



# ZAIN

## AIO Solar Street Light

60W

IP65 | IK08



ZAIN is the perfect solar lighting for the outdoors, it caters requirements of all applications, ZAIN has wide power ranges from 50W to 180W which apply pole heights from 5 meters to 14 meters. It is the latest compact solar street light, integrating the most cutting-edge technology of lithium battery and highest led technology as well as with highly efficient PV module and charge control technology. Always there is one suitable model for your project.



### High Brightness LED

High brightness led enhances visibility and safety while providing energy-efficient



### Adjustable LED Module

The angle of LED module is adjustable according to road width with better lighting performance, increasing the lighting utilization and less lighting waste.



### MPPT Charge Controller

maximizes energy efficiency ensuring longer battery life and consistent illumination without blackout.



### Programmable by Remote

The lighting program can be modified anytime by remote control according to customers' requirement.



### Robust Design

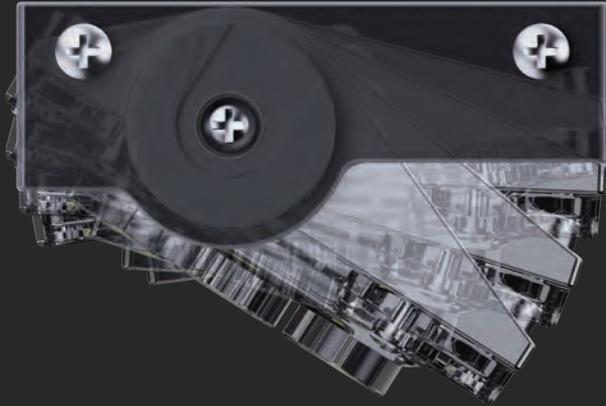
Robust design of light fixture provides superior durability, corrosion resistance, and heat dissipation.



### LiFePo4 Battery

Grade A+ Battery cell with high uniformity of internal resistance and charging and discharging.

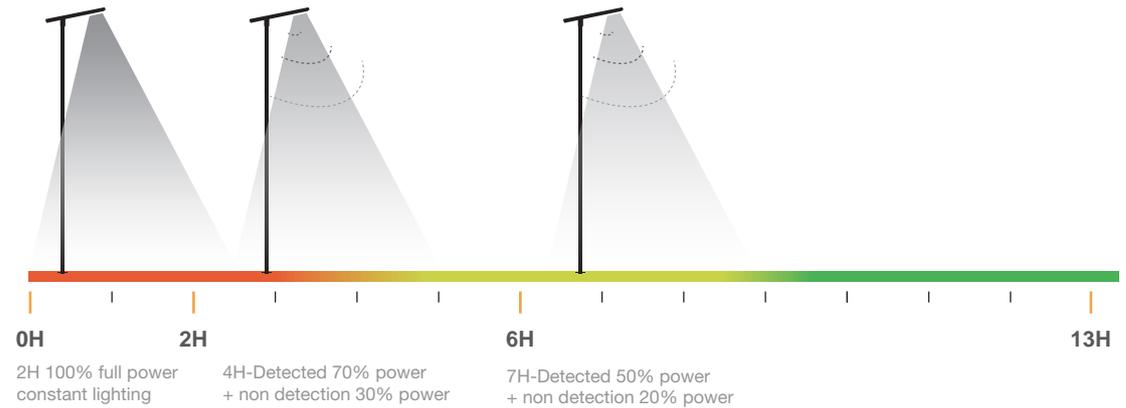
## The rotatable led module



Due to the high integration of the integrated street light, it is easy to install and greatly reduces the installation cost and other costs. However, since the angle of the sun is different in each country or region, ordinary all-in-one solar street lights cannot adjust the angle according to the position of the sun. The light of the lamp can only be irradiated to places other than the road surface, which causes a waste of light and may cause light pollution. Or in order to allow the light to shine on the road as much as possible, but it is impossible to make the solar panel the most suitable angle for facing the sun.

ZAIN series solar street lights perfectly solve the problems mentioned above. ZAIN adopts high-strength, angle-adjustable, and beautiful die-casting aluminum brackets, and at the same time allows the LED light source module to have the function of adjusting the angle. Each LED module has the angle can be adjusted manually, with self-locking function, without wrench adjustment, so that the light can be properly irradiated on the road, which greatly improves the efficiency of light use, and can also make the solar panel face the sun to maximize the power generation efficiency.

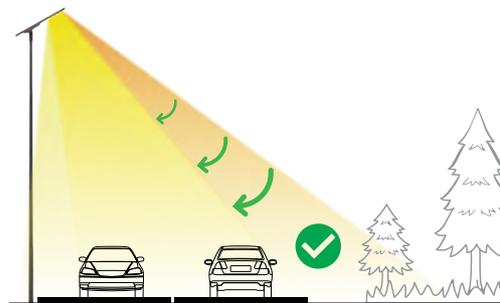
## Default Lighting Profile



## Excellent lighting performance

### ZAIN

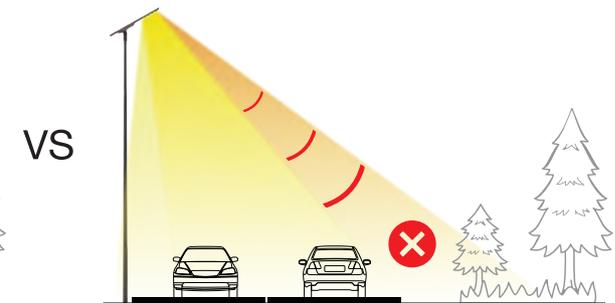
The lighting angle can be adjusted to shine on road properly, reducing light waste and improving the lighting performance..



Performance of ZAIN AIO Solar Street Lights

### OHTERS

The lighting angle is fixed and big part of light is falling out of road, and causing lighting pollution and wasting light.



Performance of Other AIO Solar Street Lights



## Main Specification

### Light Head

Luminous flux	10,200lm
Peak LED power	60W
CRI	>79
CCT range (dual color)	2200K~6000K
LED lifetime	>100,000 hours
Light dimension	1100*420*350mm
Warranty	3 years

### MPPT Controller

System voltage	18V
Max load power	100W
Motion Sensor	PIR / Microwave Optional
Programmable	√
MPPT tracking efficiency	98%
Operating temperature	-35 °C ~ 65 °C
IP rate	IP68

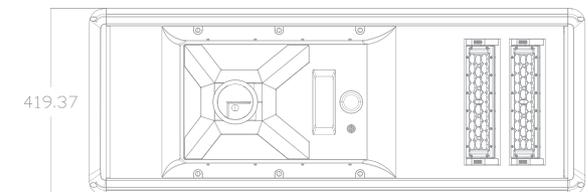
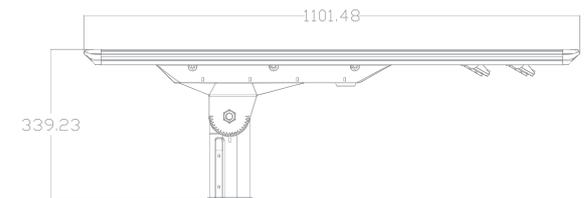
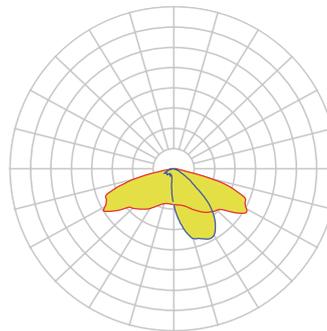
### Solar Panel

Peak Power	82W
Max. voltage	18V
Solar cells efficiency	22.3%
Technology	Monocrystalline silicon panel
Operating Temperature	-40 °C ~ 85 °C
Lifetime	>20 years
Waranty	5 years

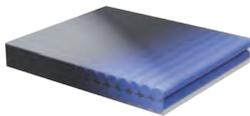
### LiFePO4 Battery

Battery type	LifePO4 6000mA 3.2V 32700
Battery capacity	12.8V 460WH
Battery lifetime	4000 cycles @ D.O.D 50%
Charge mode	C.C + C.V
Storage Temperature	+5 °C ~ +35 °C
Operating Temperature	-25°C~65°C
Warranty	3 Years

## Lighting Performance



Rotatable LED module



LiFePO4 Battery



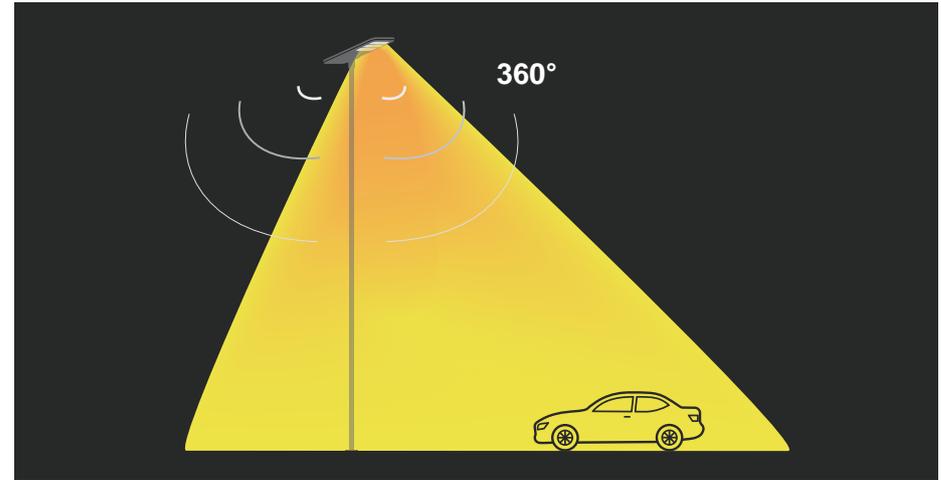
MPPT Controller

## Motion Sensor Microwave

Luminaires are equipped with microwave sensors that use the Doppler effect (like car radars) to detect nearby objects and measure the distance. The sensor emits a high frequency wave to reflect off of and analyze the objects in the vicinity.

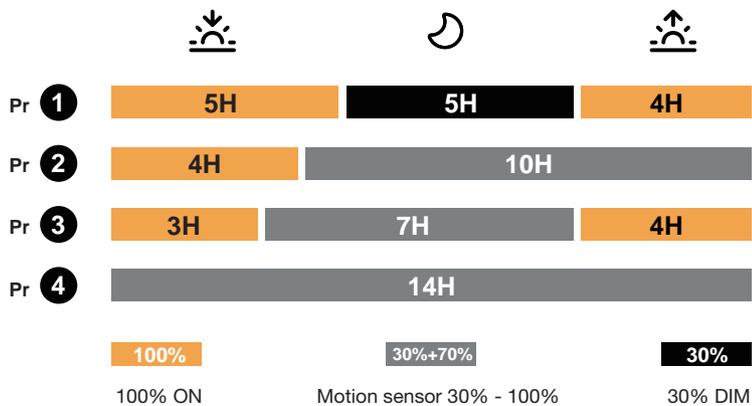
Since the microwaves only detect specific objects, detection reliability increases resulting in :

- Much better reliability compared to the infrared sensor
- Up to 360° Directivity
- Insensitivity to other environmental variations such as light, color, temperature, etc.



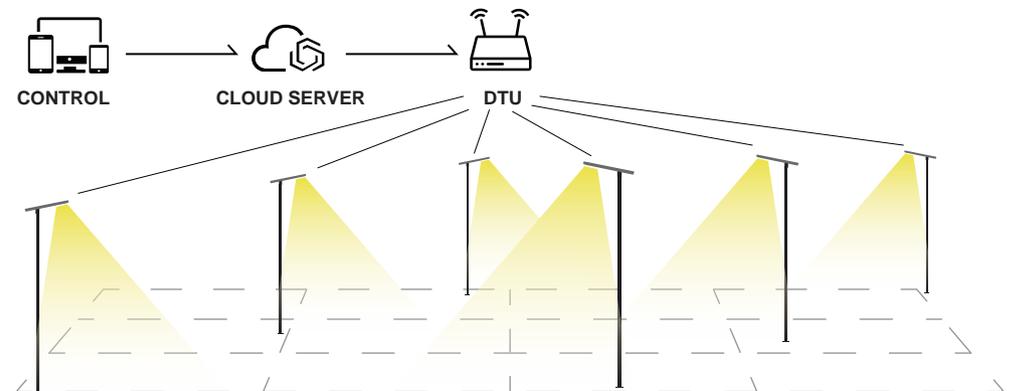
## Operation Mode & Lighting Schedule

In addition to automatic switching on and off, you have the possibility of choosing among different modular operating modes according to the needs of the project



## Remote Monitoring Technology

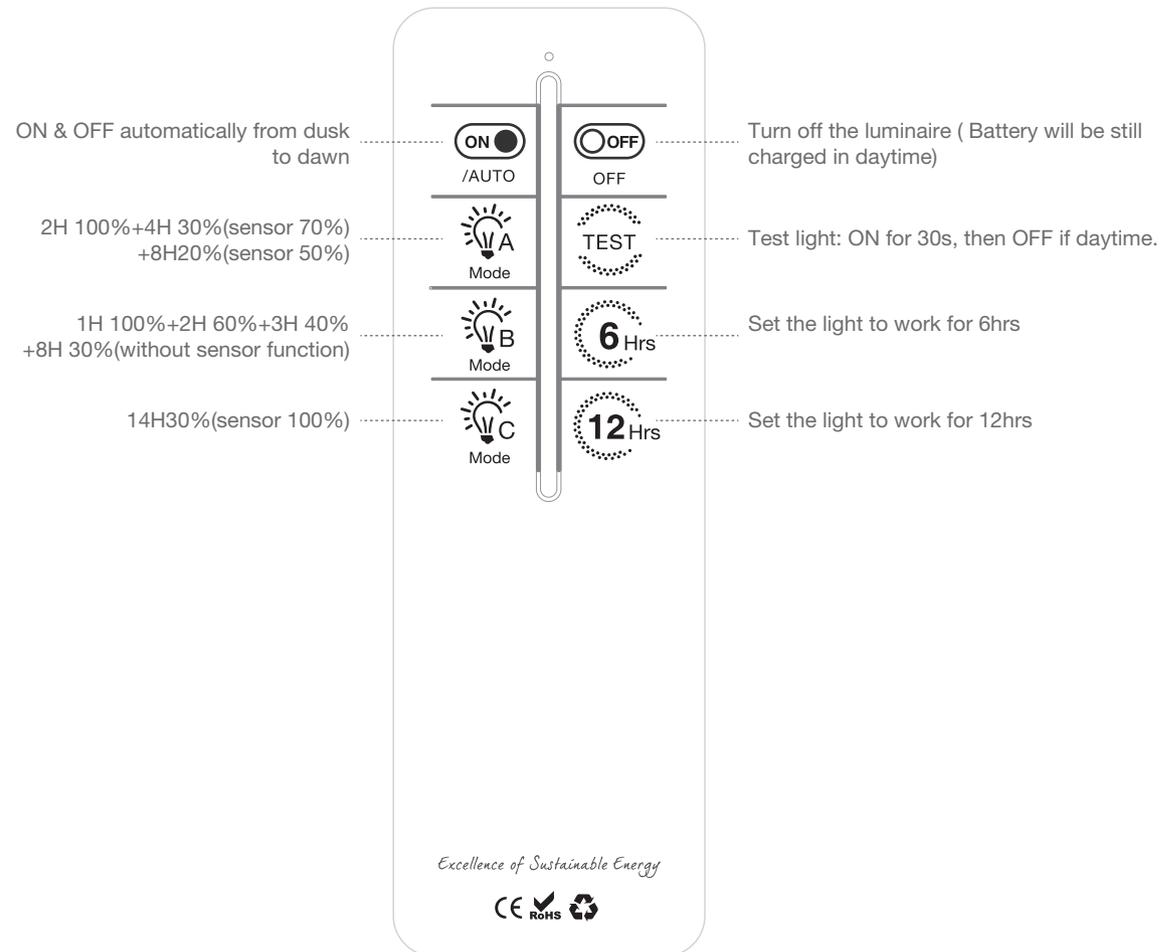
The lamps can be equipped with smart components and configured as smart street lamps, integrating transportation, environmental monitoring, energy management, city management and other hardware functions, which can be widely distributed to all corners of the city to help the construction of smart cities.



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# REMOTE CONTROL



Solar-key is a powerful remote control with multiple built-in lighting programs. With the help of the customized high efficiency MPPT solar controller. It allows you to change the working settings of solar lights easily as you need. Solar-Key remote contains the most popular lighting programs which is based on different solar radiation in countries and regions.

No matter in the Middle East and South America where the sunshine is relatively abundant, or in Europe where the sunshine is relatively weak, you can set the most suitable working state of the lamp setting.