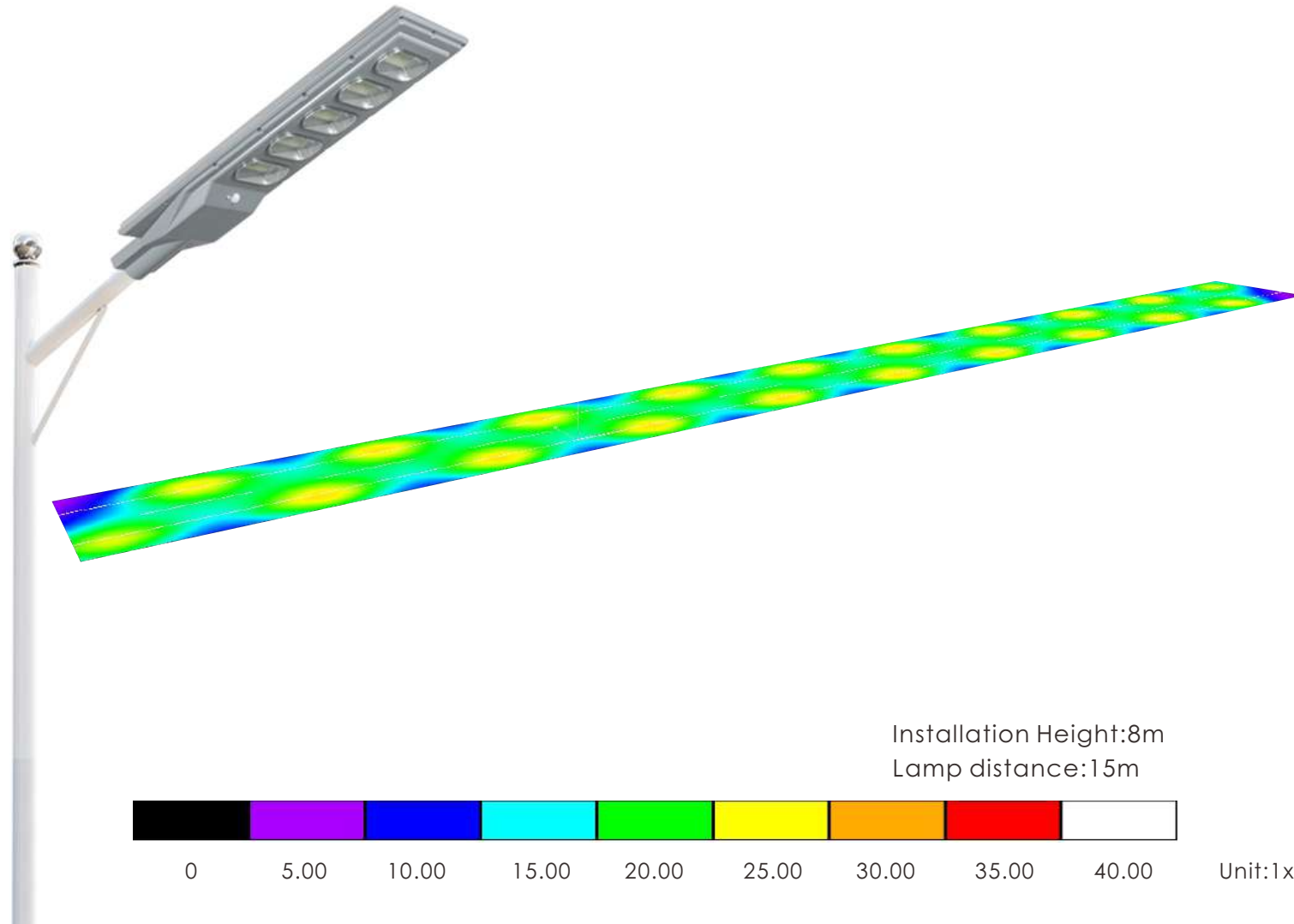
## LX-DISTANCE DIAGRAM



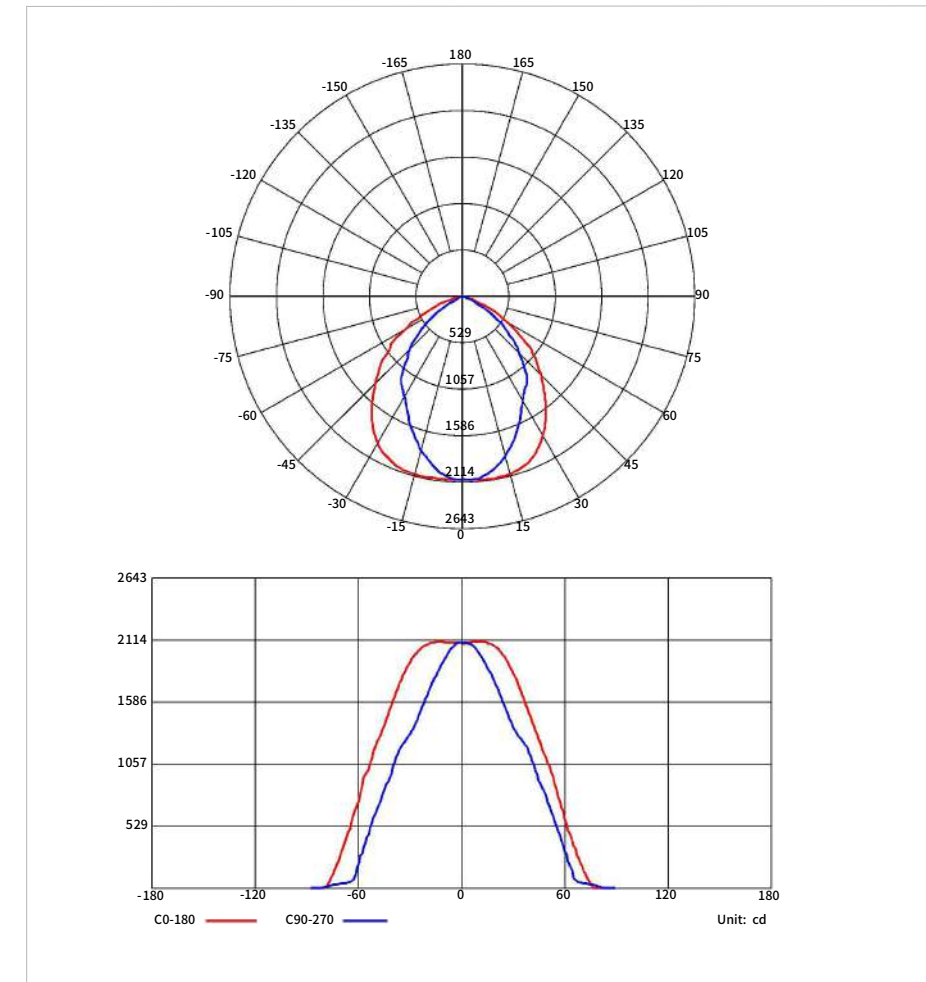
## LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



### 150W DIALUX SIMULATION EFFECT



### LUMINOUS INTENSITY DISTRIBUTION CURVE



## BATTERY SPECIFICATION

DesignLife	6-8 years				
Nominal Voltage	3.2V				
Nominal Capacity	12AH	18AH	24AH	30AH	36AH
Self-Discharge					
3% of capacity declined per month at 20°C(average)					
Operation Temperature Range					
Discharge	-20~60°C				
Charge	-10~60°C				
Storage	-20~60°C				
Max.Discharge Current 77°F(25°C)	50A(5s)				
Short Circuit Current	100A				



## BATTERY GUARANTEE OF QUALITY

### Battery Cells

High-end battery cells keep every cell's voltage, resistance, capacity, discharging always in sync.

### Battery Protector

High precision IC keep performance more stable protect over load, over charge, over discharge, short circuit, over voltage, over current keep battery pack always safe and long life span.

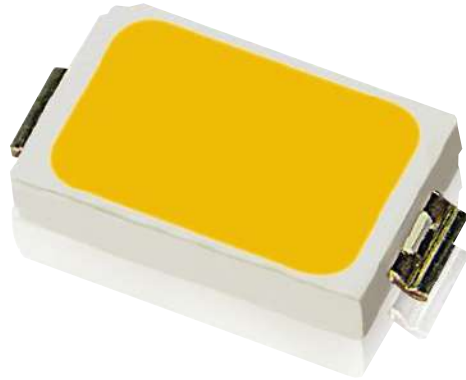
### Precision Welding Machine

Fully automatic precision welding machine can ensure that every battery can be welded firmly to prevent the danger of short circuit or power failure.

### Aging Test Machine

every battery pack need to thorough charging and discharging test by the aging test machine to keep 100% qualified.

## SMD 5730 INTRODUCTION

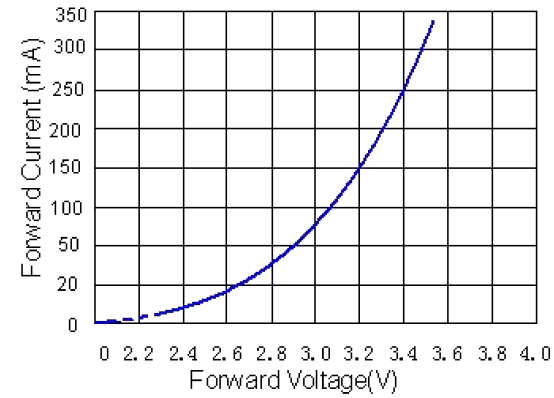


### Features:

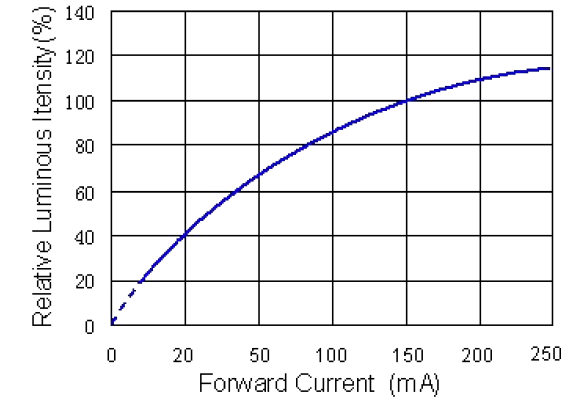
- Super high efficiency
- High reliability performance
- Viewing angle 120°
- Suitable for all SMT assembly and solder process
- Complied with RoHS directive

## TYPICAL OPTICAL-ELECTRICAL CHARACTERISTIC CURVES

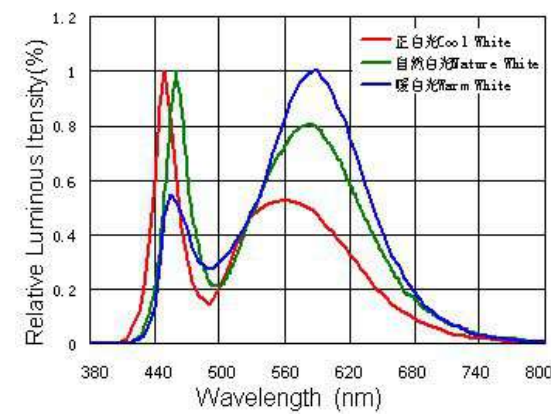
Forward Current VS Forward Voltage



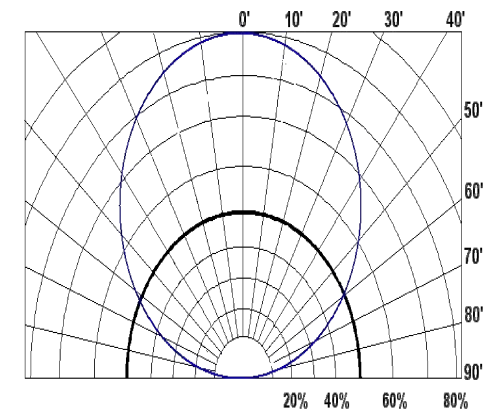
Relative Flux VS Forward Current



Relative Spectral Distribution



Typical Spectral Distribution



## SOLAR PANEL SPECIFICATION



### Specifications

Peak Power(Pmax)	7/9/12/18/22
Maximum Power Voltage(Vmp)	6
Maximum Power Current(Imp)	1.17/1.5/2/3/3.67
Open Circuit Voltage(Voc)	10.17
Short Circuit Current(Isc)	1.32/1.65/2.15/3.15/3.82
Cells Efficiency(°C)	18.09
Module Efficiency(°C)	10.74
Power Tolerance	0~+3%
Pmax Temperature Coefficients(W/°C)	-0.400%
Voc Temperature Coefficients(V/°C)	-0.300%
Isc Temperature Coefficients(A/°C)	+0.060%
NOCT Nominal Operating Cell Temperature(°C)	45±2
Operating and Storage Temperature(°C)	-40~+85
Standard Test Condition(STC)	1.000W/m²;AM 1.5;25+/-2°C

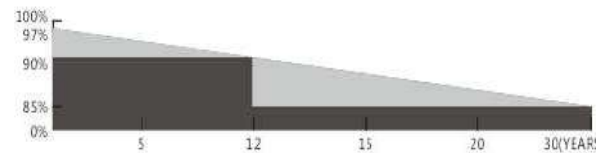
### Mechanical characteristics

Front Glass	3.2mm high transmission, low iron, tempered glass
Junction box	IP65 Rated

### Product Standard

Product Performance	IEC61215
Product Safety	IEC61730

### Linear Performance Warranty



**12**  
YEARS

Guarantee on product material and workmanship

**30**  
YEARS

Linear Power output warranty

### Key Features



#### 5 Busbar Cell:

5 Busbar Solar cell adopts new technology to improve the efficiency of modules, offers a better aesthetic appearance making it perfect for rooftop installation and application



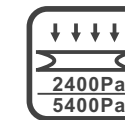
#### High Efficiency

High Module conversion efficiency, through innovative manufacturing technology



#### Low-Light Performance

Advanced glass and solar cell surface texturing allow for excellent performance in low-light environments



#### Severe Weather Resilience

Certified to withstand wind load (2400Pa) and snow load (5400Pa)



#### Durability against extreme environmental conditions

High salt mist and ammonia resistance certified by TUV



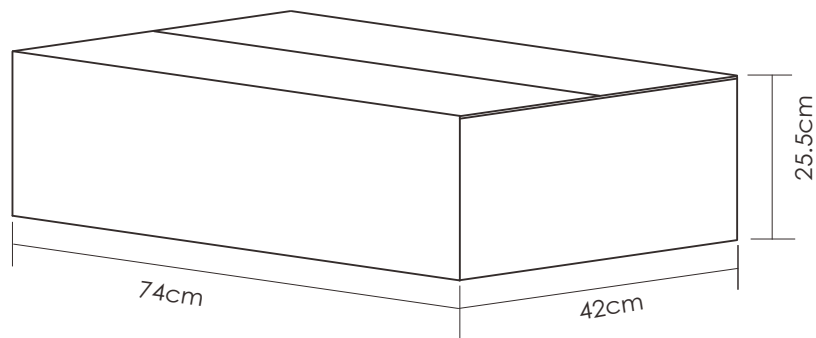
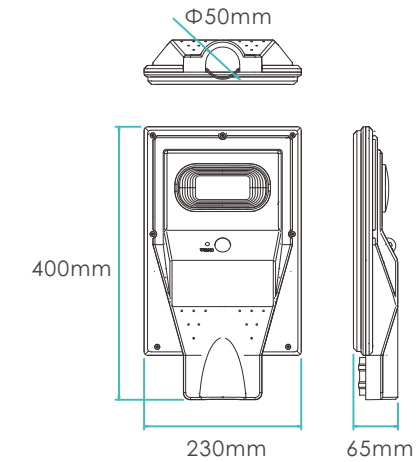
#### 0-+5W Positive Tolerance

Detailed information in Electrical Specifications

## PRODUCT SPECIFICATION

0845A30-01 | 30W

Model	0845A30-01
LED Lamp	5730LED 60PCS 3000K-6000K
Solar Panel	6V 7W, Polycrystalline
Battery Type	LiFePO4 3.2V 12AH
Charging Time	6-8 hours
Discharging Time	30-36 hours
LED	160lm/w
Material	ABS
Product Size	400*250*65mm
Install Height	3-5m
Warranty	3 Years



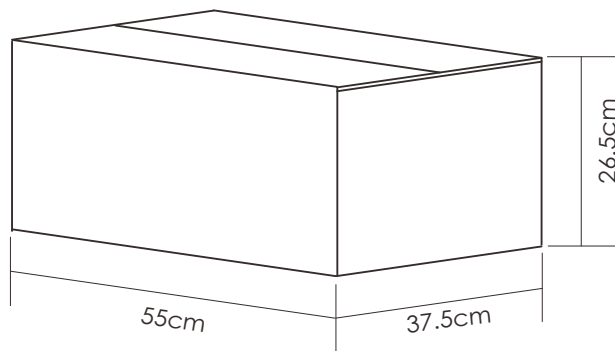
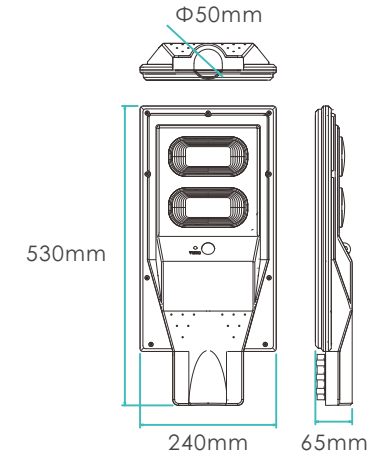
## PACKAGING SPECIFICATION

P/N	Power	Packing Size (CM)			PCS/CTN	CBM/CTN	G.W/CTN (KGS)
		L	W	H			
0845A30-01	30W	74.00	42.00	25.50	10	0.0793	19

**PRODUCT SPECIFICATION**

0845B60-01 | 60W

Model	0845B60-01
LED Lamp	5730LED 120PCS 3000K-6000K
Solar Panel	6V 9W, Polycrystalline
Battery Type	LiFePO4 3.2V 18AH
Charging Time	6-8 hours
Discharging Time	30-36 hours
LED	160lm/w
Material	ABS
Product Size	530*240*65mm
Install Height	4-6m
Warranty	3 Years



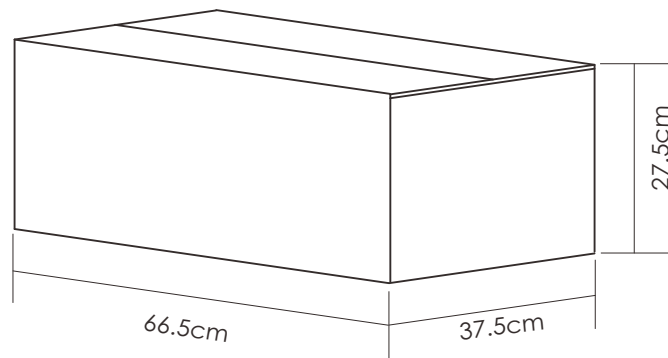
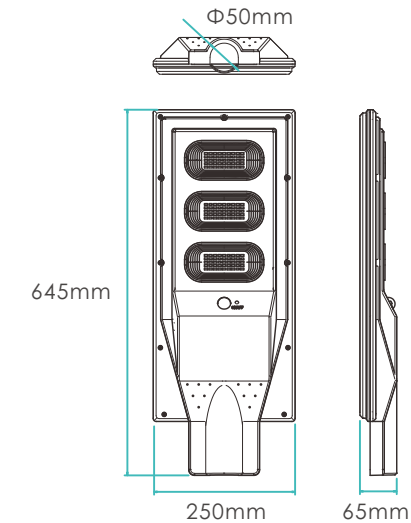
**PACKAGING SPECIFICATION**

P/N	Power	Packing Size (CM)			PCS/CTN	CBM/CTN	G.W/CTN (KGS)
		L	W	H			
0845B60-01	60W	55.00	37.50	26.50	5	0.0547	13.6

## PRODUCT SPECIFICATION

0845C90-01 | 90W

Model	0845C90-01
LED Lamp	5730LED 180PCS 3000K-6000K
Solar Panel	6V 12W, Polycrystalline
Battery Type	LiFePO4 3.2V 24AH
Charging Time	6-8 hours
Discharging Time	30-36 hours
LED	160lm/w
Material	ABS
Product Size	645*250*65mm
Install Height	5-8m
Warranty	3 Years



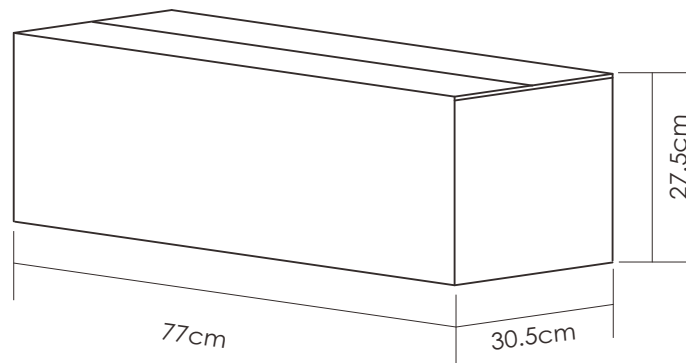
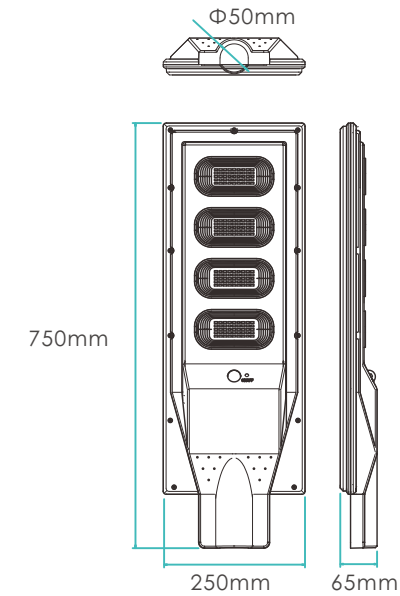
## PACKAGING SPECIFICATION

P/N	Power	Packing Size (CM)			PCS/CTN	CBM/CTN	G.W/CTN (KGS)
		L	W	H			
0845C90-01	90W	66.50	37.50	27.50	5	0.0686	17.2

**PRODUCT SPECIFICATION**

0845D120-01 | 120W

Model	0845D120-01
LED Lamp	5730LED 240PCS 3000K-6000K
Solar Panel	6V 18W, Polycrystalline
Battery Type	LiFePO4 3.2V 30AH
Charging Time	6-8 hours
Discharging Time	30-36 hours
LED	160lm/w
Material	ABS
Product Size	750*250*65mm
Install Height	5-8m
Warranty	3 Years



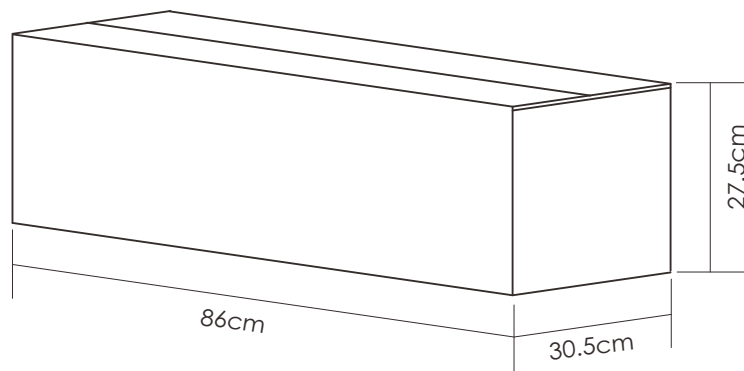
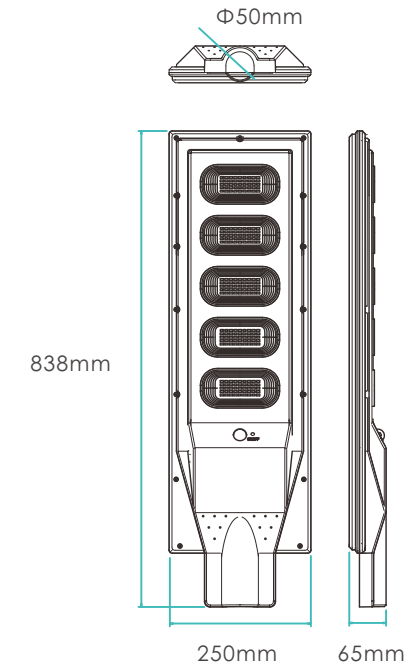
**PACKAGING SPECIFICATION**

P/N	Power	Packing Size (CM)			PCS/CTN	CBM/CTN	G.W/CTN (KGS)
		L	W	H			
0845D120-01	120W	77.00	30.50	27.50	4	0.0646	16.8

## PRODUCT SPECIFICATION

0845E150-01 150W

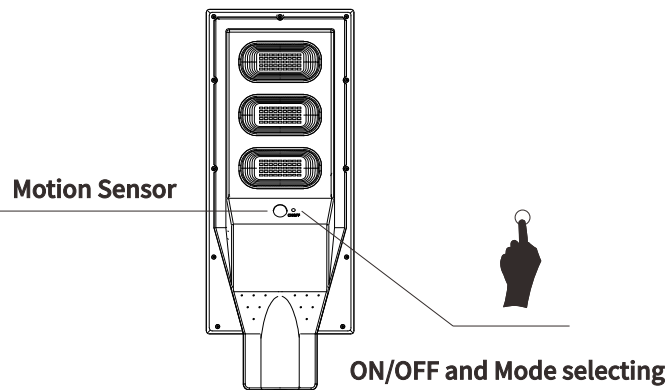
Model	0845E150-01
LED Lamp	5730LED 300PCS 3000K-6000K
Solar Panel	6V 22W, Polycrystalline
Battery Type	LiFePO4 3.2V 36AH
Charging Time	6-8 hours
Discharging Time	30-36 hours
LED	160lm/w
Material	ABS
Product Size	838*250*65mm
Install Height	5-9m
Warranty	3 Years



## PACKAGING SPECIFICATION

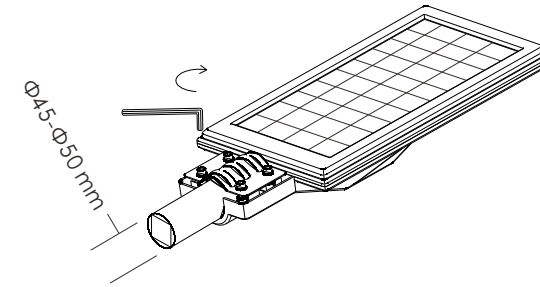
P/N	Power	Packing Size (CM)			PCS/CTN	CBM/CTN	G.W/CTN (KGS)
		L	W	H			
0845E150-01	150W	86.00	30.50	27.50	4	0.0721	18.5

**USER MANUAL**

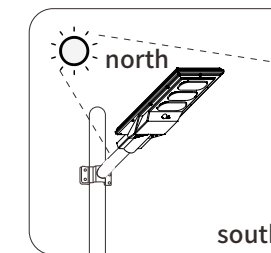
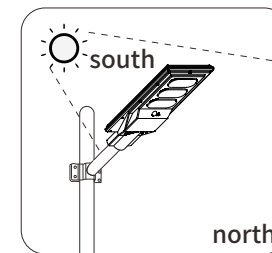


**Red/Blue LED Indications**

LED Indication	Condition
Red: ON	Charging during daytime
Red: OFF	No Charging while solar panel under dark environment
Blue: ON	Motion Sensing Mode, Full brightness once sensing activated, otherwise 30% brightness
Blue: OFF	Constant Brightness Mode



1. Insert the lamp arm into the lamp body and tighten the screw.
2. Please select the appropriate product according to the installation site's sunlight intensity and required operating time. If you are in the northern hemisphere, face the solar panels towards the south as far as possible when installing the solar light; if you are in the southern hemisphere, face the solar panels towards the north.



(A diagram for how the orientation impacts on power generation efficiency)

**Tips:**

1. Please install the solar panel in the sun direction to avoid affecting the power generation efficiency.
2. Please ensure the installation is stable.

**APPLICATIONS**

