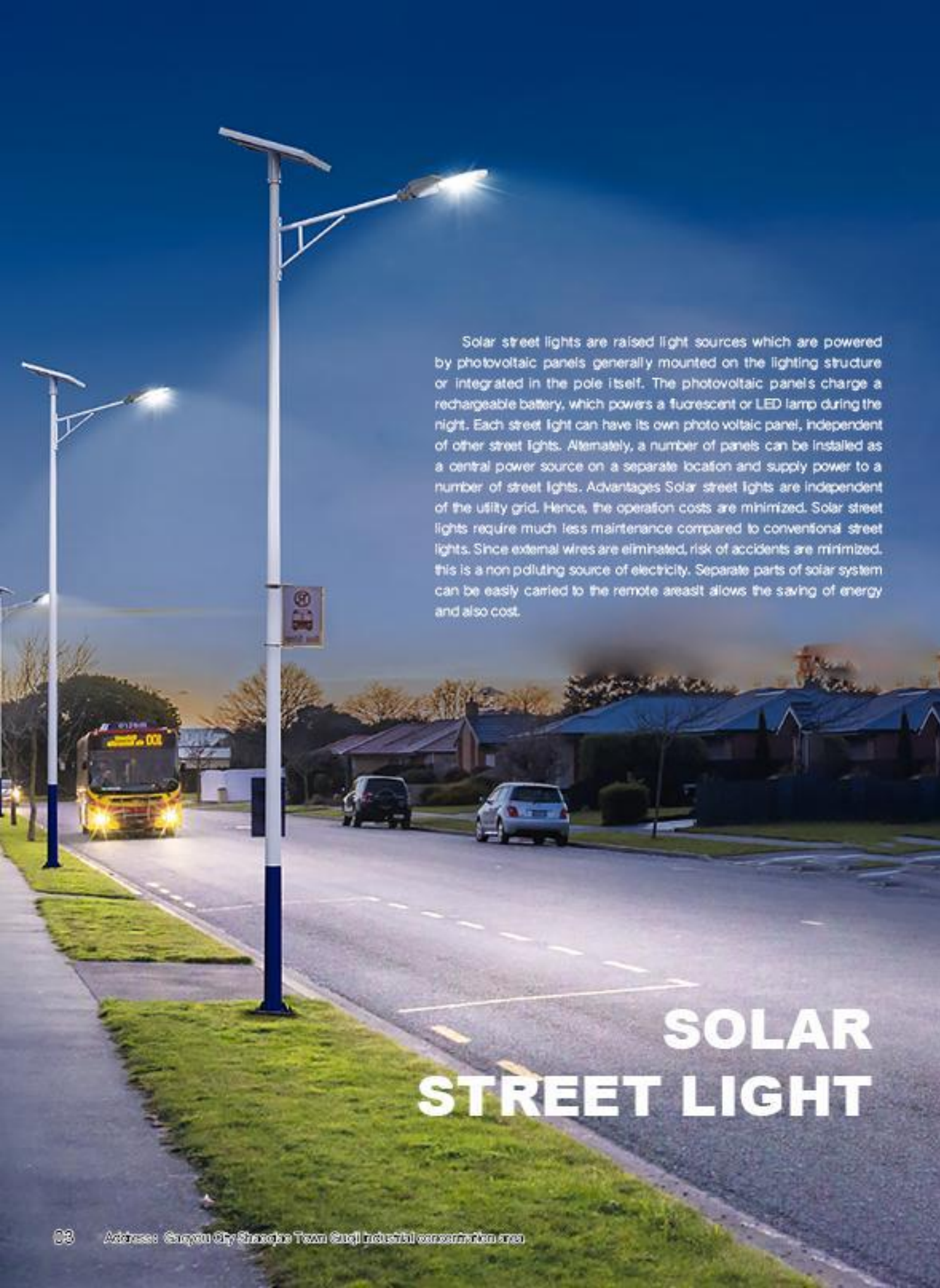




Solar street lights are raised light sources which are powered by photovoltaic panels generally mounted on the lighting structure or integrated in the pole itself. The photovoltaic panels charge a rechargeable battery, which powers a fluorescent or LED lamp during the night. Each street light can have its own photo voltaic panel, independent of other street lights. Alternately, a number of panels can be installed as a central power source on a separate location and supply power to a number of street lights. Advantages Solar street lights are independent of the utility grid. Hence, the operation costs are minimized. Solar street lights require much less maintenance compared to conventional street lights. Since external wires are eliminated, risk of accidents are minimized. This is a non polluting source of electricity. Separate parts of solar system can be easily carried to the remote areast allows the saving of energy and also cost.

SOLAR STREET LIGHT



AUTOMATIC SWITCH

Can be automatically switched according to the sunshine intensity



HUMAN BODY SENSING

The light is on when people come, and the light is dark when people go



INTERVAL DIMMING

Set energy saving in time periods based on different scenarios



SOLAR STREET LIGHT

- Light from the ground height: 5-8m
- Applicable light source: LED
- Solar cells: high conversion rate monocrystalline silicon or polycrystalline silicon solar cell components
- Battery: fully sealed maintenance-free lead-acid batteries
- Control system: microcomputer intelligent control
- Lighting time: 8-10 hours
- Applicable areas: the sunshine time is greater than 2200 hours of the region
- Ambient temperature: -20 °C ~ 60 °C



Monocrystalline panels



High efficiency



Lithium iron phosphate battery



CIP LED



Integrated design



12V/24V



Light up and down



IP65



High Power LED Light Source

- Vacuum piping heat dissipation, fast heat evacuation, long life time
- Lens: a lens for every LED makes the light cover a larger area with more well-proportioned distribution



Internet of things intelligent control integrated machine

- 2 times more rainy day backup, savings in battery
- Waterproof controller, ideal for high humidity and dust areas
- Combined LED driver and controller as one, easy to maintain



Solar Panels

- Adjustable bracket to maximum the solar radiation to save panel
- 5mm thick galvanized steel stamping, strong and anti-corrosion
- Detachable parts, easy transportation, savings in shipping cost



Battery Box

- Waterproof battery box, ideal for high humidity area
- Air-bleed vent design, specially for gel and lead acid battery
- High strength PVC plastic box and wire reinforced PVC conduit



Waterproof Connector

- Insure ZERO MISTAKE connecting by various connectors
- Integrating wiring board, easy installation, savings in installing time
- Waterproof connectors for connections exposed outside



Lithium Battery

- Long service life (1600 cycles @ 30% DOD)
- Better Weather-ability (-20~50)
- Fully sealed construction

SOLAR STREET LIGHT



SOLAR INTEGRATED LAMP

Features of Glory Series

- Glory series light features all designs in one, equipped with double-sided solar modules and powerful lighting, which can maximize the utilization of light energy, including PIR/microwave motion sensors and integrated intelligent controllers entering the design.
- The design of bilateral distribution boards marks them suitable for remote areas and areas without electricity supply.
- Deep cycle batteries are designed for 2000 charging and discharging times.
- Operating time: With the intelligent model enabled, it can operate for 10 days during rainy weather
- The power range is between 30W and 150W.

- The integrated module design is convenient for maintenance and installation.
- The use of light source modules allows for quick replacement and easy operation.
- Intelligent microwave induction, achieving energy-saving and electricity saving by turning on the lights when people come and turning off the lights when people go.
- Power switch design to avoid excessive discharge during transportation.
- Using lithium iron phosphate batteries, safe and pollution-free.
- There are two installation methods: horizontal installation, vertical installation, and adjustable support angle.

Product size

Model	L	M	H	Model	L	M	H
GALAXY-A-01	1025	442	136	GALAXY-B-01	1025	442	136
GALAXY-A-02	1235	442	136	GALAXY-B-02	1235	442	136
GALAXY-A-03	1492	442	136	GALAXY-B-03	1492	442	136



Application scenario

Road lighting / Area lighting / Perimeter lighting



FLEXIBLE SOLAR PANEL

Flexible solar panels are emerging technology products in the world's solar energy industry. It is a solar panel made of resin-coated amorphous silicon as the main photoelectric component layer laid on the bottom plate made of flexible materials. Features: flexible folding, easy to carry. But the conversion efficiency is slightly lower than that of ordinary hard solar panels.



01 Ultra Light
Glass-free, optimized frame, 70% lighter than glass module

02 Glass-Free
Glass-free, PID-free. Safer in transportation and installation

03 Exquisite Appearance
Ribbon-free, All black, No veiling glare

04 High Reliability
Shingling technology, High efficiency, Advanced sealing tech., UV and Water resistance.

05 Transportation
Lightweight and Ultra thin design, save logistic cost

06 Easy Installation
Bracket free, Fast installation with foam rubber tape, Applied to different scenarios





SOLAR GARDEN LIGHT

Solar garden light has the same function as solar street light. The difference mainly comes from specs. Like pole height, LED watt, solar panel capacity, and battery capacity.

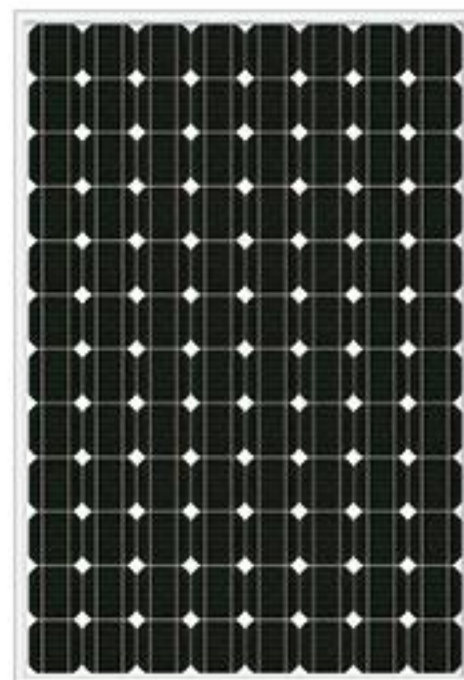
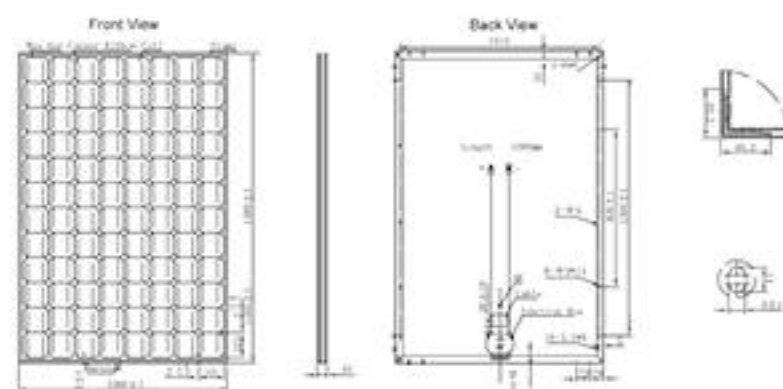
The solar garden lights usually set the height from 3m to 4.5m, usually used for park use, or pedestrian roads. The whole system could be modified from traditional utility power garden lamps.



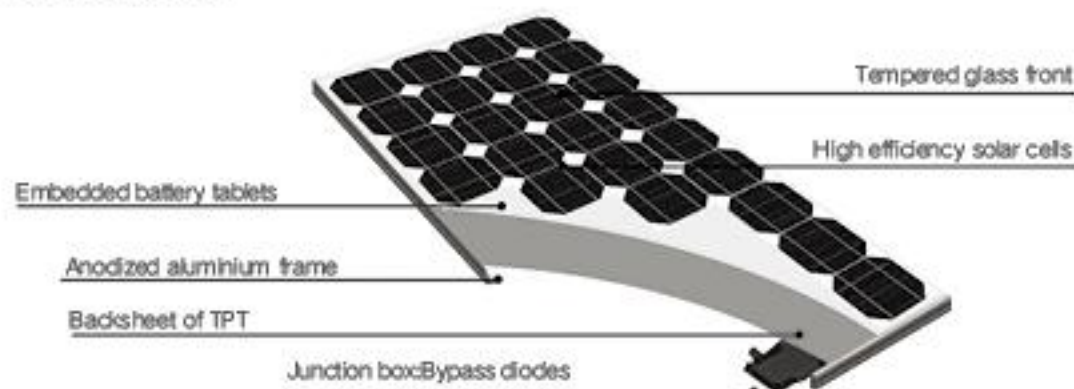
SOLAR PANEL

Monocrystal Silicon Solar Panels

Product size

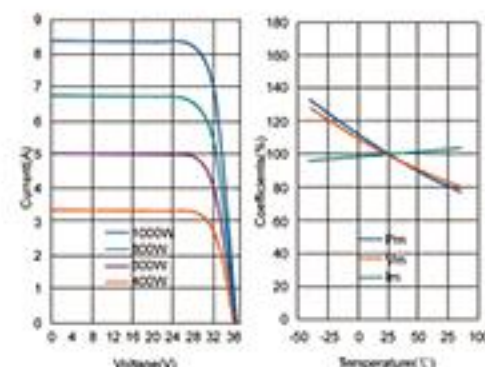


Product breakdown chart



Mechanical parameters

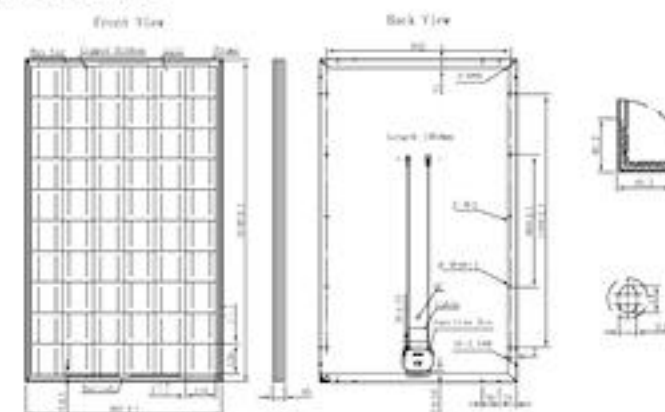
Maximum Surface Load	2400Pa
Hail Impact Test	227 gram ball falling from 1 meter height
Glass Type	High transmittance, low iron content, 3.2mm tempered glass
Frame	Aluminium alloy
Size	1580mm(L) x 1060mm(W) x 45mm(H)
Weight	22.5kgs
Insulation voltage	3600VDCmax
Working Temperature	-40°C +85°C
Storage Temperature	-40°C +85°C
Cable Length	1000mm



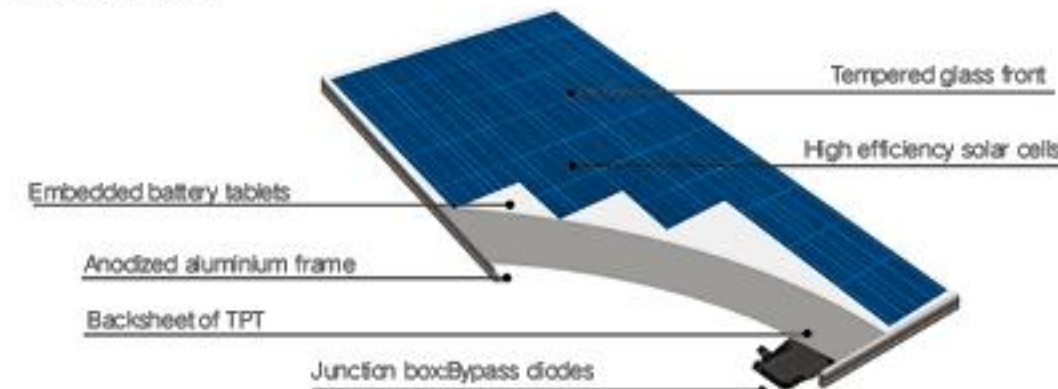
SOLAR PANEL

Polycrystalline silicon solar panels

Product size

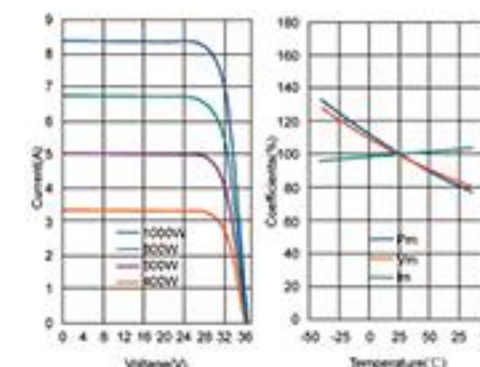


Product breakdown chart



Mechanical parameters

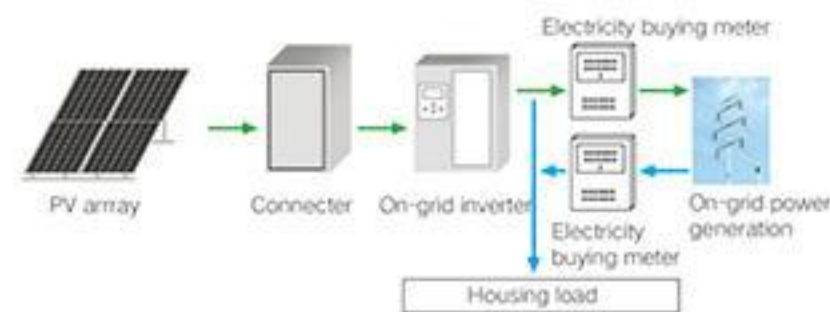
Maximum Surface Load	2400Pa
Hail Impact Test	227 gram ball falling from 1 meter height
Glass Type	High transmittance, low iron content, 3.2mm tempered glass
Frame	Aluminium alloy
Size	1640mm(L) x 992mm(W) x 45mm(H)
Weight	22.5kgs
Insulation voltage	3600VDCmax
Working Temperature	-40°C +85°C
Storage Temperature	-40°C +85°C
Cable Length	1000mm



SOLAR SYSTEM

Solar grid-connected power generation system

Summary of the solar power grid system



The grid-connected solar power generation system converts solar energy into electric energy, and sends electric energy to the grid directly through the grid-connected inverter without going through the battery storage. The development of new and renewable clean energy sources is one of the five technological areas with the most decisive impact on economic development in the 21st century. The full exploitation and utilization of solar energy is the strategic decision of the world's governments for sustainable development of energy, of which solar power generation is the most attention. Solar power generation will be large-scale applications in the long term, and the needs of special applications can be solved in the near future, and photovoltaic power generation will account for 5% to 20% of the world's total power generation by 2030. Solar cell power generation has many unique advantages, such as safe and reliable, no noise, no pollution, energy available everywhere, no regional restrictions, no fuel consumption, no mechanical rotating parts, low failure rate, easy maintenance, can be unattended, short construction cycle, random size, no need to erect transmission lines, can be easily combined with buildings, etc. These advantages are not conventional power generation and other power generation methods.



- ① Photovoltaic modules
- ② Junction box
- ③ Photovoltaic inverter
- ④ Photovoltaic power generation system monitoring
- ⑤ Transformer
- ⑥ Ring network cabinet
- ⑦ The factory electricity
- ⑧ The grid

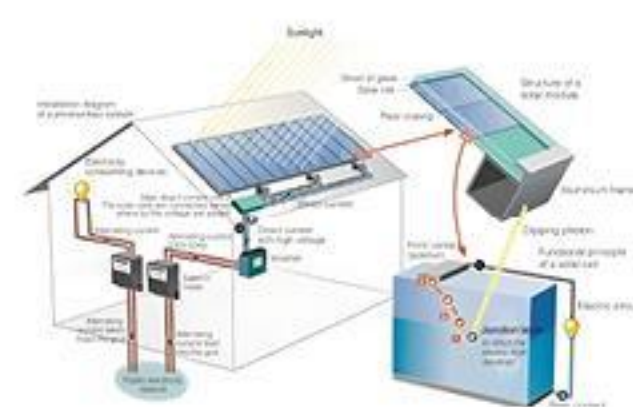
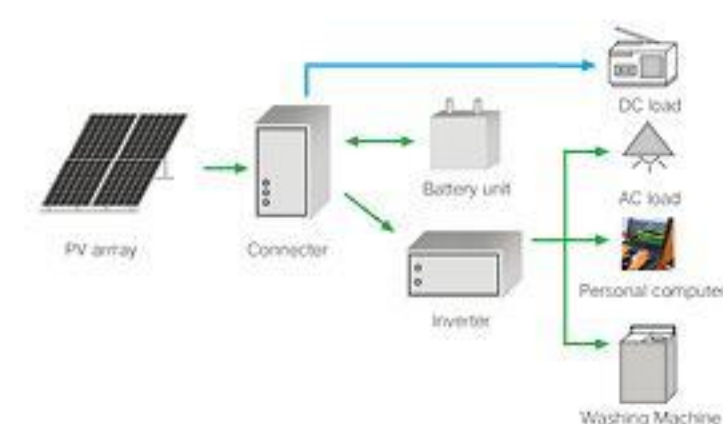
Factory roof power generation system

- One-time investment, stable gain 15% return on investment, 25 years than money bank
- Enjoy state subsidies, high economic benefits, reduce the financial burden on the user, save electricity costs
- Roof insulation effect is good, the sorrow in other conventional heat insulation measures
- Do not take up land for construction, short time limit

SOLAR SYSTEM

Solar off-grid power generation system

Summary of the solar power grid system



Off-grid solar photovoltaic power generation refers to the way that solar photovoltaic power generation is not connected to the grid, which is typically characterized by the need for batteries to store the energy used at night. Off-grid solar photovoltaic power generation in the civil scope is mainly used in remote villages, pastoral areas, islands, plateaus, deserts farmers and herdsmen to provide lighting, watching TV, listening to the radio and other basic household electricity. In the industrial scope, it is mainly used for communication, satellite radio and television relay stations, solar water pumps, beacon lights, oil and gas pipeline cathodic protection, weather stations, road shifts and border posts to provide power. In areas with wind power and small hydropower, can also be composed of hybrid power generation systems, such as wind power generation, solar power generation supplement systems.

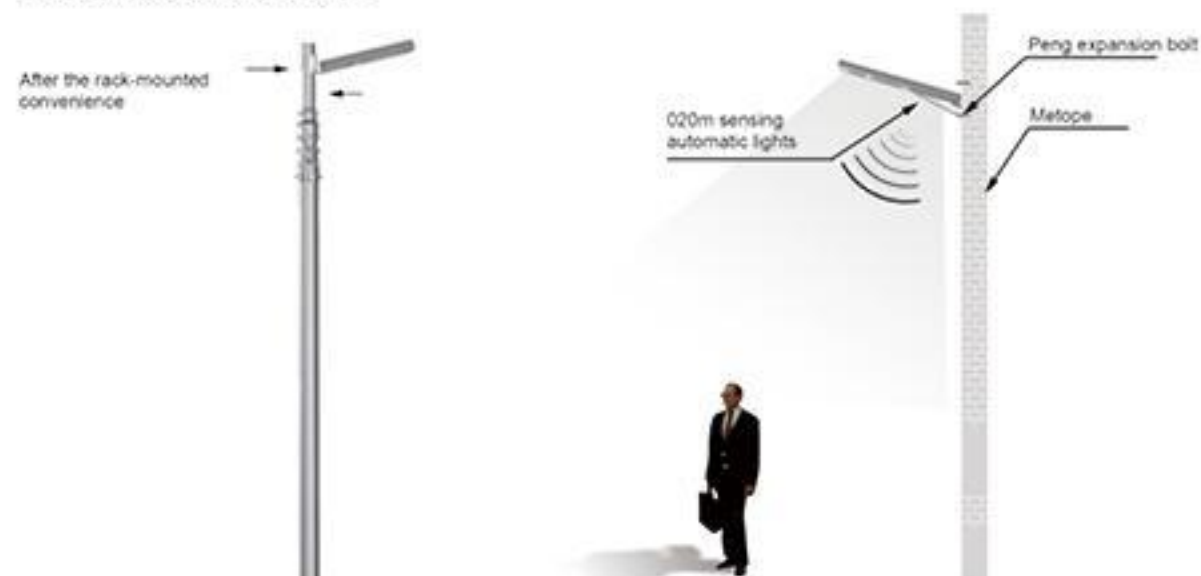


INTEGRATED SOLAR STREET LAMP

Product breakdown chart



Installation structure chart



Hidden radar sensor

Integration design, concise and beautiful, drive radar sensor is accurate, sensitive and fearless environment temperature change

1. active exploration (sensitive and accurate)
2. intelligent microwave sensor (hidden not exposed)
3. according to the power strength, can penetrate the different thickness of the wall
4. (8 - 10 meters) farther, perspective is wide, no dead zone
5. and is not affected by environment, temperature, dust, etc



LED STREET LIGHT POLE

- Water proof and anti rust
- Light source upgrade
- High efficiency heat dissipation
- Short circuit protection
- Engineering quality
- Three year warranty



GARDEN LIGHTS SERIES



Courtyard lighting is widely used in garden area ,culture ,leisure and entertainment plaza ,pedestrian streets ,commercial streets,and residential areas, places such as the carriageway on both sides of the widespread use of decorative and lighting configurations, decorative lighting lighting products. Variety of rod material, the use of flexible light source, structure and morphology in different styles and is the landscaping, lighting, green organic combination of light and shadow, light and art of the perfect crystal.



There are many types of garden lights, the main types are hanging type or post on top type.

Both type forms an elegant look, usually with casting aluminum pole. The luminaries used on garden lights are usually HPS, incandescent bulbs, or LED light.

HIGH MAST LIGHTING SERIES



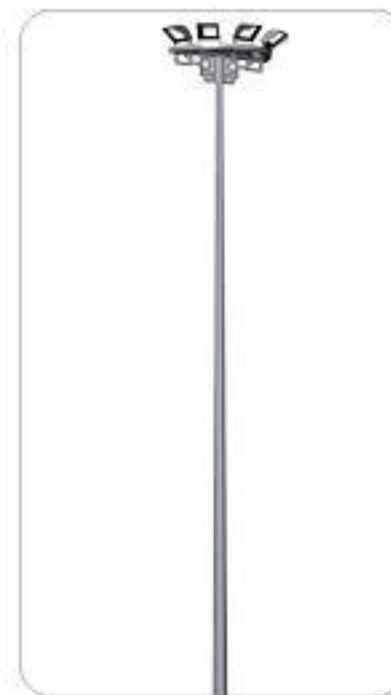
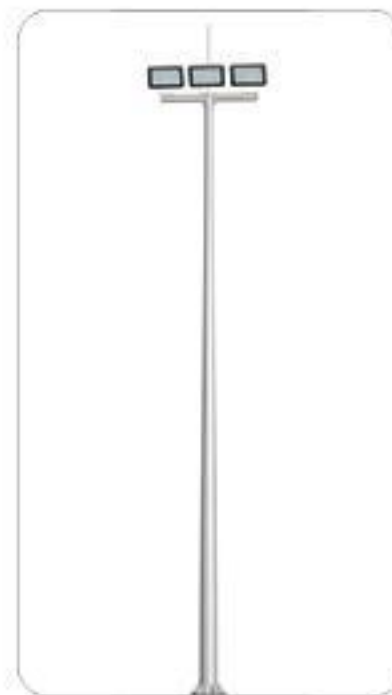
High-mast lighting is a tall pole with lighting attached to the top pointing towards the ground, usually but not always used to light a highway or recreational field. The pole that the lighting is mounted on is generally at least 30 metres (98 ft) tall (under this height it is referred to as conventional lighting system), while the lighting consists of a luminaire ring surrounding the pole with one or several independent lighting fixtures mounted around it. Most units have four, six or eight lights in the ring, with ten, twelve and sixteen lights used in rarer instances. While most high-mast lights are high-pressure sodium, other types such as mercury vapor, metal halide and LED, have also been used. Some units have the lighting surrounded by a circular shield to prevent or reduce light pollution or light trespass from affecting neighborhoods adjacent to the highway.



MID-POLE LIGHTING SERIES



Maintenance of these systems are done by lowering the luminaire ring from the mast head to the base using a winch and motor to the ground or at a height accessible by a cherry picker and located in areas to allow for easier access without disrupting traffic.



TRAFFIC SIGNAL LIGHT

Standard specs:
200mm diameter
300mm diameter
400mm diameter
Lamp material: ABS Plastic, Aluminum
LED bulb: OSRAM
Warranty: 5 years



Traffic lights, also known as traffic signals, traffic lamps, traffic semaphore, signal lights, stop lights, robots (in South Africa), and traffic control signals (in technical parlance), are signaling devices positioned at road intersections, pedestrian crossings, and other locations to control flows of traffic.

TRAFFIC SIGN POLE

Traffic poles are used for hanging traffic lights, or traffic signs.

Material: Q235/S235/S275/SS400/ASTM A36, Q345/S355

Material standard: EN 10025

Pole design standard: EN 40-2 and verified per EN 40-3-2

Welding standard: ASTM A252-1998 or ASTM A714-1999, AWS D1.1

Zinc coating standard: ASTM A123 or A153 (EN ISO 1461)

Finishing standard: ASTM A123 (EN ISO 1461)





GANTRY

Gantries are widely used in highway, urban roads and various roads. It is used for traffic signs, cameras, LED screens, intelligent screens, induction screens and information screens.

Features

speed limit, high limit, guide, limited height monitoring, traffic information publicity

Material: Q235/Q345/ alloy steel

Material standard: EN 10025

Pole design standard: EN 40-2 and verified per EN 40-3-2

Welding standard: ASTM A252-1998 or ASTM A714-1999, AWS D 1.1

Zinc coating standard: ASTM A123 or A153 (EN ISO 1461)

Finishing standard: ASTM A123 (EN ISO 1461)

