



## **X5** (All-in-One) **Solar Street Light**



Monocrystalline  
Solar Module



Efficient  
Controller



Lithium-ion  
Batteries



CREE LED



All-in-One



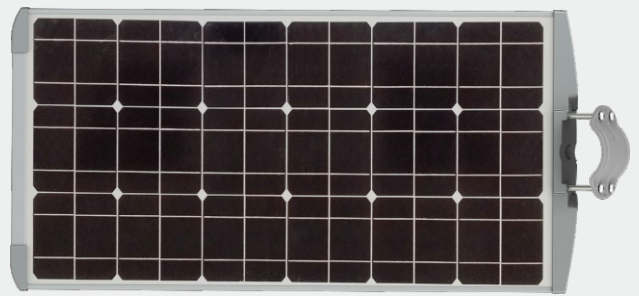
Anti-Typhoon



Motion Sensor



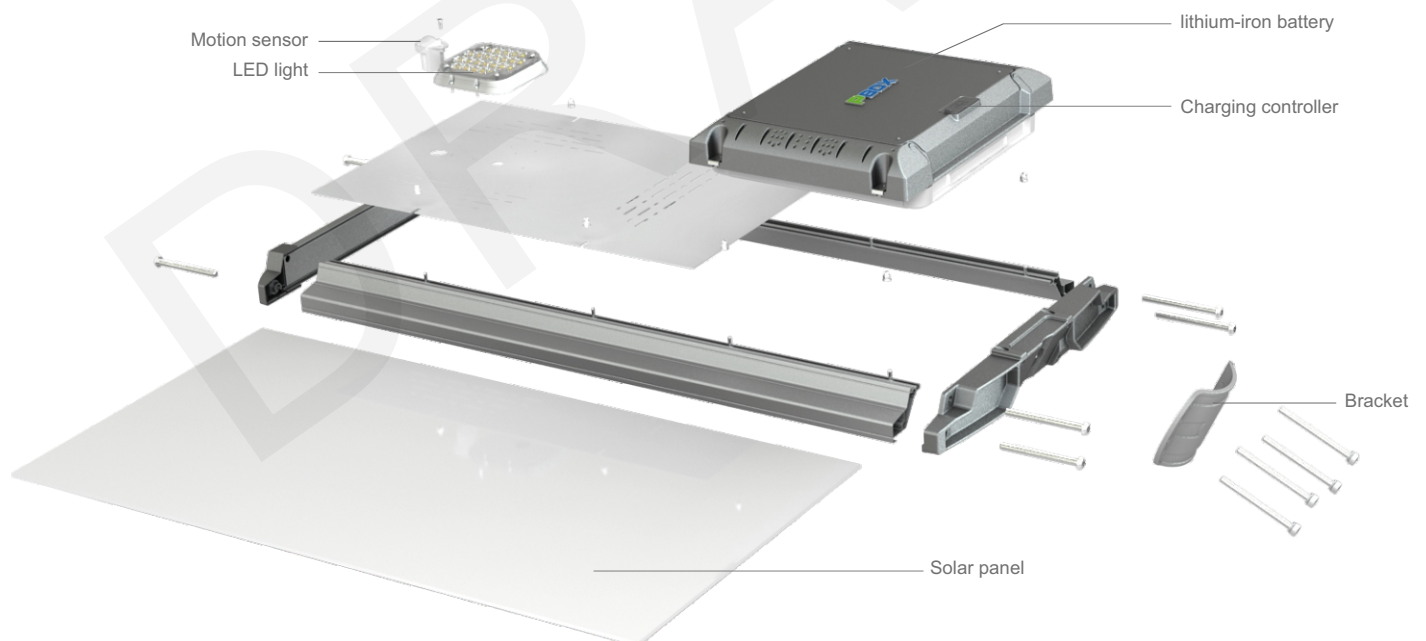
IP65



## Simple installation, extremely practical

The PBOX X5 standalone solar streetlights 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 with 4 screws to the post and press the on/off button. That is all.

The X5 will switch on when the sun sets and switch off when the sun rises. When there is no one around, it will dim itself to improve power efficiency, however, when any one approaches, it will increase its brightness by a factor of four.



## Protected against all weathers

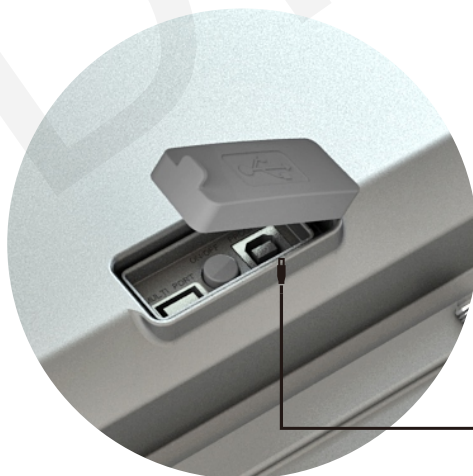
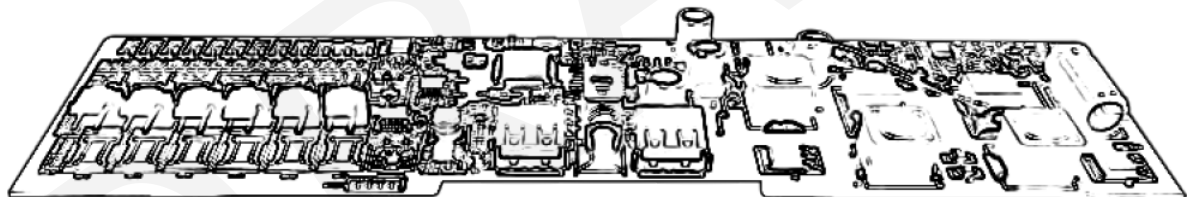
The solar streetlights have to survive extreme cold and hot weather. The modular structure of the PBOX X5 is extremely good at protecting the essential parts of the streetlights. It reaches IP65 protection grade, effectively isolating humidity, dust and heat invasion, making it easy to overcome the challenges of harsh outdoor environments.



## Battery determines system stability; Management determines battery's stability

Traditional solar powered streetlights use lead acid batteries that have a very short life cycle and are difficult to maintain, creating massive environmental pollution and a very low ROI. We therefore decided to use Lithium-ion batteries that have **3 times** the life cycle, **4 times** the discharge ability and are not harmful to the environment in our sealed product. However Lithium-ion batteries need a proper battery management system to avoid the “barrel effect”. X5 uses an exclusive patented technology battery management program, enabling the life span of battery to last for over 6 years, greatly improving the ROI and at the same time helping to sustain the earth's resources.

When the optional exclusive extreme low temperature protection device is installed, X5 can work at **-40°C**, thus making it suitable for alpine regions.



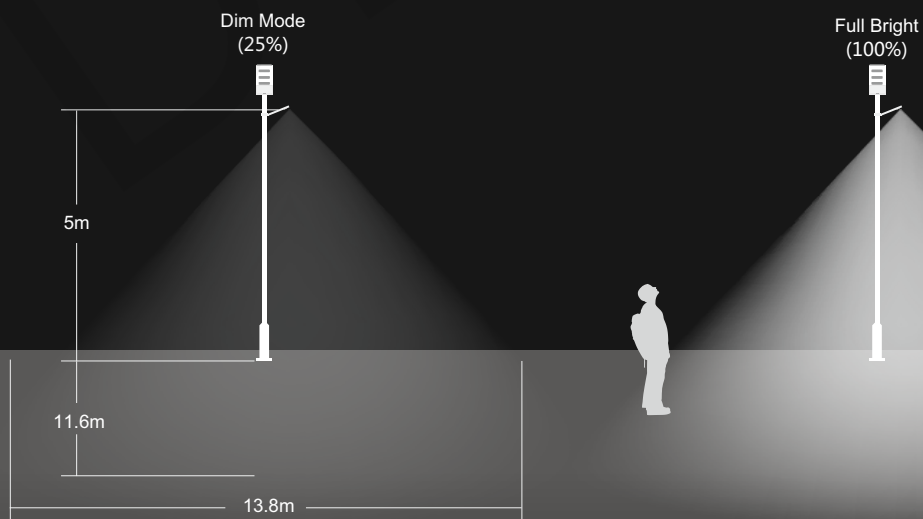
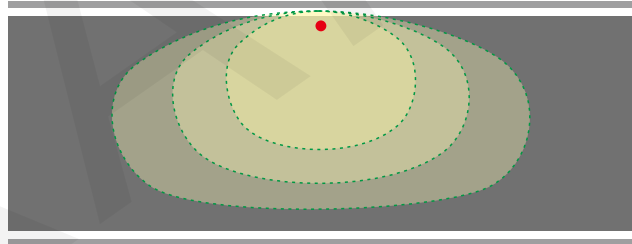
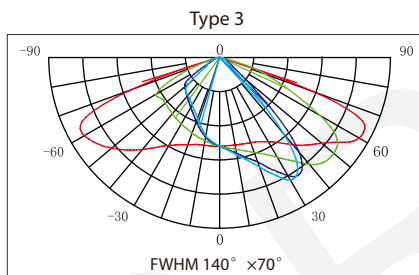
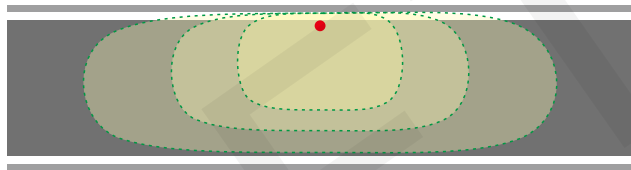
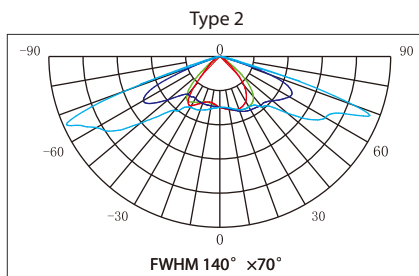
## High performance charging controller, provides full protection for the system

The independent researched and developed charging controller generates more power, especially during cloudy & rainy days. It simultaneously has protection for over current, over voltage and over heating. Through the USB interface on the controller, it is able to easily modify its operating mode.



## CREE LED ALUMINUM LAMP BASE creates a first-class light source

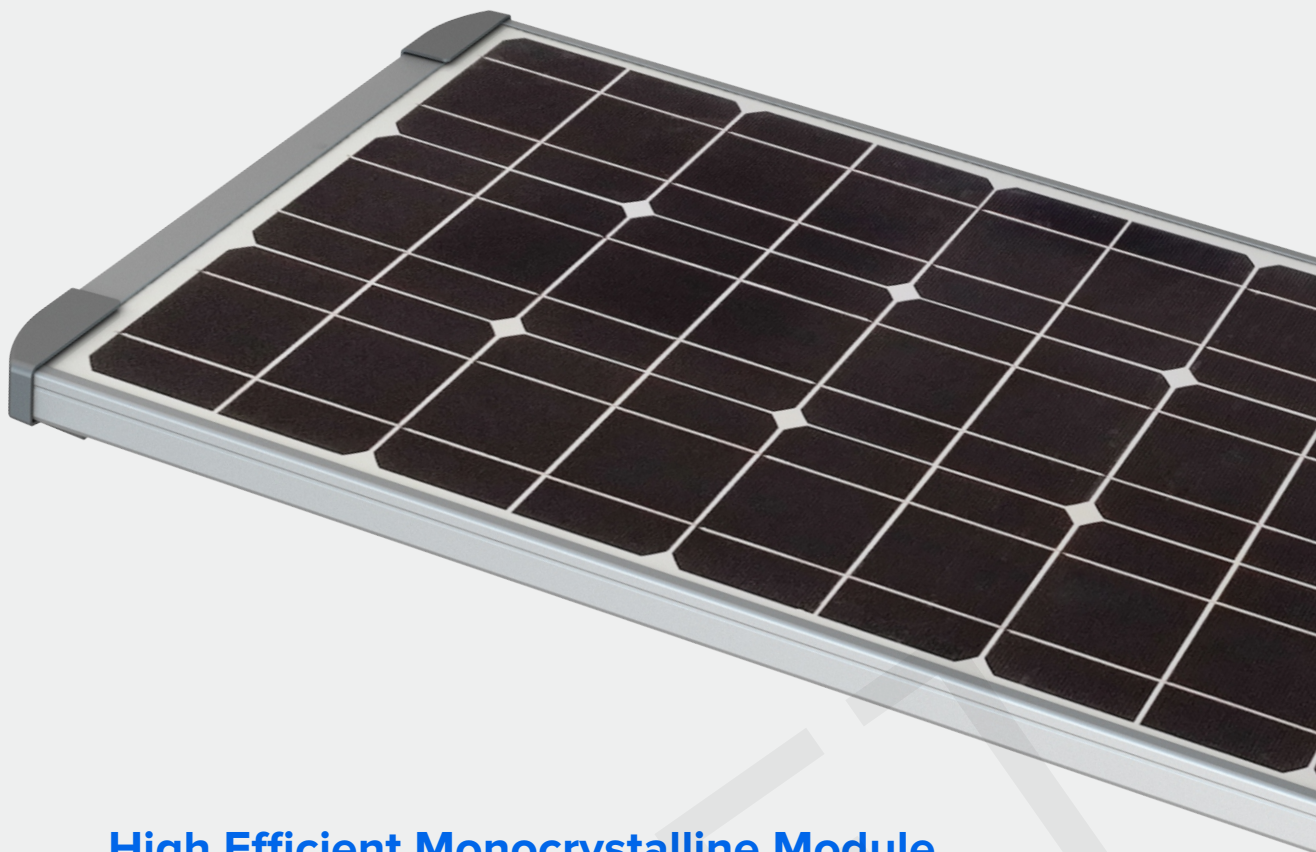
By choosing the CREE 5W LED chips, single lumen value at **180lm/W** (@25°C), with the aluminum lamp base and sealed lens, with its excellent heat dissipation, it is as if the LED chip has been placed in a sealed unit. Thus it maintains high brightness levels with very little fading. The sealed lenses are made of strong UV protected PC and are aging and shock resistant; The well optimized light distribution, makes for a more uniform and wider lighting area.



## Motion detection

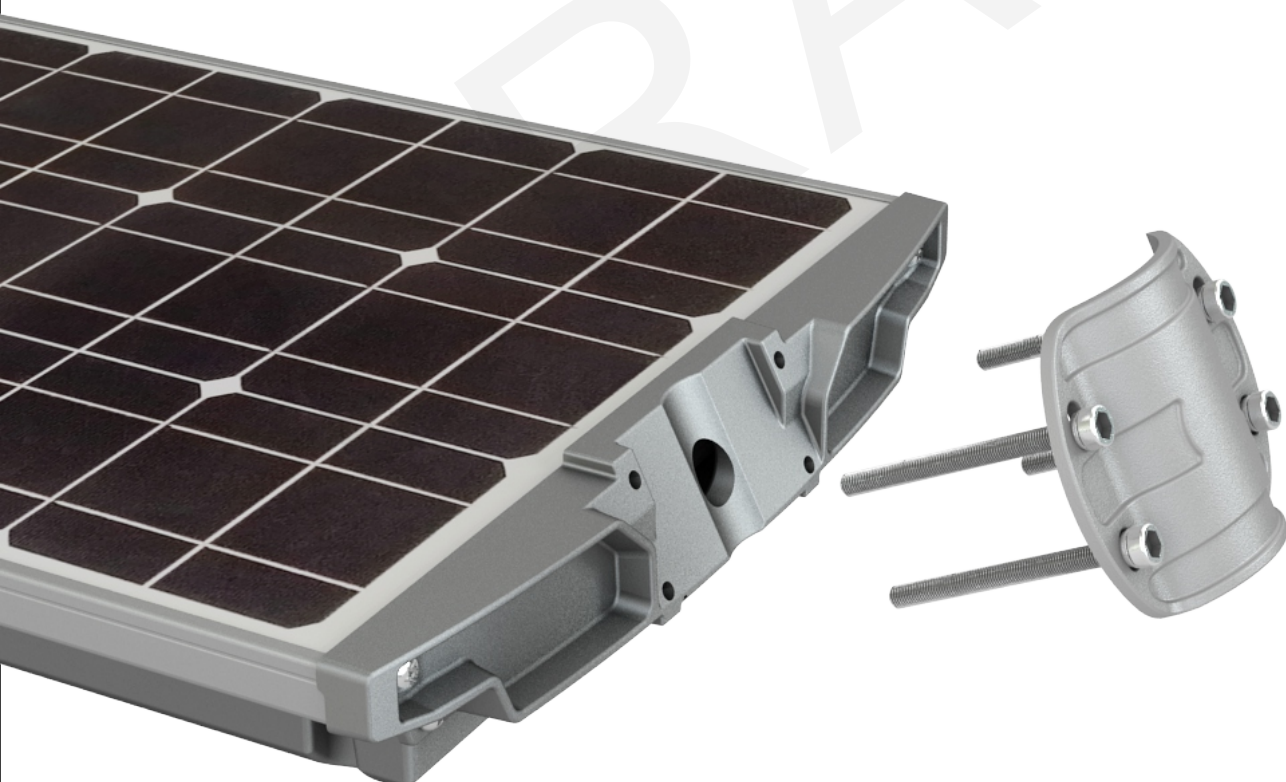
PBOX X5 comes complete with built-in motion detection system that automatically regular the light source from full bright (100%) to dim mode (25%) to increase battery autonomy.





## High Efficient Monocrystalline Module

19.6% photoelectric Conversion Efficiency  
Ending with 85% output in 20 years  
3.2mm tempered glass lamination for excellent mechanical load resistance.



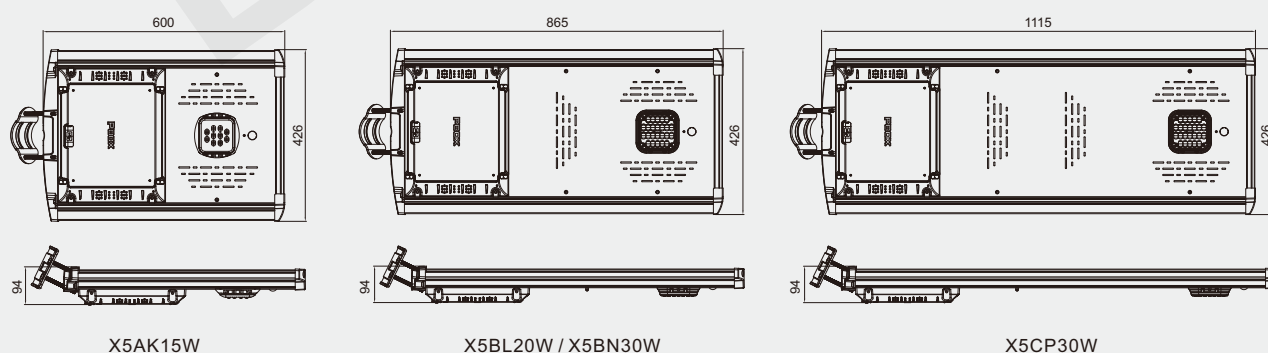
## SUPER ALUMINUM FRAME makes this a tough unit

PBOX X5 uses a super aluminum frame, which is light weight, strong and corrosion resistant, making it able to resist strong wind load of up to 130MPH. Stainless steel screws are used as fasteners to protect against any harsh weather.

## PBOX X5 All-in-One Technical Data

Model No.	X5AK15W	X5BL20W	X5BN30W	X5CP30W
<b>Physical Parameters</b>				
Power of PV Module (W)	35	55	55	70
Liuthium Battery Capacity (Wh)	192	230	308	410
Qty. of LED Chips (pcs)	10	18	24	24
PIR Sensor	√	√	√	√
Battery Heating Function	/	/	/	/
Net Weight of Product (kg)	8.5	10	10.5	13.5
Demision of Product (mm)	600×426×94	865×426×94	865×426×94	1115×426×94
Controller Type	Touch-tone controller	Touch-tone controller	Touch-tone controller	Touch-tone controller
<b>Light Parameters</b>				
Light output (W)	15	20	30	30
Light Distribution	Type 2	Type 2, Type 3	Type 2, Type 3	Type 2, Type 3
Color Temperaure (K)	5000	5000	5000	5000
Typical Luminous Flux (lm)	2250	3000	4500	4500
Min. Working Time (Hours)	Full Bright	11.5	10	9
	Dim Mode	46	40	36
Light Photosensitivity (lx)	30	30	30	30
<b>Packing Parameters</b>				
Dimension of Carton (mm)	670×260×480	940×260×480	940×260×480	1185×145×480
Gross Weight of Product (kg)	21	23	24	15
Packing (pcs)	2	2	2	1
<b>Environment Requirements</b>				
Charge Temperature	0°C~60°C	0°C~60°C	0°C~60°C	0°C~60°C
Discharge Temperature	-20°C~60°C	-20°C~60°C	-20°C~60°C	-20°C~60°C
Storage Temperature	0°C~45°C	0°C~45°C	0°C~45°C	0°C~45°C
<b>Mounting Recommendations</b>				
EPA (effective projected area) (ft <sup>2</sup> )	1.45	2.06	2.06	2.69
APA (acutal projected area) (ft <sup>2</sup> )	1.21	1.72	1.72	2.24
Wind Load Rate (mph)	110	110	110	130
Top of Pole or Tenon OD (mm)	75~90	75~90	75~90	75~90

## Physical Dimensions (mm)



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