# All In One Solar Street Light



**Quality is the future** 

# **Operating Instruction**

Top manufature of the world

No need electricity

Easy installation

Longer lifetime

#### Sincerely thank you for using the integrated solar street light

The design of the integrated solar street light/garden light absorbs the inspiration and energy from the universe, and combines today's best green energy portfolio (solar energy, semiconductor LED light source, dedicated battery for street lights). It uses excellent practical control technology, such as micro controller, thermal infrared human body induction etc., combines with the simple integrated structure design, perfect achieve higher brightness with lower power consumption,

(average 5w power consumption equals 100w incandescent lamp's illumination), long life span and free maintenance, excellent waterproof and heat dissipation, at the same time with convenient installation. All the advantages above make it the best contributed and creative patent product of our company.



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## Parameters

Model No.	5W	8W	12W	15W
Light source	5 w	8 w	12 w	15 w
Solar panel	high efficiency polycrystalline	high efficiency monocrystalline	high efficiency monocrystalline	high efficiency monocrystalline
Human induction	Yes	Yes	Yes	Yes
Product size	330*243*35mm	505*295*70mm	505*295*70mm	780*295*45mm
Net Weight	2. 1 KG	4.2 KG	4.6 KG	7.0 KG
Lumen (full power)	550lm	880lm	1320 lm	1650lm
Lumen (energy-saving mode)	165 lm	265 lm	396lm	495 lm
Angle	120 °	120 °	120 °	120 °
Color temperature	6500k-7000k	6500k-7000k	6500k-7000k	6500k-7000k
Working time	≥24Hr	≥24Hr	≥24Hr	≥24Hr
Working temperature	Charging: -20° C~+60° (	C Discharge:-20° C~+	60° C Storage tempera	ture: 0° C~+45° C
Recommended Mounting Height	2-2.5m	3-4m	3-4m	4-5m
Recommended Mounting Distance	6-8m	8-10m	10-12m	12-15m

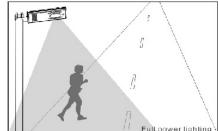
Working time data is based on charging 8 hours in the sunny summer, measured in north latitude 22°, east diameter 13°. Actual working time may be changed due to different installation area, season, environment, direction etc.

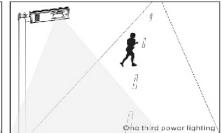
Model No.	20W	30W	40W	50W	60W	80W & 100W
Light source	20W	30W	40W	50W	60W	80W & 100W
Solar panel	high efficiency monocrystalline					
Human induction	Yes	Yes	Yes	No	No	No
Product size	920*325*45mm	1136*325*44mm	1136*325*45mm	1136*420*45mm	1136*420*45mm	1469*420*395mm
Lumen (full power)	2200LM	3300LM	4400LM	5500LM	6600LM	8800LM & 11000LM
Lumen (energy- saving mode)	660LM	990M	1320LM	2750LM	3300LM	4400LM & 5500LM
Angle	120 °	120 °	120 °	120 °	120 °	120 °
Color temperature	6500k-7000k	6500k-7000k	6500k-7000k	6500k-7000k	6500k-7000k	6500k-7000k
Working time	≥24Hr	≥24Hr	≥24Hr	≥24Hr	≥24Hr	≥24Hr
Working temperate Charging:-20° C~+60° C Discharge:-20° C~+60° C Storagetemperature:0° C~+45° C						
Recommended mounting height	5-6M	6-7M	6-7M	8-9M	8-9M	10-12M
Recommended mounting distance	18-20M	20-25M	20-25M	25-28M	28-30M	30-35M

Working time data is based on charging 8 hours in the sunny summer, measured in north latitude  $22^{\circ}$ , east diameter  $13^{\circ}$ . Actual working time may be changed due to different installation area, season, environment, direction etc.

## Matters needing attention

- (1) "All-in-one" will not work without sun. Please select the matched product model according to the Sunlight intensity of the install location or the total annual radiation of solar energy. In the lacking sunlight or long continuous rainy day area, the working time of solar lights can be shortened or can not light, All-in-one light with mains supply or solar dual-mode electric power supply is suggested to choose in such case.
  - (2)All-in-one" selects long-life lithium battery as energy storage device. Discharge condition at night is at temperature 20°C ~ + 60°C, battery performance will be damaged beyond this range. Please make
- sure the local extreme temperature does not exceed the above condition when selecting the "All-in-one".
  - (3) "All-in-one" battery after fully charged, the longest store time can be up to six months. Check the battery in time after long time transport or storage, charge and record it on a regular time. Otherwise, the battery will be damaged.
  - (4)When installing "All-in-one", make the solar panel towards the direction of the sun as possible in order to get maximum energy and avoid houses and the shadow of obstacles such as trees at the same time, otherwise it will reduce the generating efficiency of the solar panel, and lead to "All-in-one" working time being shortened.
  - (5) "All-in-one" solar panel surface's degree of cleanliness also affects the generating efficiency of the solar panel. So its surface (such as dust, leaves, greasy dirt, etc.) needs to be cleaned, scrubbing with ordinary cleaner on a regular time is suggested.
  - (6) "All-in-one" internal parts are with good waterproof design, all reach IP65 standard. Ventilation holes and cracks on the shell are specially designed for the cooling and drainage. Metal parts are all made of corrosion resistance aluminum or stainless steel, which can tolerate the strict environment of the sea or high heat and high humidity desert.





## Installation steps

## **5W-20W** Installation steps

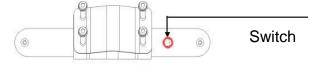
- (1) Select the best day-lighting location to set up the pole. Pole 3-5 meters high is appropriate, diameter 40  $^{\circ}$  100mm, Thickness more than 2.0mm iron rod or steel rod.
- (2) Open the packaging and check if components are completed. Contained



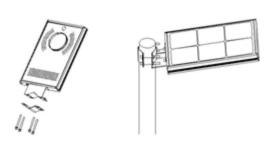
Special tools

M8 socket head cap screw

(3)Turn on the switch before installation.



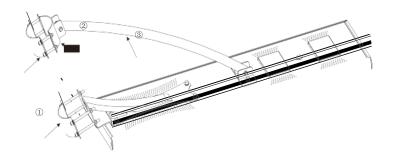
(4) Put integrated solar light into the pole, fasten the screws with special tools, and ensure the light is firm.



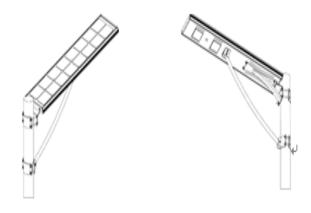
## 30W-60W Installation steps

step (1) to (3) same as 5-20W installation steps

(4) Putintegrated solar light into the pole, fasten the screws with special tools,

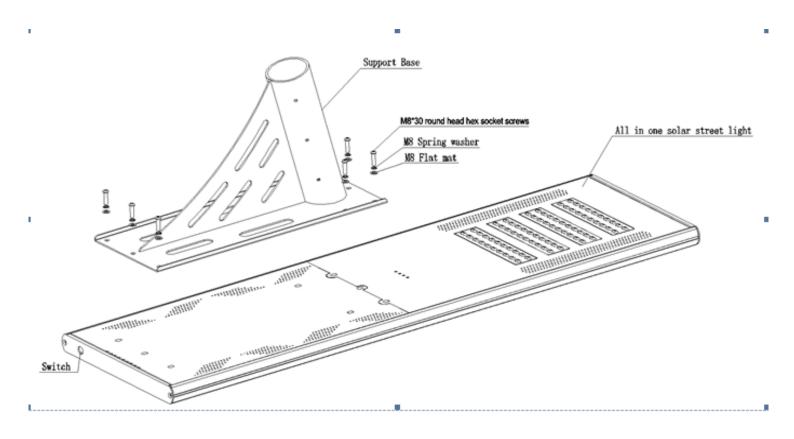


(5) The integration of solar energy lamps set into the lamp, use special tool for fastening screws, ensure lamps can be stable.



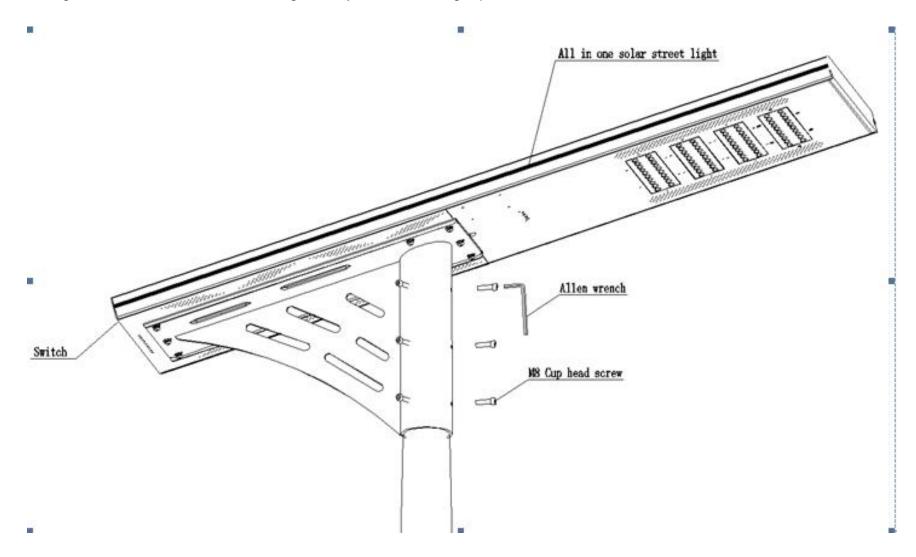
# 80W-100W Installation steps

- Lamp assembly
- 1 open the cartons to take out the integrated solar street llight and parts, put the light flatwise (solar panels face down);
- 2 Placed the support base to the light installation position, make these screw holes with light's alignment;
   3 Screw with the M8 round head hex socket screws, then tighten with a wrench.



#### The installation on light pole

- 1 First turn ON the switch;
- 2 Set the light which assembled with support base on the light pole, adjust the direction;
- 3 Screw with the M8 Cup head hex socket screws on the tube of support base;
- 4. Tighten with a wrench, make the light firmly fixed on the light pole.



#### **Maintenance**

- (1)Solar controller is the core component of solar street lights, which has the function of light control, time control, charging and discharging, etc. Keep it dry in use, and do not touch the buttons at discretion. Malfunction must be in professional operation;
- (2)Solar panel is the longest service life of component in the solar street light, which can be used for 35 years. And in use if it doesn't rain for days, the surface of the solar panel will gather much soil dust, which will affect the power generating efficiency manual cleaning when necessary. Keep the solar panel towards the south, correct it timely if there is swing;
- (3)LED light source has a long service life, general failure rate is extremely low. Dirt cleaning of the whole light source is needed when using 2 to 3 years in case the dirt resists electricity and reduce the brightness of lights;
- (4) The battery itself has certain self-discharge, when the integrated solar light is not in use for a long time, please take out the light regularly for charging in the sun.

# **Troubleshooting**

Phenomenon	Cause	Inspection methods	Solution
Lights not work	Switch does not turn on	Detect whether the switch turns on	Turn on the switch
	Switch failure	Short circuit the switch, if lighting up, could judge switch failure.	Replace Switch
	Battery runs out	Long rainy day or wrong installation site could not charge enough power. Open the system, disconnect the battery and use multimeter to check the voltage of the battery, if voltage less than 11V, then could judge battery runs out or low power cause system could not work.	Charge battery by solar panel in daytime, and turn off the switch at night to stop discharge,like this, 2 days could full charge the battery.
	LED Failure	Firstly, adjust the DC power supply to voltage 9V and current less than 1A, then connect the positive and negative electrode of DC power supply to LED, if LED could not light, could judge LED failure.	If ensure LED failure, please contact us to return and replace.
Short lighting time	Low battery	Wrong installation or dust and leaves cover on panel cause not enough solor power to battery. 1. Check whether there is dust or leaves covering on the solar panel; 2. Open the system, disconnect the battery and use multimeter to check the voltage of the battery,if voltage less than 11V, that could judge battery runs out or low power cause system could not work.	1. Charge battery by solar panel in daytime, and turn off the switch at night to stop discharge, like this, 2 days could full charge the battery.  2. Clean the solar panel.
	Battery Failure	Open the light and check if battery is dispalced or outer has been damaged .     Battery maturing, lights used more than 2 years.	1.If damage caused by transportation, please return toour factory for repairing or replacement.  2.Contactus tobuy the same type battery if battery maturing.
No induct	Sensor Failure	Move in the range of detection under the half power lighting condition ,if light not turns to full power ,could judge the sensor failure.	If ensure failure caused by controller or sensor, please return to our factory for repairing or replacement.
Flashing light	Controller (timer) setting wrong	Intelligent mode open hHigh power lights have a shing light.	Return to our factory to reset or replace the products.

# **Product warranty**

Product name :	Product name	:
FactoryNumber :	Date of produc	ction:
Tel.:	Fax :	
Address :		
Producer's stamp :	(stamped and e	ffective)
Customer name:	<ul> <li>Contact information</li> </ul>	):
Customer's address :		
Guarantee content:	After sales:	
Customer Sign:	Satisfied	Dissatisfied
Guarantee content:	After sales:	
Customer Sign:	Satisfied	Dissatisfied
Guarantee content:	After sales:	
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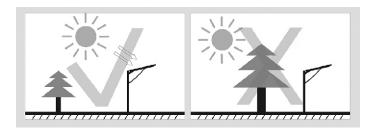
#### Warranty terms:

During the warranty period, if there is malfunction under the normal use in accordance with the operating instructions (judged by the company official staff), product will be free repaired. During the warranty period, any one of the following cases, must charge for repair

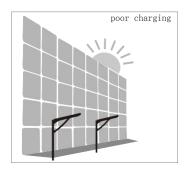
- Can not provide the letter of guarantee and valid proof of purchase.
- Malfunction and damage caused by wrong use and improper personal repair.
- Malfunction and damage caused by transport, move, drop after purchasing.
- Malfunction and damage caused by other inevitable external factors.
- Damage caused by using the unspecified power and voltage. Product appearance, vulnerable products and accessories are beyond the scope of the warranty. We make the above guarantee only, and do not make any express or implied guarantee (including merchantability, and application of a certain rationality and adaptation of implied warranty), whether in contract, civil negligence, or other aspects, Our company will not take any responsibility to any special, incidental or consequential damages.

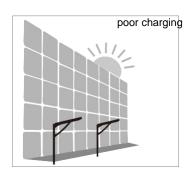
## installation instructions

# matters needing attention One:



## matters needing attention Two:





★ Please choose a place that is full of sunlight and can be completely exposed to the sun. Notice that the solar panels must be covered, and must be exposed to the sun.

## After sales service telephone