

The Dolphin Solar Light



Product Name	Dolphin Slar Light
Specification	Integrated 20W LED Solar Light
Date	2022-02-01
Version	REV 1.0



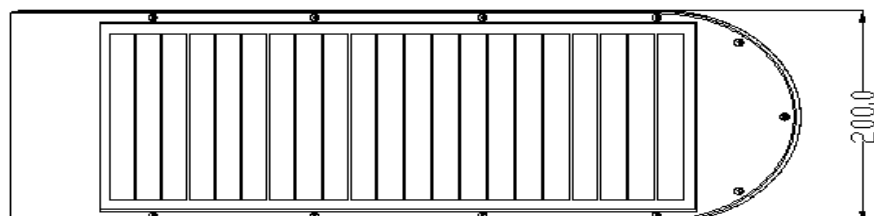
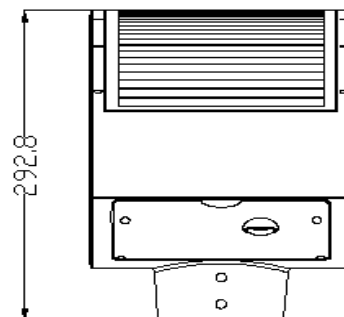
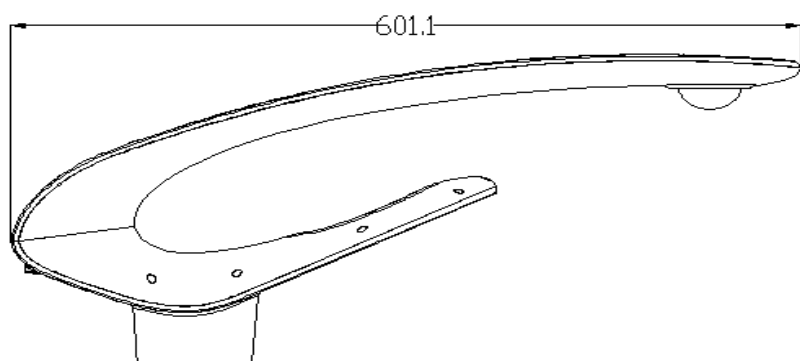
Product Features

- Patent design, includes invention patents, utility model patents, design patents.
- The unique innovative design moulds itself easily into the surrounding environment .
- The curved solar panel reduces dust accumulation and enhances charge efficiency. The laminated tempered glass mono-crystalline silicone photovoltaic ensures improved performance with rugged high strength durability
- LM80 tested SMD2835 chips provide a high lumen output with reliable consistent performance.
- The Polycarbonate lamp diffuser assists in illuminating with a soft low glare elegant light
- Digital PIR sensor accurately detects human movement with a detection angle/ distance: $120^\circ \leq 8\text{mtrs}$.
- The LiFePO4 battery 32700/6.4V/6000mAh, with over-charge and over-discharge protection, safe and durable offering an estimated 2000 charge cycles
- The intelligent charging management system is adopted to optimize the battery usage and improve safety.
- Impact resistant Aluminum lamp casing with IP65 ingress protection.
- The structure is simple and novel, battery is easy to replace, lamp pole diameter is 60mm, standard design.
- Equipped with indicator light for easy maintenance.
- Several different working modes are optional with a remote control, suitable for a variety of applications.
- 5 Year Warranty.



Specifications

Item No.	SolDolph20	LED type	SMD2835*120pcs
Power	20W	Lumen	2000LM
Solar Panel	Curved shape, Mono-crystalline silicone 12W, 10.5V	Battery Pack	LiFePO4 battery,replaceable 32700/6000mAh/6.4V/ 38.4Wh
Beam Angle	120°	PIR sensor Range	Detection angle: 120° Detection area: 4-8M
Charging Time by Solar	8hrs to fully charge (Charging under sunshine of 100000lux)	Lighting Time	Sensor Mode: 5 nights Constant Lighting Mode: 3 nights
Lamp Size	601.1*200.0*292.8 mm	Packing Size	670*310*260 mm
Lamp Fixture Color	Silver+White+Yellow	CCT	• 2800-3200K • 4000-4500K • 5000-5500K • 6200-6700K
IP Class	IP65	Material	Aluminum, PP+ABS+PC housing
Installation Height	2.5-4 mtrs	Remote Distance	12 m
Working Temp	-20C°- 60C°	Storage Temp	0C°- 45C°
Applicable Pole Diameter	φ60mm	Warranty	5 years
Packing	1*solar light, 1*screws bag, 1*user manual		

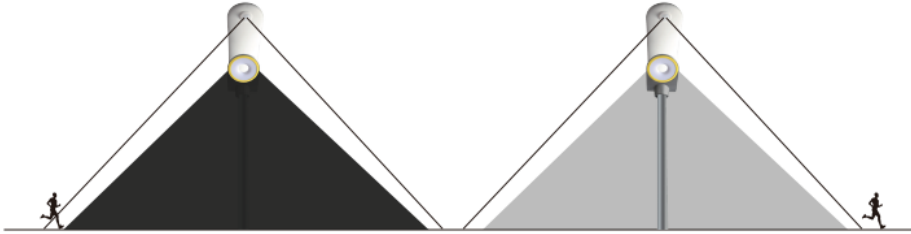


Multifunctional with Different Working Modes

Select Working Modes by Pressing Button on the Lamp

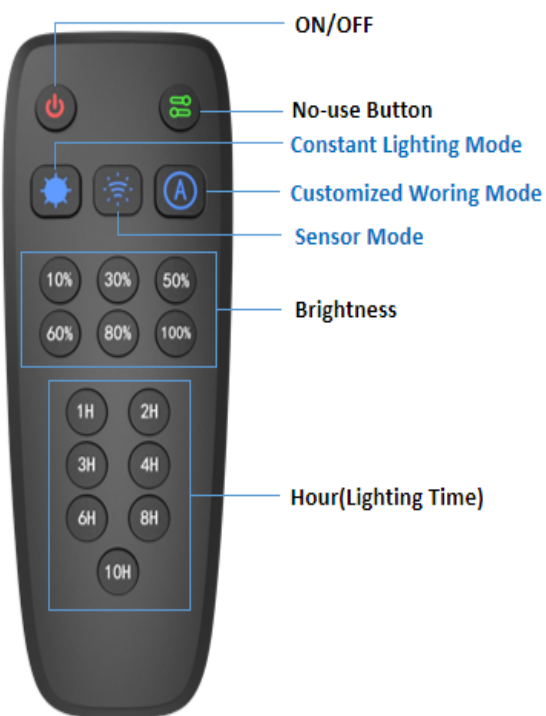
Press lamp button 1st time, it is Sensor Mode .

Lamp automatically turns to 100% brightness when motion is detected in the range of 8mtrs, then dim to 15% brightness after 20 seconds of no motion.



Press lamp button 2nd time, it is Constant Lighting Mode .

Lamp automatically turns on at dusk and remains 100% brightness till it's dawn or power's off.



Operation for Remote Control:

1. Please press ON/OFF button on the lamp firstly to turn on the lamp and activate remote control.
- 2.The lamp has a memory function, kingeep the current working mode until it's reset.
- 3.The Solar panel will keep charging when lamp is turned off by remote control.
4. Only one working mode can be selected at a time.
- 5.Each time the Mode/Brightness/Hour button on the remote control is pressed, the lamp will flash once, indicating the successful change.
- 6.Press the ON/OFF button on the remote control, the lamp reacts as below.

Turn on the button Lamp light on for 3 seconds.
Lamp lights up directly.

Turn off the button and the Lamp flashes 3 times and then off. Lamp flashes 3 times then off.


1. Constant Lighting Mode

Pre-Operation:

1> Under Constant Lighting Mode:

Brightness can be set to: 10%/30%/50%/60%/80%/100%.

Lighting Time can be set vary: 1H/2H/3H/4H/6H/8H/10H.

1. Before resetting the brightness or hour, please make sure to press button  firstly, after which press brightness button first or press hour button first are both ok.

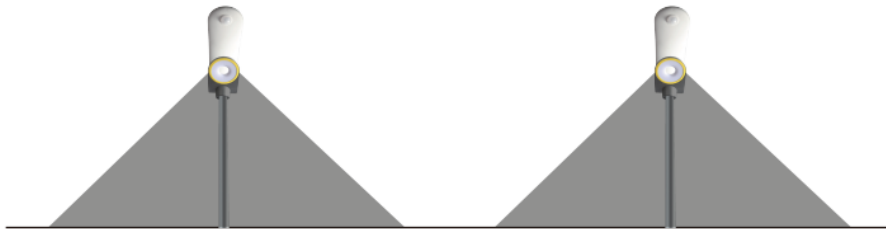


Operation:


Option 1: Press 

It's default setting of Constant Lighting Mode:

Lamp automatically turns on at dusk and remains 50% brightness till it's dawn or power's off.



Option 2: Press  + **Press one of the 6 Brightness buttons**

For example: Press  + Press 60%

The Lamp automatically turns on at dusk and remains 60%*100% brightness till it's dawn or power's off.

Note: Under constant lighting mode, when you only select the brightness, but not lighting time, it will keep lighting on at the chosen brightness till it's dawn or power's off.



Option 3: Press  + **Press one of the 6 Brightness buttons** + **Press one of the 8 Hour buttons**


For example: Press  + Press 60% + Press 4H

The Lamp automatically turns on at dusk and remains 60%*100% brightness for 4 hours, then switches over to default Sensor Mode.

[2] Sensor Mode



Pre-Operation:

1. Under sensor mode, press 60%/80%/100% , setting the motion activated brightness , while light is keeping flashing, press 10%/30%/50%, setting the dim brightness.
2. lighting time buttons are invalid.
2. Press  lamp will switch to Sensor Mode and keep in Sensor Mode for whole night.
- 3> Default dim brightness is 15%, but it can also be set to 10%~100% differently according to customers' request before shipment.

Operation:

Option 1: Press

It's default setting of Sensor Mode:

Lamp automatically turns to 100% brightness when motion is detected in the range of 8mtrs, then dim to 15% brightness after 20 seconds of no motion.



Option 2: Press + Press one of the 6 Brightness buttons



For Example: Press  + Press 60% + Press 10%

Lamp automatically turns to 60%*100% brightness(1200lm, 60%*2000lm) when motion is detected in the range of 8mtrs, then dims to 10%*60%*100% brightness(120lm) after 20 seconds of no motion.



[3] Factory Default Setting Working Mode



- 1>This button  can be set to factory setting work mode.
- 2> Brightness buttons and Hour buttons are invalid under this mode.
- 3.If no customization is required, pre , it works as default setting: Automatically turns on at dusk and remains 100% brightness for 5 hours, then it turns to 50% brightness constant lighting till dawn.

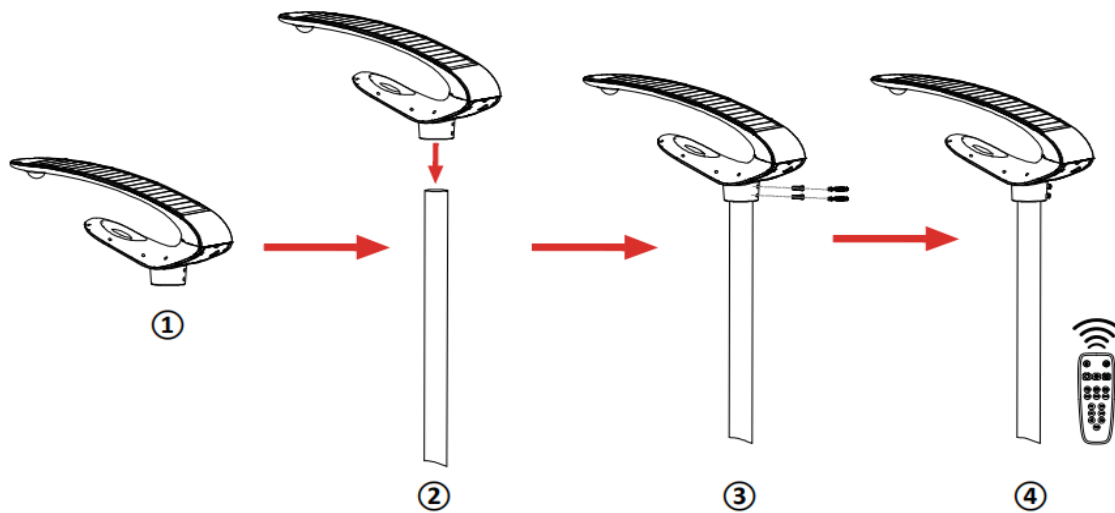


Indicator Functions:

There are 4 colors(green, red, blue, yellow) in the indicator light, each color indicates the working status of different parts of the lamp, by which we can easily know whether each part is functioning correctly or if intervention is required.

Indicator	Indicator Status	Functions
Green Charging Indicator	Flash slowly (Flashes once every 2 seconds, keep repeating)	MPPT charging well as normal.
	Flash fast (Fast flash 3 times then off for 2 seconds, keep repeating)	The output voltage of solar panel is lower than the charging voltage of battery. (Usually because it's in the early morning or solar panel is covered.)
	Off	<ol style="list-style-type: none"> 1.Solar panel is not correctly connected. 2. It's Dark / night. 3. Battery is fully charged. 4. Battery is disconnected. 5. Battery is not charging.
Red Battery Indicator	Off	Battery works normally.
	Flash slowly (Flash 1 time every 2 seconds, keep repeating)	Battery over discharged(Low Power).
	Constant lighting on (Green light OFF at the same time.)	Battery is fully charged.
Blue LED Indicator	Off	LEDs are functioning correctly.
	Fast Flash(Fast flash 3 times then off 2s, keep repeating)	LEDs output over-voltage.
		LEDs short circuit.
		LEDs disconnected.
Yellow PIR Sensor Indicator	Constant lighting on	PIR sensor works normally bu movement detection
	Off	<ul style="list-style-type: none"> • 1. PIR sensor works normally when people leave at night. • It's day time.

Installation:



1. Prepare lamp, accessories and tools, and then turn on the lamp by pressing the button on lamp. (①)
2. Fit the Lamp on a lamp pole with a diameter of 60mm and fix it with 2 screws M8*20MM. (②-③)
3. Use remote control to set desired working mode. (④)

Warnings

1. This is a solar powered lamp, please install it in a location where can get enough sunlight for at least 5 hrs.
2. The on/ off button located on luminaire needs to be switched on in order to function and charge
3. The lamp has a power-off memory function. Before resetting the work mode, it will remain the current mode after turning off or battery replaced.
4. Please note the lighting time may be affected by sunshine duration & weather.
5. Built-in intelligent system is with over-charge, over-discharge and over-voltage protection, safe and durable.
5. Built-in intelligent IC is with over-charge, over-discharge protection.
6. The lamp is equipped with an internal battery pack, which is replaceable.
If any required, please contact the seller for correct new battery pack.
7. It is recommended to charge every six months if store in warehouse to ensure battery performance.
8. Non-professionals please do not disassemble the lamp.
9. Please do not dispose the battery with household garbage.