



# OFF-GRID SOLAR STREET LIGHT

**-** 100W/200W/300W400W

LED solar street lights are composed of photovoltaic power generation system, energy storage system. And light control system. The 19%+ conversion rate solar panel converts solar energy into electricity and stores it in battery, which provides power to the lighting control system at night, realizing 100% energy saving.



#### **PRODUCT OVERVIEW**

#### HIGH EFFICIENCY SOLAR PANELS (

Outdoor solar street lights use polycrystalline silicon photovoltaic panels, and the photoelectric conversion rate is increased by 19%. This solar LED street light has a built-in 12AH/15AH/20AH/30AH large-capacity lithium battery, which can be fully charged in just 6-8 hours, and it can last for about 24-48 hours of work.

#### RUGGED CONSTRUCTION AND LIGHT CONTROL

The new solution makes the LED street lamp lifespan up to 5 years. The solar street light has built-in light control, which can automatically adjust the light (light on at dusk, turn off at dawn, and enter charging mode).

#### **SOLAR STREET LIGHT**

100W/200W/300W400W outdoor solar street lights, 3000k~6000k high-quality solar street lights, super bright and ultra-wide lighting, can meet the lighting needs of large places, such as parking lots, stadiums, gardens, roads and other large places.



This solar street light has very good waterproof, rainproof and ligh thing-proof performance.

-4° F-120°F temperature resistance, IP65 waterproof, can work in all kinds of bad weather.





#### **PRODUCT DETAILS**

SOLAR LED STREET LIGHT



#### Solar Panel

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



#### **LED Chip**

Moisture-proof and waterproof, high quality LED chip has a wide lighting range.



# **Die-casting Aluminium**

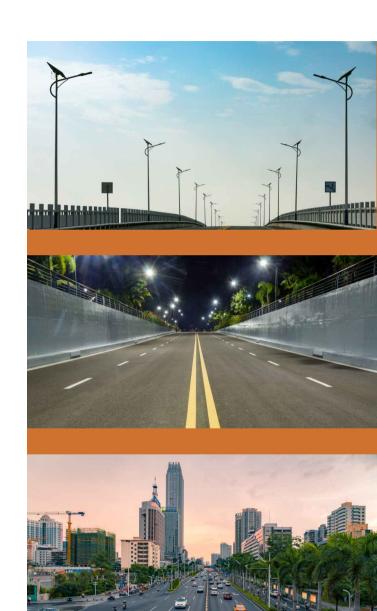
Using high-quality and durable Die-casting aluminium material, it can effectively isolate moisture, and has excellent heat dissipation effect and corrosion resistance.



#### **B**attery

Long battery lifespan and more durable. Even use in the -20°C-65°Carea.





# SOLAR LED STREET LIGHT

#### **SOLAR PANEL SPECIFICATION**



#### **Specifications**

Peak Power(Pmax)	12/18/25/30			
Maximum Power Voltage(Vmp)	6/6/6/6			
Maximum Power Current(Imp)	2/3/4.16/5			
Open Circuit Voltage(Voc)	10.1/10.1/10.1/10.1			
Short Circuit Current(Isc)	3.1/4.1/5.26/6.1			
Cells Efficiency(%)	18. 09			
Module Efficiency(%)	13.93			
Maximum System Voltage(V)	1000			
Maximum Series Fuse Rating(A)	10			
Power Tolerance	0~+3%			
Pmax Temperature Coefficients(W/°C)	-0.400%			
Voc Temperature Coefficients(V/°C)	-0.290%			
Isc Temperature Coefficients(A/°C)	+0.048%			
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 characteristtics

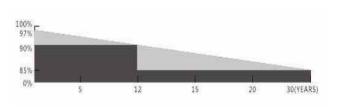
Dimensions

Front Glass	3.2mm high transmission, low iron, tempered glass
Frame	Anodized Aluminium Alloy
Junction box	IP65 Rated
Output cables	2.5mm² cable 90cm+mc4

#### Product Standard

Product Performance	IEC61215
Product Safety	IEC61730

## Linear Performance Warranty



Guarantee on product materail and workmanship



Linear Power output warranty

#### **Key Features**



5 Busbar Cell:

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



High Efficiency High Module conversion efficiency, through innovative manufactureing technology



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



Serve Weather Resilience Certified to withstand: wind load(2400Pa) and snow load (5400Pa)



Durability against extreme environmental

High salt mist and ammonia resistance certified by TUV



0-+5W Positive Tolerance Detailed information in Electrical Specifications

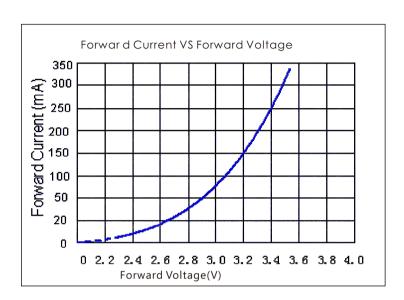


# **INTRODUCTION SMD 5730**



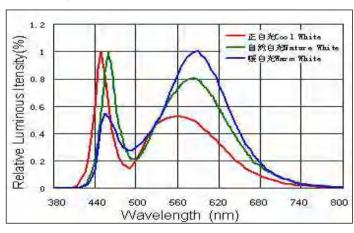
#### Features:

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

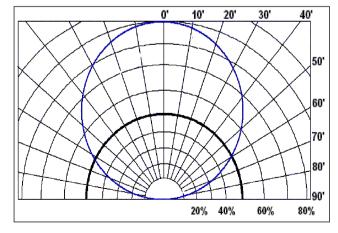


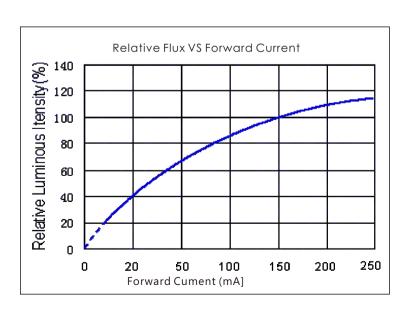
## TYPICAL OPTICAL-ELECTRICAL CHARACTERISTICS CURVES

#### Relative Spectral Distribution



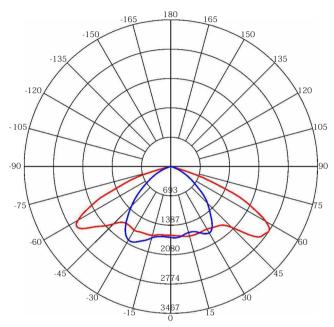
TypicalSpectral Distribution

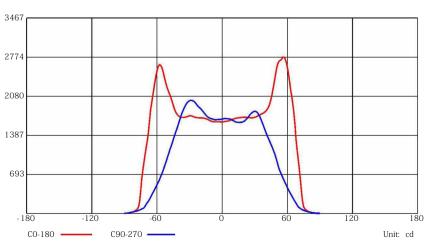


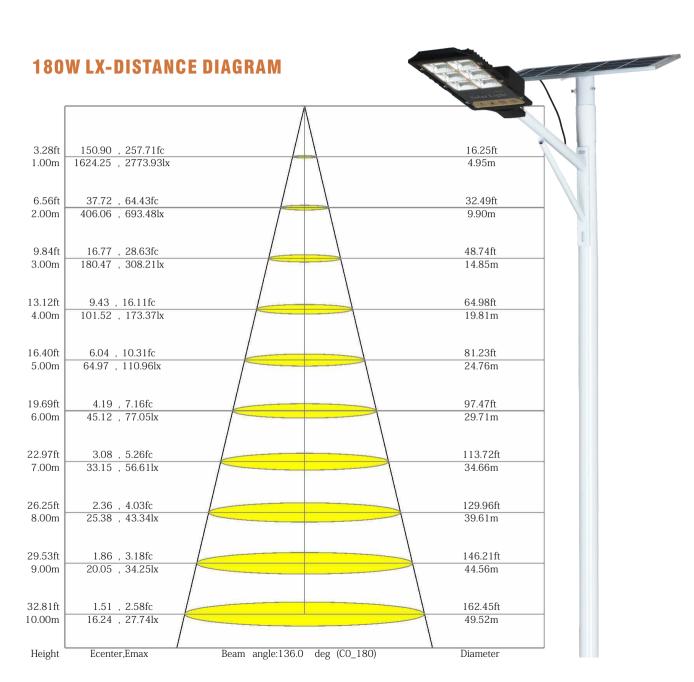


# **180W LUMINOUS INTENSITY DISTRIBUTION CURVE**

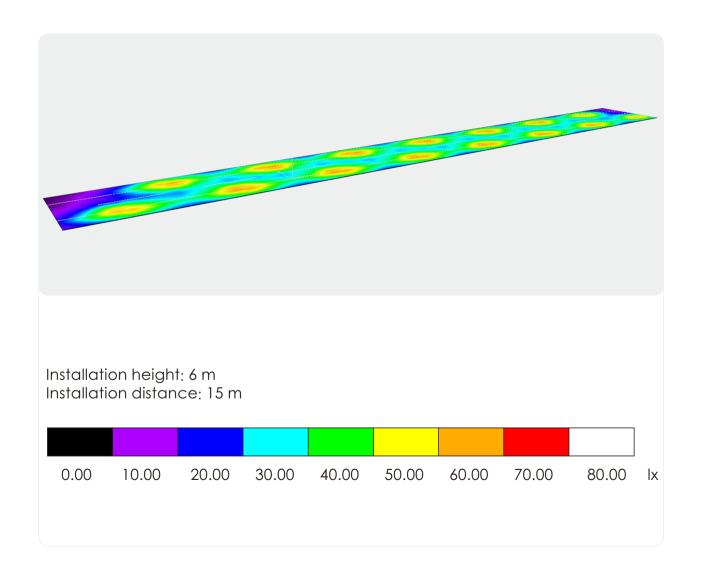
SOLAR LED STREET LIGHT



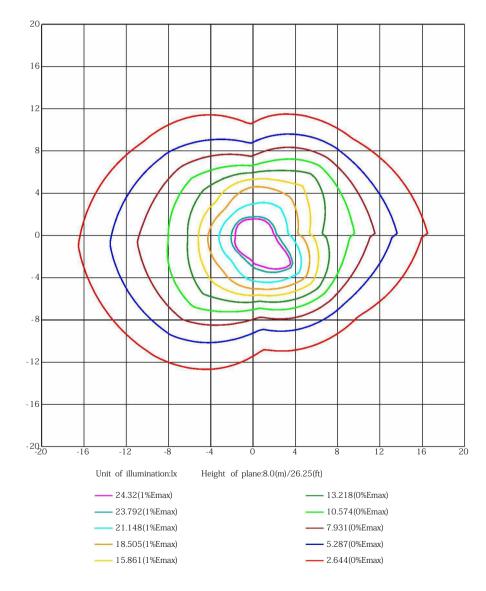




# **400W DIALUX SIMULATION EFFECT**



## **180W ISOLX DIAGRAM**



#### **BATTERY SPECIFICATION**

SOLAR LED STREET LIGHT



DesignLife	6-8 years			
Nominal Voltage	3. 2V			
Nominal Capacity	12AH	15AH	20AH	24AH
Self-Discharge Self-Discharge				
3% of capacity declined per month at 20°C(average)				
Operation Temperature Range				
Discharge	-20~60 <b>°C</b>			
Charge	-10~60 <b>°C</b>			
Storage	-20~60° <b>C</b>			
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**

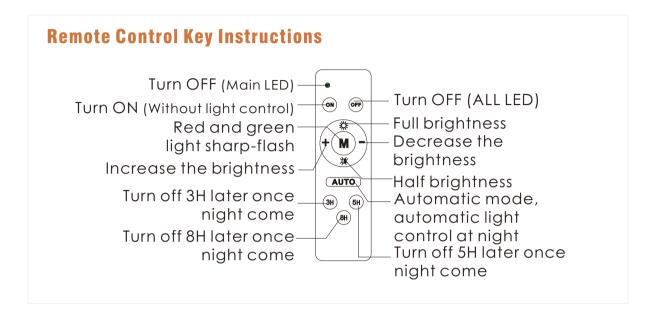
every battery pack need to thorough charging and discharging test by the aging test machine to keep 100% qualified.



# PRODUCT SPECIFICATION

Model	0423A100-01	0423B200-01	0423C300-01	0423D400-01
LED Chip	5730LED 90PCS*2	5730LED 63PCS*4	5730LED 90PCS*4	5730LED 72PCS*6
Luminous Efficiency	160 lm/w	160 lm/w	160 lm/w	160 lm/w
Color Temperature	3000K~6000K	6000K	6000K	6000K
Solar Panel	6V 12W Polycrystalline	6V 18W Polycrystalline	6V 25W Polycrystalline	6V 30W Polycrystalline
Battery Type	3.2V 12AH LiFePO4	3.2V 15AH LiFePO4	3.2V 20AH LiFePO4	3.2V 24AH LiFePO4
Charging time	6-8 hours	6-8 hours	6-8 hours	6-8 hours
Discharging time	8-12 hours	8-12 hours	8-12 hours	8-12 hours
IP Rate	IP65	IP65	IP65	IP65
Material	Die-casting Aluminium	Die-casting Aluminium	Die-casting Aluminium	Die-casting Aluminium
Product Size	470*190*90mm	470*190*90mm	575*235*90mm	575*235*90mm
Install Height	3-5m	4-6m	5-7m	5-8m
Warranty	3 years	3 years	3 years	3 years
Product images	Saint Light  1 1 1 2 3 3	Solar Light  O 1 2 3 6	Solar Light  Solar Light	Salar Light

# SOLAR LED STREET LIGHT



#### **INSTALLATION GUIDE**



- 1. Insert the lamp arm into the lamp body and tighten the screws.
- 2. Make sure that the solar panel is installed facing south and there are no obstacles blocking it.

#### WARNING

- Please install the solar panels facing the direction of the sun to avoid affecting the efficiency of power generation.
- Please ensure that the installation is stable.
- Please avoid looking directly at the lights.
- The disassembly process must be carried out in a safe place.
- Do not short circuit, disassemble: Do not place in water and near fire.
- Repairs or disassembly of luminaires by the user are prohibited without expert guidance: the supplier is not liable. Consequences due to improper operation or maintenance by users.