

### **Product description:**

Second-generation integrated solar street lamp use imported high-efficiency monocrystalline silicon solar panel, smart MPPT controller, deep cycle lithium battery, high-efficiency led chip, all in one box Integrated design, Easy to install and use, have Microwave induction and RGB flashlight design, multi-function lighting.

#### Features:

1. Professional design team develop, put solar panel, led chip, controller, battery, human induction in one box;

2. High-end design appearance, atmosphere, the whole lamp adopts high-pressure die-cast aluminum alloy, Impact resistance, High temperature resistance, Surface imitation marble painting process, corrosion resistance

3. Solar panels can be adjusted 360 degrees to suit various environments

4. Intelligent sensor technology, microwave radar sensor, according to the moving object to adjust the brightness of the lamp , more energy-saving, humane

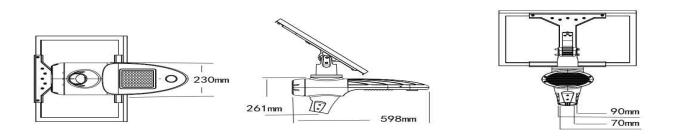
5. Intelligent power adjustment, automatic judgment of weather, rational planning of discharge rules

6. Smart remote control, With UVA(unmanned aerial vehicle) remote control, remote control long distance, bring high corrosion resistance, Four lighting modes can be set

7. Intelligent charge and discharge management, Charge-discharge dual protection and intelligent equalization technology, Cycle times more than 2000 times

8. LED chip max can reach 210LM/W, more than double the average brightness of an ordinary LED light source,140 degree view angle, bring same lighting results with shotor pole.

- 9. Muti-function lighting modes, tail RGB flashlight design, flashing in multiple colors.
- 10. The whole lamp plastic part adopts outdoor PC material fire rating, anti-UV, high temperature resistance, antioxidant.
- 11. The whole light waterproof level can reach IP67 actually, can work directly in water for a short time.
- 12. Ultra-human light design, easy to disassemble, install and transport.



## **Technical Parameters:**

Model	N-40	N-50	N-60	N-80	N-100	N-120	
Lumen	4000LM	5000LM	6000LM	8000LM	10000LM	12000LM	
Color temperature	3000К 4000К 5000К 6000К 7000К						
Material	High-end aluminum alloy + outdoor fire-rated PC						
Battery	Lithium battery11.1V(24AH-63AH)						
Solar panel	Imported high efficiency monocrystalline silicon18V (50W-160W)						
LED	Bridgelux 3030			Bridgelux 5050			
Waterproof IP grade	IP67						
Discharge time	Lighting 12 hours/day, support 10 rainy and cloudy days (with motion sensor)						
Charging time	4-5hours (bright sunshine)						
Installation diameter	$\Phi$ 60-65mm (suggest)						
Product size	598*230*261mm						
Product weight	11kg-15kg						
Working temperature	-25 °C −+65 °C						
Certificate	CE ROHS IP65						
Warranty	3 or 5 years						
Remote control	yes						
Color rendering index	Ra≥80						
	1						
Inductive head		D Indicator status	5	Function			
	Red (blinking)			Charging			
	Red (bright)				full charge		
	Blue (off)				out of battery		
	Green (bright)			normal work			

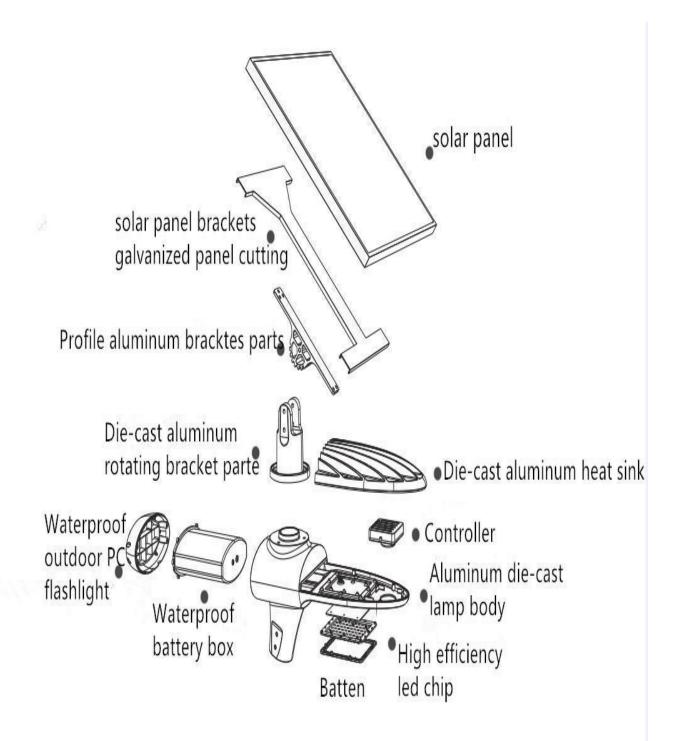
## working principle:

When there is radiation, photovoltaic modules use solar radiation to generate electricity, Convert light energy to electrical energy, Using intelligent controller to charge battery input power, at the same time overcharge the battery over-discharge protection, Intelligent control of lighting and illumination of lighting sources, no manual operation.

### easy dis-assembly and assembly:

Second generation integrated solar street light,Light body without glue, the battery with a special waterproof box fixed, the internal structure of the lamp is concise and reliable. Compared with other non-removable replacement products in the market, each component is easy to maintain and replace, cost effective.All wire rods use waterproof male and female mating connectors which are labeled, anti-error function. Designing intentions, embodies the rigorous and humane lighting custom spirit.





### High efficiency monocrystalline silicon solar panel:

360 degree rotation design: Make up for the inconvenience that traditional integrated solar street lights cannot rotate solar panels at multiple angles, Application to different latitudes and differently oriented roads, adapt to more complex installation environments

Material: High efficiency monocrystalline silicon solar panel, High-efficiency monocrystalline silicon solar panels are widely used in space stations and satellites, Its conversion rate is 20%-30% higher than polysilicon solar panels, max can reach 20%, charging speed is faster.



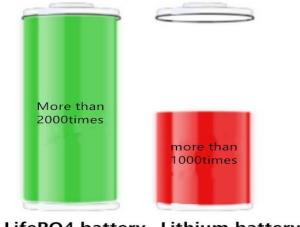
### Lithium battery:

Second generation solar street light lithium battery adopts A1 high-efficiency ternary lithium battery and A1 grade lithium iron phosphate battery, high temperature resistance, high current discharge, lithium battery cycle up to more than 1000 times,LifePO4 battery cycles up to 2000 times.

### Double protection

1. Dual temperature control system, Intelligent controller and lithium battery have temperature control system inside, When the ambient temperature reaches the set limit temperature (60  $^{\circ}$  C), Intelligent controller and lithium battery at the same time power off, to protection lithium battery safety.

2. Each explosion cell of the lithium battery pack is equipped with explosion-proof valve, to prevent the battery from discovering an explosion and placing potential threats out of the way.



LifePO4 battery Lithium battery cycle life cycle life

### Intelligent microwave induction:

The second generation of integrated solar street lights equipped with the latest microwave induction technology. Solved the technical problem that traditional microwave induction is easily disturbed, Sensing distance up to 30 meters. Two to three times that of traditional infrared sensors, Guarantee the effective lighting of street lamps, environmental and energy saving.



# RGB flashlight design:

The second generation of integrated solar street lights with RGB flashlight design, 6 colors switch by turns, adjustable blinking speed, off at will, added different colors to the night road.





## Multi-color selection and breakthrough process:

Second-generation integrated solar street lamp makes breakthrough progress in surface technology, Both standard and black surfaces are imitation marble painted, silver anodized surface, solved the problem of the single color of traditional integrated solar street lamps, make the overall corrosion resistance of the lamp better, can installation on the seaside and any other bad weather place, waterproof IP grade reach up IP67, enjoying better vision with the elegant appearance.



### Remote control instructions:

13. UAV remote control solution, control distance up to 30 meters, bring high corrosion resistance, Four lighting modes can be set, according to the pattern of the season sunshine.



# User manuel for remote controller:

DEMO:No matter day or night, light"on" for 1 minute. Only for test use.

OFF:No matter day or night, light"OFF".

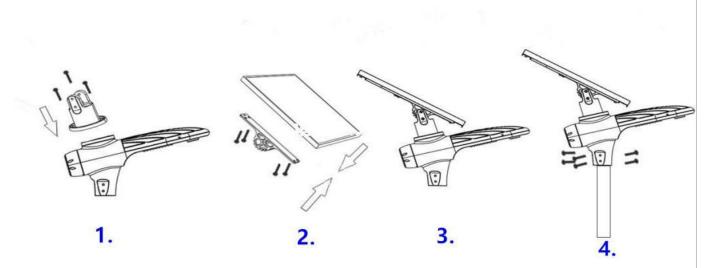
L:At night, 12hrs full power.

T:At night,4hrs full power+8hrs 30%.

M:At night,12hrs motion sensor control.

U At night,4hrs full power+8hrs motion sensor control.

### Installation diagram:



- 1. Determine the direction of the rotating fastener, tighten the screws;
- 2. Secure solar panels and brackets with screws;
- 3. Use 2 longer screws to adjust the anglefixed;
- 4. Mount the lamp into the pole and tighten the screw.

### **Precautions :**

1. When installing solar panels can adjust the optimal light acceptance angle according to the situation in the area .installing the components, try to handle them gently. Do not collide or knock them to avoid damage.

2. Choose an unobstructed place to install the solar panel, dust must be cleaned regularly o

3. All the screws used to install the lamp must be fastened and on the locknut, should be no loosening.

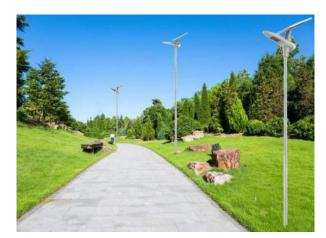
4. Because the lighting time and power are set according to the factory specifications, if lighting time needs to be adjusted, must be notified before place and order.

5. When repairing or replacing light source, lithium battery, controller; model, power, must be the same as the original configuration, we don't suggest replace the light source with different power models, lithium battery box, controller or casual non-professionals to replace and adjust lighting time parameters.

6. Replacing internal components, wiring must be strictly in accordance with the corresponding wiring diagram.the positive and negative poles are clearly separated and reversed.

#### **Application:**

Widely used in branch roads, streets, and factory roads, parks, villages, mountainous areas and remote areas lighting projects, courtyards, schools, squares and other places that need outdoor lighting, help the domestic traditional lighting





upgrade to LED green new energy lighting.

