

# X4S (All-In-One Type) Solar Street Light

CE | CB | RoHS | IP66 | IK08



Double-Sided  
Solar Panel



Efficient  
Controller



LiFePO4 Li-ion  
Battery



Motion  
Sensor



Superior  
Outdoor LED



Robust  
Structure



IP66  
Waterproof



100W

150/200W

## Simple Design, Superior Quality

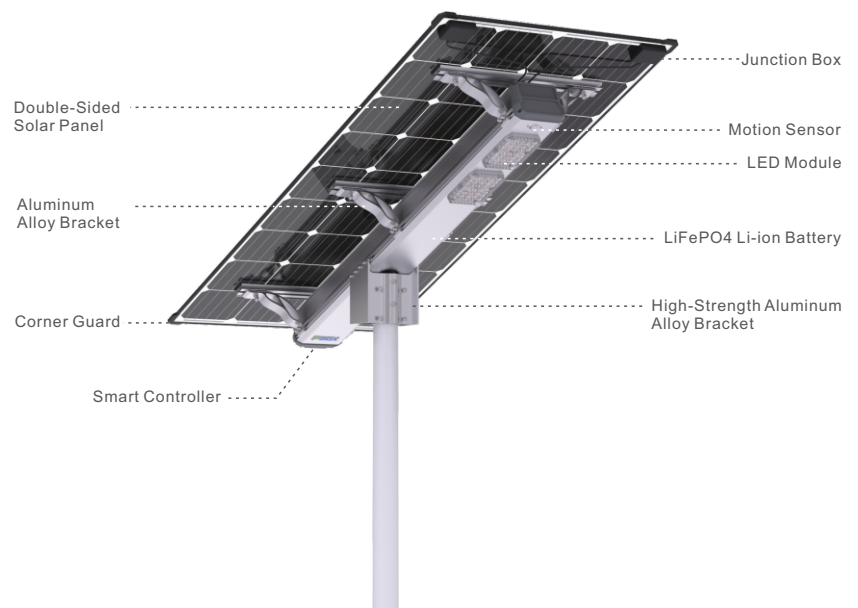
X4S series is a brandnew design developed by PBOX team. The solar lighting system integrates bifacial solar panels with high conversion efficiency, high luminous LED lamps, long life and environment friendly batteries with intelligent battery management system, and stable and intelligent controllers.

With such a smart and compact design, the X4S is very easy to install, maintain and transport, providing users with a very convenient off-grid lighting solution.

## Simple Installation, Extremely Practical

The PBOX X4S stand-alone solar street lights are very simple to use, no separate battery pack required and no complicated wiring or settings. All you need to do is to attach it to the post with some screws. That is all.

The X4S will switch on automatically at dusk and switch off automatically at dawn. When there is no one around, it will dim itself to reduce energy consumption; when any one approaches, it will increase its brightness to 100% immediately.



## Solid & Reliable Bracket Structure

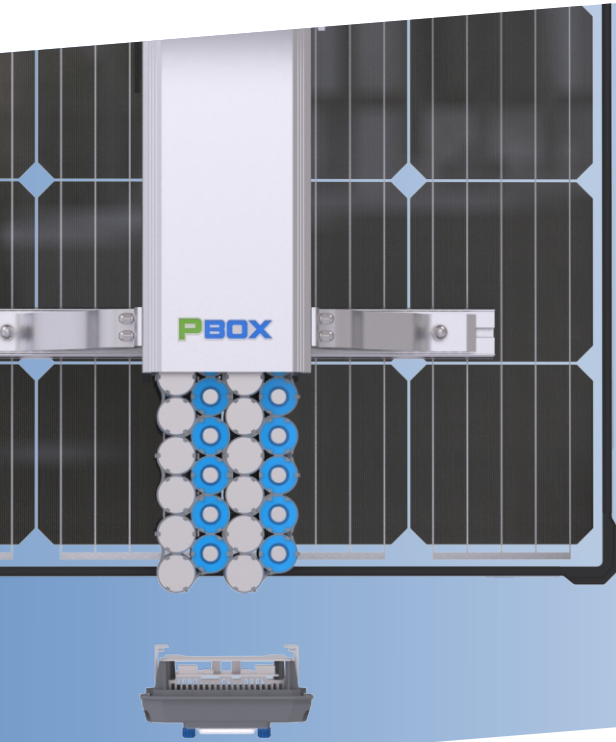
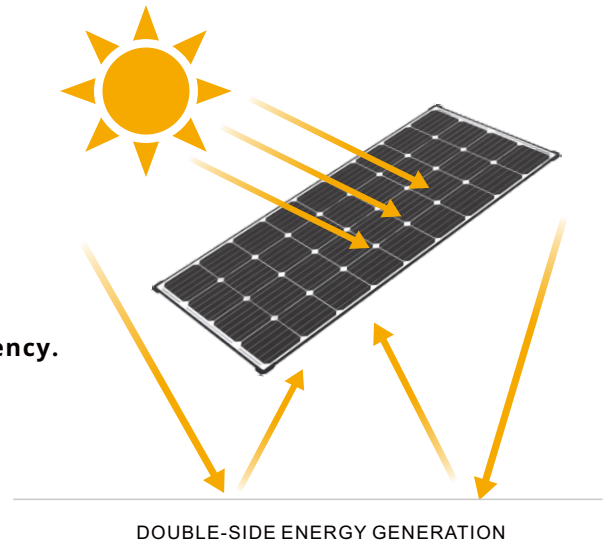
The high strength 6063 aluminium alloy, corrosion resistant anodized surface, and special structure design, makes the bracket strong, secure and reliable.



## Efficient Double-Sided Solar Panel

X4S uses the unique designed double-sided PV module and tempered glass on the panel, which minimizes the risk of degradation of the panel, enabling long-term use.

- **Bifacial solar module, more energy generation.**
- **Mono-crystalline solar panel, Up to 22% conversion efficiency.**



## Advanced Battery Management Technology

At the heart of every PBOX solar lighting system are the ingenious Lithium LiFePO4 batteries featuring PBOX's patented advanced battery management system. They have much greater charging efficiency and the battery cycle life is up to 4000 times at 80% DOD.



Light Weight



Eco-Friendly



Stable Performance



Long Life Span



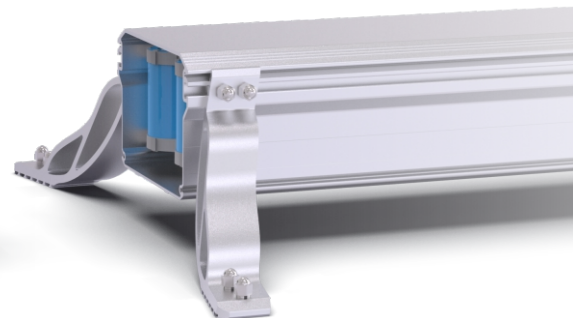
Safe and Explosion-proof



High Temperature Resistance

## MPPT Controller Ultra-Intelligent

PBOX's MPPT Controller offers flexible accessibility and comprehensive protections for the whole lighting system against over voltage, over current, over charge, over discharge, over load, short circuit and ESD. It supports output power regulation by PIR motion sensor, which can reduce energy consumption and enhance battery autonomy and operational reliability. It is also capable of two remote control functions, respectively by an IR remote control unit and by PBOX Edge software, for better management or monitoring of the lights.



- ✓ **PIR Function**
- ✓ **Overcharge Protection**
- ✓ **Overdischarge Protection**
- ✓ **Short-circuit Protection**

# LED Street Light

## High Efficient LED

Using high-efficiency LED, luminous efficiency is up to 190lm/W (@25 C). The lights sealing lens is made of strong anti-ultraviolet PC, which has anti-aging and anti-impact performance, enabling long term usage.

The unique design of the optical lens, allows us to eliminate the lighting pollution to the environment.



## Optical Control

The optical lens was designed by PBOX Lighting' R&D team, combining the features of PBOX luminaires for various applications. With the professional optional control design, PBOX luminaires could provide a wide light distribution range, and a better uniformity of illumination, which make the lamps better adapt to the specifications of standards and regulations for road lighting.

The lens is made of high-quality PC material, which has a very good optical durability and transmittance, as well as a good impact resistance, making the lamp durable and stable.



**IP66**

**IK08**  
IK Rating

**50,000 hr**  
The LED life

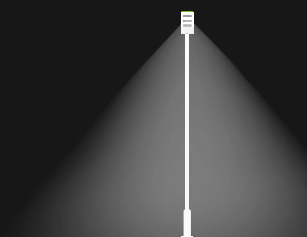
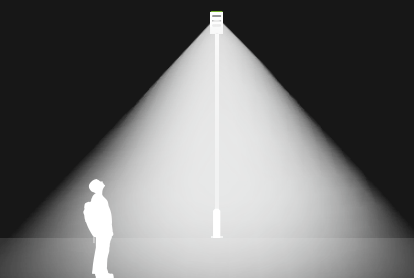
**3 year**  
Warranty

## PIR Motion Detection System

PIR motion detection system can automatically regulate the light source from full bright to dim mode to increase battery autonomy.

**100% Brightness when motion is detected**

**25% Brightness when no motion is detected**

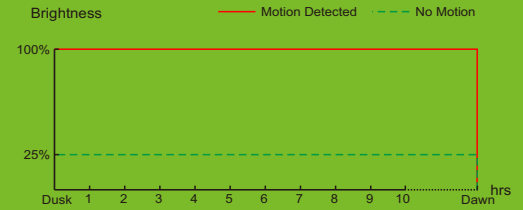


# X4S Series Solar Street Light

## PARAMETERS

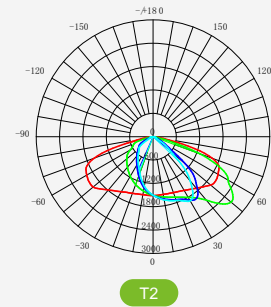
Model No.	X4S100P40	X4S150R50	X4S200V80
<b>PV Module Parameters</b>			
Power of PV Module (W)	100	150	200
Lithium Battery Capacity (Wh)	410	615	1024
PIR Sensor	√	√	√
Dimension of Product (mm)	1085×553×315	1120×728×315	1580×728×315
Net Weight of Product (kg)	19	28	35
<b>Light Parameters</b>			
Light Output (W)	40	50	80
Qty. of LED Chips	36	36	2×36
Optional Light Distribution	T2	T2	T2
Typical Luminous Flux (lm)	7200	8750	14400
Color Temperature (K)	5000	5000	5000
Min. Working Time (hours)	Bright Mode (100%)	9	10
	DIM Mode (25%)	35	42
Light Photosensitivity (lx)	60~90	60~90	60~90
<b>Packing Parameters</b>			
Dimension of Carton (mm)	1135×405×615	1170×220×800	1630×220×800
Gross Weight of Product (kg)	42	32	38
Qty Per Carton (pcs)	2	1	1
<b>Environment Requirement</b>			
Charge Temperature	0°C~51°C	0°C~51°C	0°C~51°C
Discharge Temperature	-20°C~60°C	-20°C~60°C	-20°C~60°C
Storage Temperature (<3 months)	-20°C~45°C	-20°C~45°C	-20°C~45°C
Storage Temperature (3~12 months)	-20°C~25°C	-20°C~25°C	-20°C~25°C
<b>Mounting Recommendation</b>			
EPA (Effective Projected Area) (ft <sup>2</sup> )	3.25	4.45	6.28
APA (Actual Projected Area) (ft <sup>2</sup> )	2.7	3.71	5.23
Wind Load Rate (mph)	130	130	130
Top of Pole or Tenon OD (mm)	65~70	65~70	65~70
Recommended Installation Height (m)	4~6	5~8	8~10
Recommended Installation Distance (m)	20~30	20~30	30~45

### Working Mode:

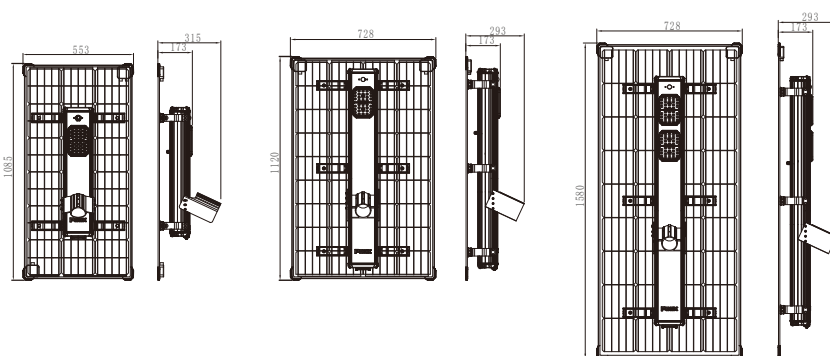


### Bat Wing Light Distribution

The new lens design improves the lighting effect and lighting uniformity, while also increasing light coverage.



### Physical Dimensions (mm):



X4S100P40

X4S150R50

X4S200V80

\* The light source contained in this luminaire shall only be replaced by the manufacturer or its agent or a qualified person.

The torque setting for any bolts or screws used to secure the luminaire to the bracket is 14 N/m.

Use for outdoors only.