### SOLAR LED STREET LIGHT



# Q7 SERIES SOLAR STREET LIGHT

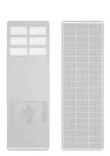
Our all-in-one solar street lights are super bright and ultra-wide, with outdoor street light coverage up to 120°, which can easily illuminate an area of 400 square feet. And built-in large-capacity battery, additional batteries can increase energy by 66%, making the life of street lights longer. It can be fully charged in 6-8 hours, and in the midday sun, it provides you with 12-48 hours of night illumination to ensure the safety of your surroundings.

#### Company Information:

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#### PRODUCT OVERVIEW

## EASY TO INSTALL, NO WIRING REQUIRED

Solar panel street lights can be installed by themselves, which is easy to install. The installation height of street lamps is recommended to be 4-6m. LED street lights are easy to install with screws and do not require wiring or trenching. It can meet the lighting needs of large places, such as parking lots, stadiums, gardens, roads and other large places.

#### **COPE HARSH WEATHER, IP65 WATER PROOF**

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This solar street light has very good waterproof, rainproof and lightning-proof performance, -4° F-120°F temperature resistance, IP65 waterproof, can work in all kinds of bad weather.

#### RUGGED CONSTRUCTION AND LIGHT CONTROL

The new housing design makes the service life of LED street lights reach 5 years. Secondary optical design, so that the light emitted by the LED light source shines to the irradiated area through secondary focusing, so that the light can be effectively used. Solar street lights have built-in light control, which can automatically adjust the lights (light at dusk, turn off the light at dawn, enter charging mode).

ALL-IN-ONE SOLAR STREET LIGHT





#### Solar Panel

High quality Mono-crystalline silicon material, high charging efficiency, long lifespan.

#### **B**attery

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





#### **Aluminum Alloy**

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

#### **LED Chip**

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





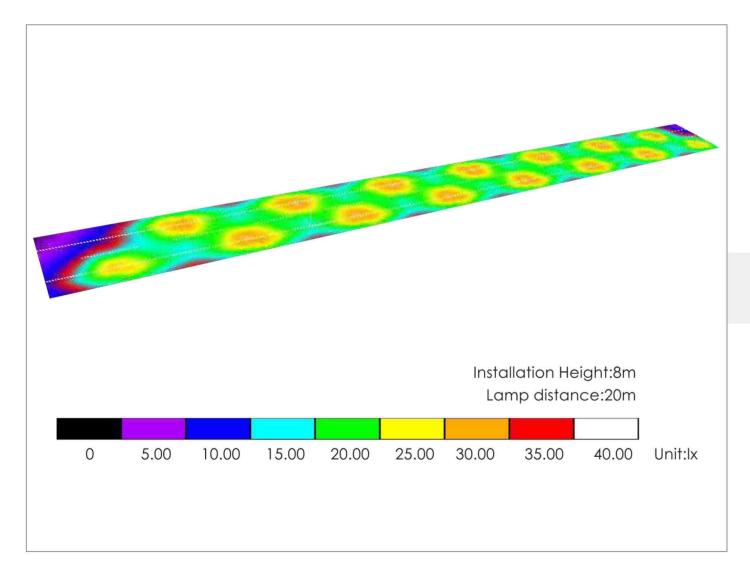
#### **Optical Lens**

The Lens makes the light spot is uniform, there is no astigmatism, no shadow, and the transmittance is very high, which maximizes the utilization of LED light.

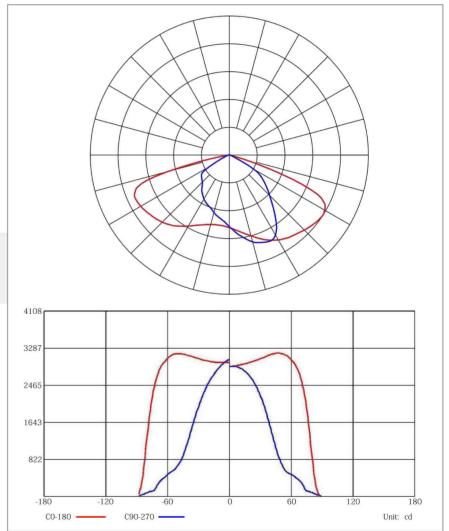




#### **70W DIALUX SIMULATION EFFECT**

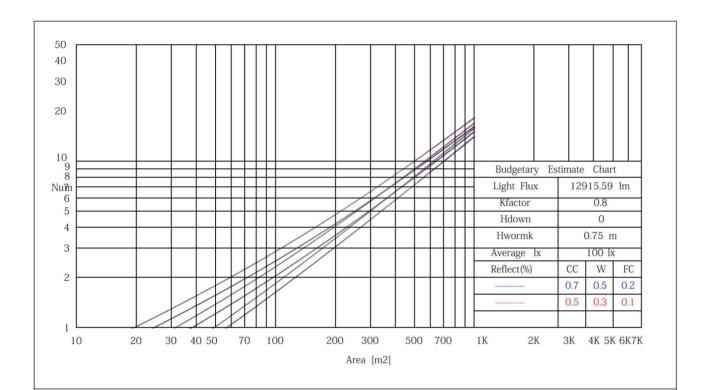


#### **LUMINOUS INTENSITY DISTRIBUTION CURVE**





#### 85W LUMINAIRE BUDGETARY ESTIMATE DIAGRAM



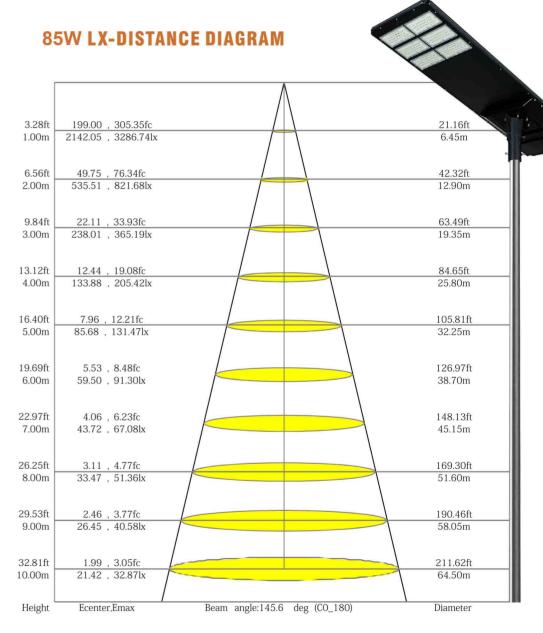
CRange:0 - 360 Deg GRange:0 - 90 Deg CInterval: 45.0 Deg GInterval: 1.0 Deg

TestSpeed:High Test System: Huipu CPM-1800BGoniophotometer

Temperature: Humidity:

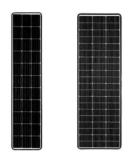
Operators: Test Distance: 6.04 m

Test Date: 2022/04/13 Remarks:





#### **SOLAR PANEL SPECIFICATION**



#### Specifications

Peak Power(Pmax)	180/245
Maximum Power Voltage(Vmp)	20/30
Maximum Power Current(Imp)	9/8.16
Open Circuit Voltage(Voc)	24.1/34.1
Short Circuit Current(Isc)	10.1/9.26
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 Temper	ature(°C) 45±2
Operating and Storage Temperature(°	C) -40~+85
Standard Test Condition(STC)	1.000W/m²;AM 1.5;25+/-2°C

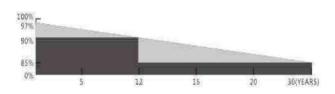
#### Mechanical characteristtics

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 enviromental

High salt mist and ammonia resistance certified by TUV

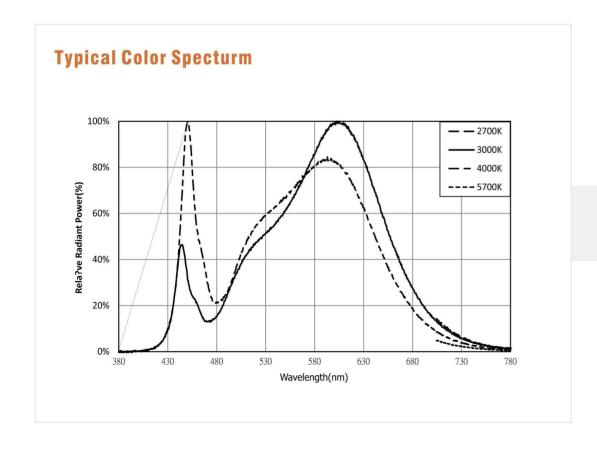


0-+5W Positive Tolerance Detailed information in Electrical Specifications



#### **INTRODUCTION SMD 5050**

The Bridge lux SMD 5050 offers exceptional performance in a compact LED package. This high power LED is hot-color targeted which ensures that the LEDs fall within their specified color bin at the typical application conditions of 85° C. With its broad lumen coverage and wide range of CCT and CRI options, the SMD 5050 provides unparalleled design-in flexibility for indoor and outdoor lighting applications. Its high flux capability reduces the number of LEDs and enables industry leading system level lumen per dollar. The SMD 5050 is ideal as a drop in replacement for emitters with an industry standard5. 0mm x 5. 0mm footprint.



#### **B**enefits

- Lower operating and manufacturing cost
- Ease of design and rapid go-to-market
- Uniform consistent white light
- Reliable and constant white point
- Environmentally friendly, complies with standards
- Design exibility

#### Features

- Industry-standard 5050 footprint Excellent color maintenance
- 9 bin color control enables tight color control
- Superior luminous ux at maximum current for reduced LED count
- ullet Hot-color targeting ensures that color is within the ANSI bin at the typical application conditions of  $85^{\circ}$ C
- Multiple CCT and CRI congurations for a wide range of lighting applications





#### **BATTERY GUARANTEE OF QUALITY**

#### **Battery Cells**

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

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#### **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.

02

## 

#### **BATTERY SPECIFICATION**

DesignLife	6-8 years			
Nominal Voltage	12. 8V			
Nominal Capacity	72AH	100AH		
Self-Discharge				
3% of capacity declined per month at 20°C(average)				
Operation Temperature Range				
Discharge	-20~60℃			
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			

#### **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	QKAT0412-AIO18070	QKAT0412-AIO24585
LED Lamp	5050 LED 168pcs 6000K	3030 LED 864pcs 6000K
Solar Panel	20V 180W Mono-crystalline	30V 245W Mono-crystalline
Battery Type	LiFePO4 12.8V 72AH	LiFePO4 12.8V 100AH
IP Rating	IP65	IP65
Charging time	6-8 Hours	6-8 Hours
Discharging time	2 Rainy days	2 Rainy days
Lumen	160 lm/w	160 lm/w
Material	Aluminum alloy	Aluminum alloy
Lamp Size	1917*420*365.5mm	1917*604*366.5mm
Warranty	3 Years	3 Years
Real picture of the product	365.5mm	604mm /01th/h/h/3



#### **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**

- 1. Please install the solar panel in the sun direction to avoid affecting the power generation efficiency.
- 2. Please ensure the installation is stable.
- 3. Please avoid looking directly at the light.
- 4. Dismantling process must be carried out in a safe place.
- 5. Do not short-circuit, disassemble; do not put in the water and near the fire.
- 6. Without the guidance of experts, users are forbidden to repair or dismantle the lights; The supplier shall not be responsible. for any consequences owing to incorrect operation or wrong maintained by users.