

GES Product Datasheet : G03 Series

General information

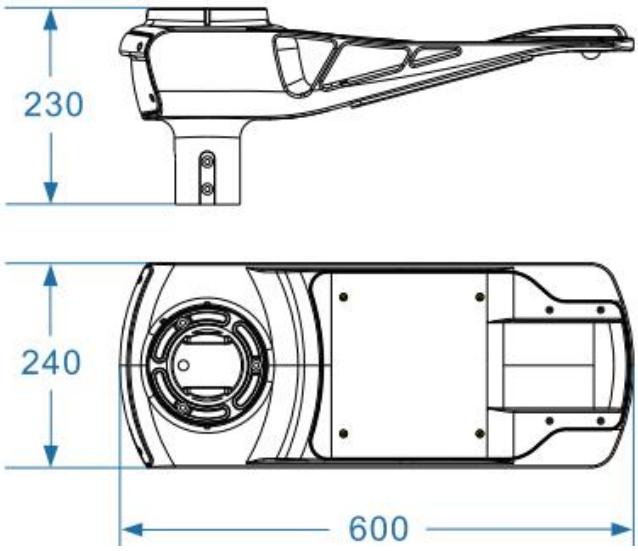
Based on the stable electronic circuit of traditional integrated solar street light and semi-integrated solar street light, this solar light is upgraded by our engineers on mechanical structure, software and hardware. Bidirectional rota-table solar panel, light without mechanical switch, mobile perfectly. Safety, eco-friendly and intelligent application.

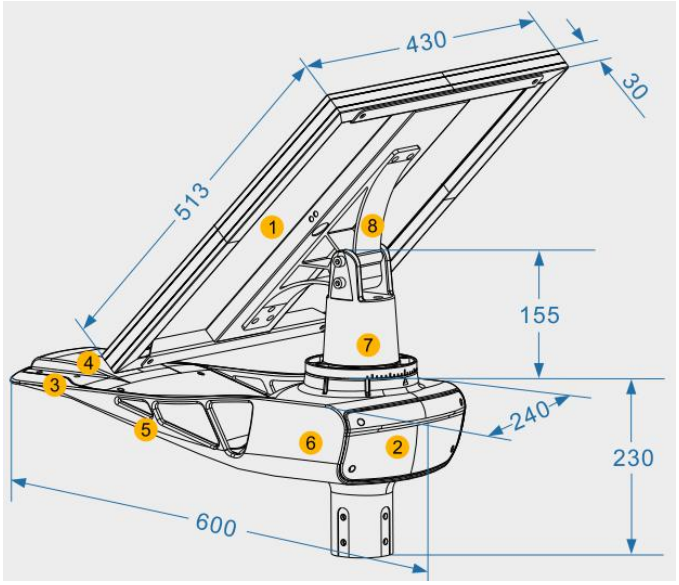
As a outdoor lighting fixture, G03 series are powered by solar energy and designed to offer outstanding performance by utilizing top grade LED beads, integrated optical LED lens, high efficiency mono solar panel, powerful lithium battery, self-developed MPPT controller and Bluetooth APP system.

The solar light is a revolutionary product by utilizing Photovoltaic effect. It is designed to constantly absorb solar energy in daylight and convert to electricity. The intelligent controller can precisely control the charge, discharge and well preserve electricity into the lithium battery. The light will start to illuminate (powered by the lithium battery), once the illuminance of ground reduced to 15lux in nighttime, or solar panel voltage drop to 5V below.
The intelligent controller not only protects the battery from over-charging, over-charging, over-discharging, but also can control the light switch-on, the time of switch-on and optimize the brightness effectively according to the real-time environment.

Product structures

G03 series are manufactured with the exclusive private mold, the material of frame is Aluminium alloy (ADC12, 6063-T5).

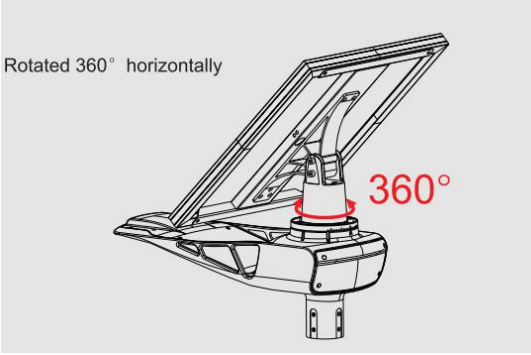


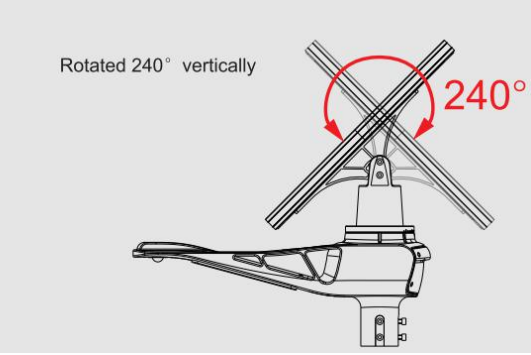


1. Solar panel 2. PIR/Microwave sensor 3. MPPT Controller 4. LED source
5. Lithium battery 6. Horizontal bracket 7. Vertical bracket

Function Characteristic

1. Solar panel can be rotated 360° horizontally and 240° vertically, which will increase the photo-electronic conversion maximum in different areas. (Customized solar panel is available.)



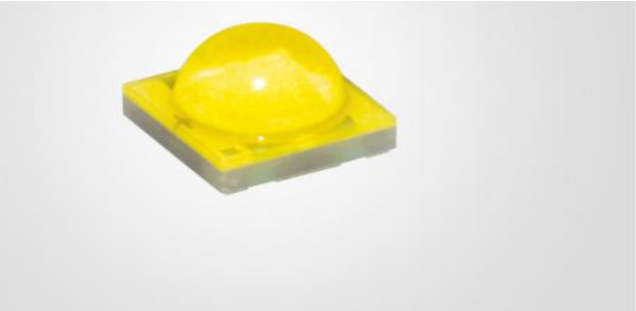


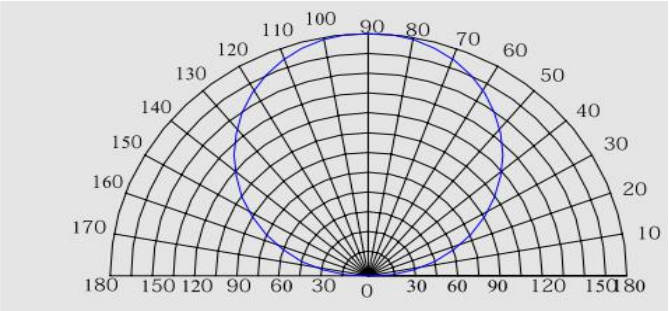
2. The integrated bat-wing lens offers excellent light transmittance and also durable to resist damage.





3. Top grade LED bead: the advanced lighting technology brings a higher Luminous Intensity, lower thermal resistance, longer lifespan, and a luminaire greater ruminate stability.



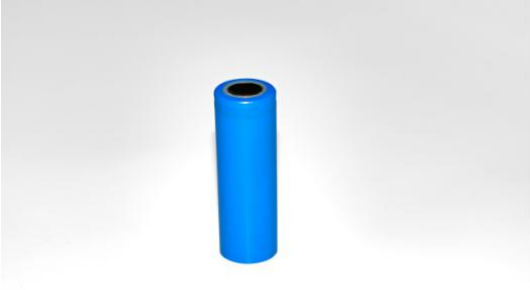


4. Smart MPPT controller developed by our R&D team, maximum power charging.





5. Powerful lithium battery module package, lower self-discharge rate, longer lifespan, stronger depth of discharging, wider working temperature and environment friendly.





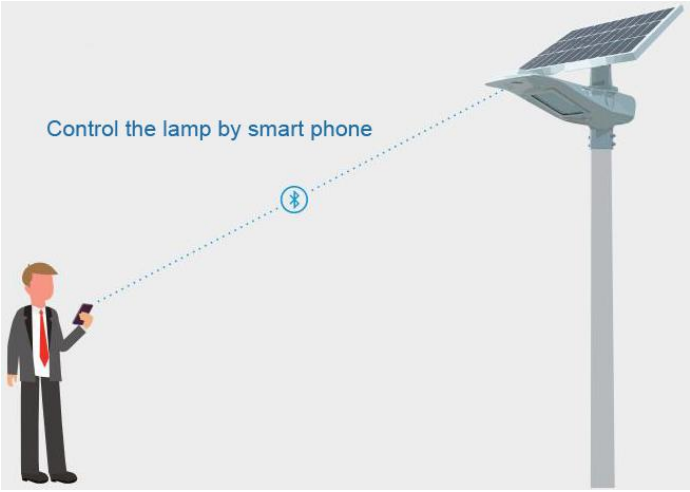
6. PIR/Microwave sensor

Use advanced PIR/Microwave sensor technology, very sensitive and optimize brightness automatically. Max sensing distance is 12m. The build-in Microwave sensor can automatically regulate brightness by identify moving object around,

increasing brightness when object approaches and decrease after object leaves about 20-30s (can be customized). This fluctuation of lighting intensity could preserves solar energy effectively.



7. Mobile APP



1. Turn on/off the lamp
2. Enable to reset needed rainy/cloud backup days (3/5/7 days), so that the lamp will adjust the brightness to meet the requirement.
3. Failure analysis: detect and diagnose faults.
4. Reset needed lamp lighting on postpone time.
5. Loading controller operation data and display on APP page.
6. Enable to recover factory original settings once incorrectly set programs.

8. The Pathway LED Indicator



During nighttime, the pathway LED indicator will be turned on with the street light simultaneously, and could be served for pathway guidance and traffic warning by emitting a red rhythmic light, the red light offers a good penetrability even in the thunderstorm, frog bad weather, effectively prevent the drivers from traffic accidents by indicating the front road status.

Technical parameters

Model	G03-20W	G03-30W	G03-40W	G03-50W
LED power	20W	30W	40W	50W
Solar panel	35W	50W	50W	60W
Battery capacity	159.8WH	213.1WH	239.8WH	319.6WH
Controller	Smart MPPT controller, support Bluetooth APP functions.			
Charge time	6-8 hours			
Operating temperature	-30C° ~60C°			
Sensing distance	<12 meters			
LED beads	30 (SMD-3535	42 (SMD-3535)	42 (SMD-3535)	60 (SMD-3535)
Lumen	2600-2700	3900-4000	5200-5300	6500-6600
Light distribution	Bat wing			
Color temperature	3000-6500K is optional			
Material of frame	Aluminium alloy (ADC12, 6063-T5)			
Light body size	60*24*23cm			
Solar panel size	43*52*3cm	52*46*3cm	52*46*3cm	70*46*3cm
Net weight	12KG	14.8KG	15.1KG	16KG
Advised installation height	3-4 meters	4-5 meters	4-5 meters	5-6 meters
Carton size of lamp	69*33*32cm			
Carton size of panel	51*57*8cm	67*57*8cm	67*57*8cm	83*57*8cm
Gross weight	13.5KG	17.8KG	18KG	19KG
20' GP/40' GP	200 sets/450sets			