

# ALL IN ONE SOLAR STREET LIGHT

High Efficiency Up to 195LM/W



IP65

IK10

5  
Years

CE

## ■ Overview

All in One solar street light are becoming more and more popular to illuminate the streets due to its compact design and integrated features. It offers total freedom from electrical “main power” without request for trenching cabling or expensive labor costing. Not only our solar powered light are clean energy, eco-friendly and zero running cost, but also uncontrolled to grid power fluctuations and blackouts, ensuring perfect performance and continuity of service & safety all year round.



## The Innovative Structure Designed with Great Originality

- Elegant Design
- Each Part Modular Design
- Extensible Solar Panel Wings
- Easy maintenance
- Quick & Easy installation
- Time Control/ Dimmable / Motion Sensor Control



High efficiency solar panel takes use of monocrystalline photocells, a small panel can bring big power outputs and let the whole light have longer autonomy.



Maximum Power Point Tracking, it is the latest and most efficient solar charging technology which has 30% higher efficiency than PWM.



The LiFePO4 power battery cells have a long service life that 3,000 charge and discharge cycles 80% capacity remain.



Our battery packs design offer multi-protection technology that allows the whole battery pack to work correctly even few cells was damaged.



The motion sensor detects movement within several meters of the unit and turns the LED module from ‘dim mode’ to ‘full-brightness’ mode.

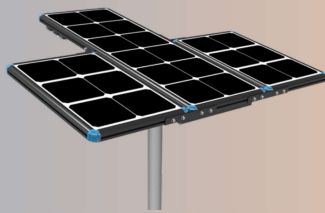
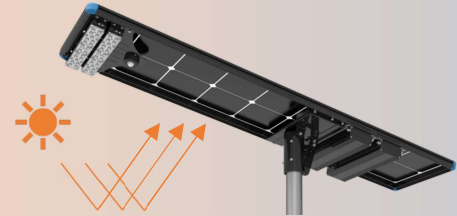


The voltage of solar panel will change according to the daylight, this is used as a photosensor to control the light work automatically.

## Product Features

### Bifacial PV Panels

Bifacial PV cells receive the reflected light from ground, it generates more power compare with single layer solar panel. Benefit by our innovative structure design, the double layer PV cells increase maximum 20% higher efficiency..

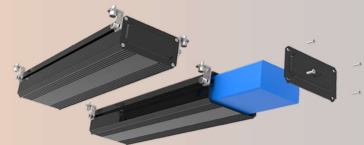


### Extendable Solar Panel

The split solar panel is extendable so that you can add it more to meet different requirements, for some area which the sunshine is not enough, it is able to add more solar panels to absorb more sun energy.

### Extendable Battery Module

The battery have a super high cooling structure  
You can add battery module to meet different requirements of back up time, meanwhile the battery is very easy to install and maintenance.

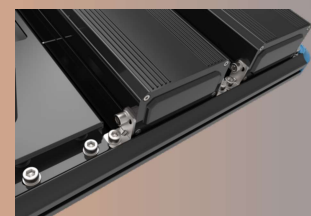


### Adjustable Lighting Orientation

LED module brings a super high lumens efficiency, our patent solar street light have 1.5-1.8 times brightness at same power! The LED module is +60° to -60° rotatable, so that you can get a better lighting distribution.

### Sturdy and Anti-theft Design

Two steps aluminum surface treatment – anodizing and powered coating. It is strong to stand in extremely environment. Metal mounting support makes it sturdy. The bolts takes use of anti-theft design for safety.



## Working Mode



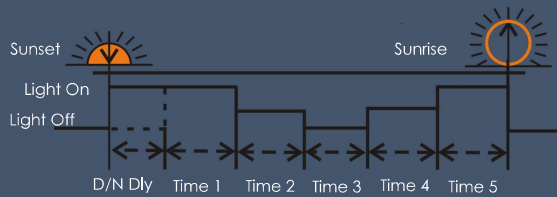
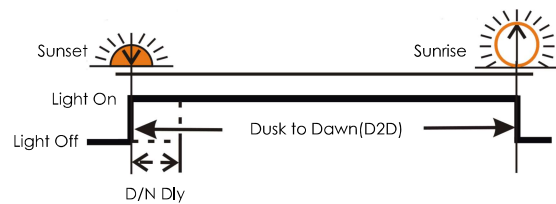
### Motion Sensor Dimming

When the human body movement is detected, the solar street light will automatically adjust to full power output. When no one is moving, the light will be adjusted to dim or turn off.

### Dusk to Dawn Mode

The solar lamp will automatically turn on from dusk to dawn. The light will keep constant brightness in a set power in the period.

\*D/N Dly: Day/Night open load delay time. (0-30min)

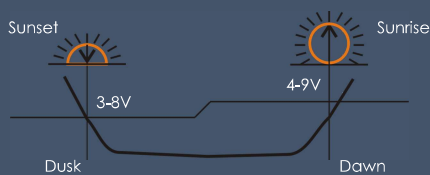
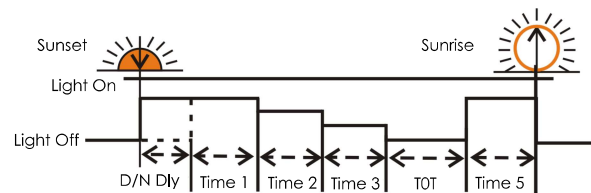


### Five-Stage Night Mode

The lamps lighting divide into 5 stage, each stage time and dim can be setting according to demands. With diming setting, it is an efficient way to save energy, and keep the lamp working in best power and time.

### TOT Motion Sensor Mode

If set time 4 to TOT mode, the controller will automatically calculate lasting time of time 4 according to actual night time.



### Auto Turn on/off

The controller recognize day and night based on the solar panel open circuit voltage. This day/night threshold can be modified according to local solar radiation. The setting range is 3-8V, the standard setting is 5V.



## IAIO40-20W

# All in One Solar Street Light

All in One solar street light are popular in solar area lighting due to its compact design and integrated features. It offers total freedom from electrical "main power" without request for trenching cabling or expensive labor costing. Not only our solar powered light are clean energy, eco-friendly and zero running cost, but also uncontrolled to grid power fluctuations and blackouts, ensuring perfect performance and continuity of service & safety all year round.

### Working Mode (Motion Sensor)

Stage	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Time	0 H	0 H	6 H	6 H	0 H
Outputs	100%	100%	100%	80%	100%
Outputs (No Sense)	\	\	20%	20%	\

### Finish Color Options

	Silvery RAL9006		Anthracite Grey RAL7016		Matt Black (on request)
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## Technical Data

IP65 IK10 5 Years CE

Model No. IAIO40-20W

### Physical Parameter

PV Module Power	Mono 40Wp
Battery Capacity	12.8V 12Ah LiFePO4
Control Mode	Motion Sensor/Timing
Outline Dimension	711*372*84mm
N.W.(kg)	9.5kg

### Light Parameter

LED Module Power	20W
LED Chips	Lumileds 3030
Physical lifespan	100,000 hrs
Visual Angle	80°150° (Type III)
CCT	4000/5000/6000K
Luminous Efficiency	180Lm/W
Max. Luminous Flux	3600 Lm
Full Bright Mode Lighting	>9 hrs
Dim Mode Lighting(20%)	>41 hrs

### Environment Requirement

IP Rating	IP65
Wind Load Rate	110mph
Charge Temperature	0°C ~ 60°C
Discharge Temperature	-10°C ~ 60°C
Storage Temperature	-10°C ~ 60°C

### Installation Proposal

Installation Height	4-6m
Installation Distance	10-20m
O.D. of the Pole	55-60mm

## Dimensions

