



SO-ZMQ-001



SO-ZMQ-002



SO-ZMQ-003



SO-ZMQ-004



SO-ZMQ-005



SO-ZMQ-006



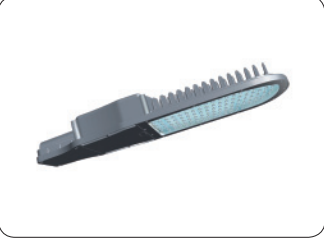
SO-ZMQ-007



SO-ZMQ-008



SO-ZMQ-009



SO-ZMQ-010



SO-ZMQ-011



SO-ZMQ-012



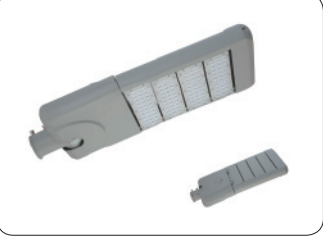
SO-ZMQ-013



SO-ZMQ-014



SO-ZMQ-015



SO-ZMQ-016



SO-ZMQ-017



SO-ZMQ-018



SO-ZMQ-019



SO-ZMQ-020



SO-ZMQ-021



SO-ZMQ-022



SO-ZMQ-023



SO-ZMQ-024

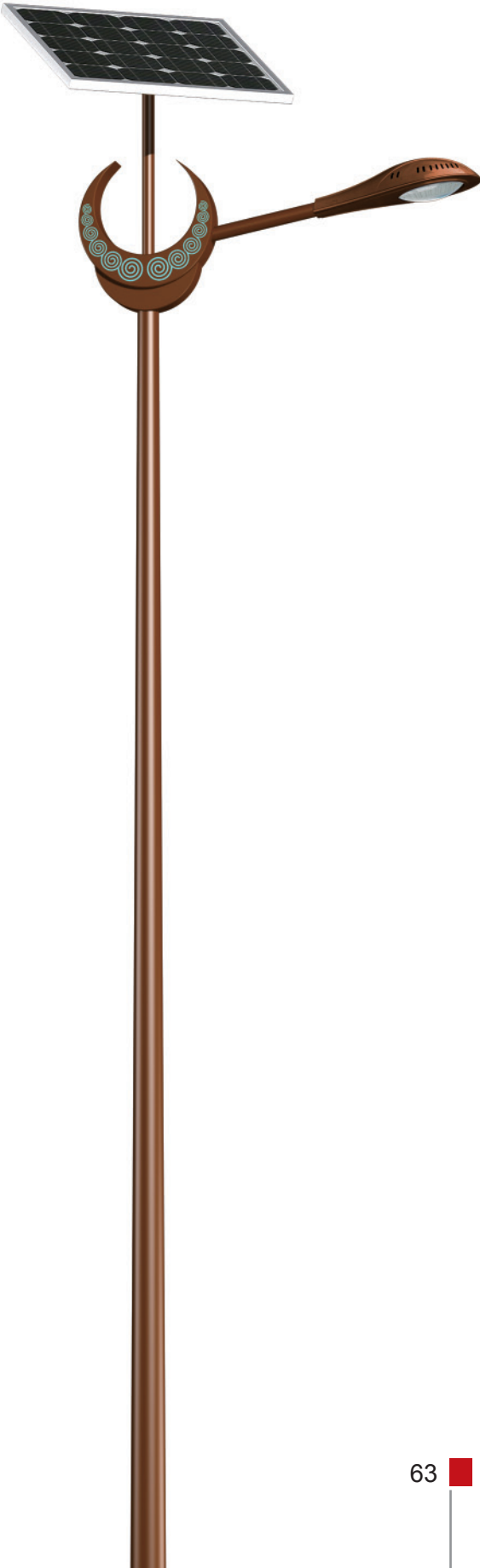


太阳能灯系列

SOLAR LAMPS SERIES

太阳能灯系列照明是近年来照明工程中利用太阳能部分替代传统照明的一种新型光源配置形式，环保、节能等。可适用于道路、庭院、公园、学校、高原及野外无外接电源地区的照明和装饰。改变传统节电节能模式，倡导绿色环保型照明，造福世界造福人类。

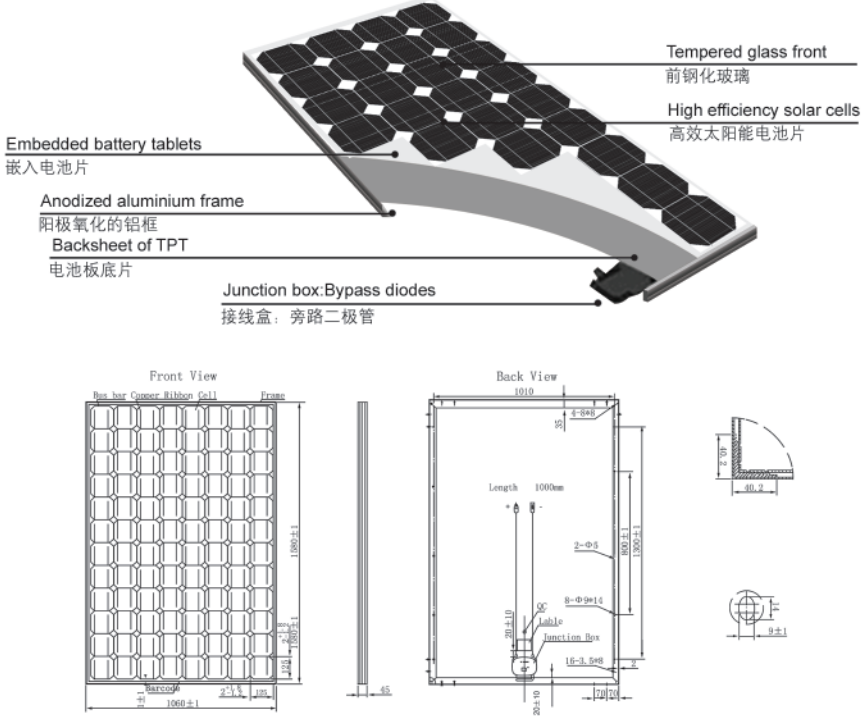
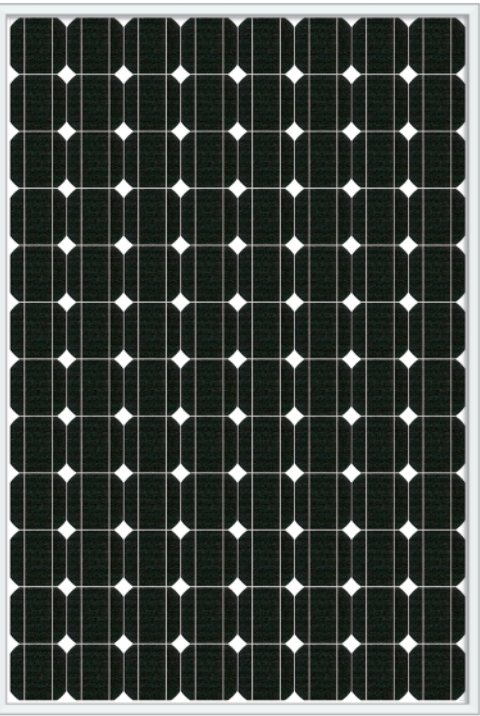
Solar lamp series lighting is in recent years the use of solar lighting engineering parts to replace traditional lighting is a new light source configuration, environmental protection, energy saving etc.. Applicable to road, garden, park, school, plateau and the field without external power supply area lighting and decoration. Change the traditional energy-saving energy-saving mode, to promote green lighting, benefit the world for the benefit of mankind.





MONO-CRYSTALLINE SOLAR PAME

单晶硅太阳能电池板

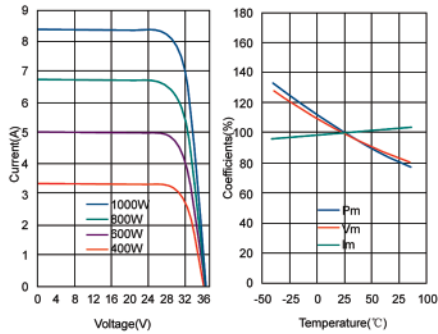


电力参数

型号 Type	BD250M-32	BD255M-32	BD260M-32	BD265M-32	BD270M-32	BD275M-32
峰值功率	250W	255W	260W	265W	270W	275W
功率公差	±3%	±3%	±3%	±3%	±3%	±3%
开路电压	59.9V	60.7V	61.6V	61.9V	62.3V	59.8V
短路电流	5.58A	5.60A	5.63A	5.72A	5.84A	6.16A
峰值电压	47.9V	48.3V	49.2V	49.5V	49.9V	50.3V
峰值电流	5.22A	5.28A	5.29A	5.35A	5.41A	5.47A
电池片转换效率	17.4%	17.6%	18%	18.40%	18.8%	19.00%
组件效率	14.93%	15.23%	15.52%	15.82%	16.12%	16.42%
最大系统电压	1000VDC					
型号	6" (125mm)*6" (125mm) mono 96pcs (8*12)					
旁路二极管	4pcs 9A					
峰值功率温度系数	-0.47%/°C					
开路电压温度系数	-0.38%/°C					
短路电流温度系数	-0.10%/°C					
电池正常工作温度	45°C (±2)					
标准测试条件	辐照度 1000W/M², 光谱分布 AM1.5, 太阳能电池表面温度 25°C					

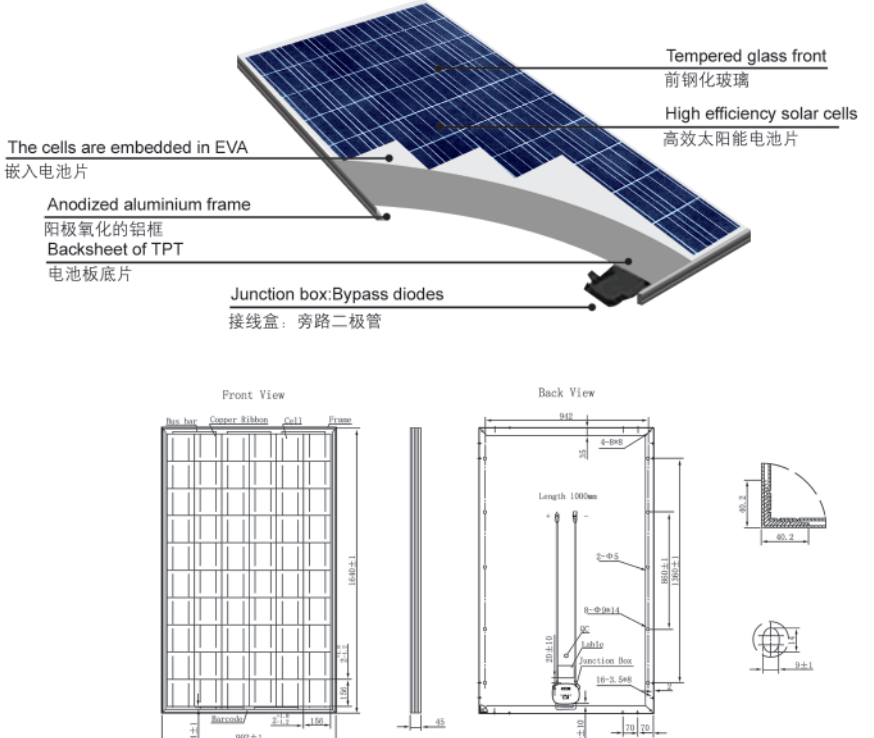
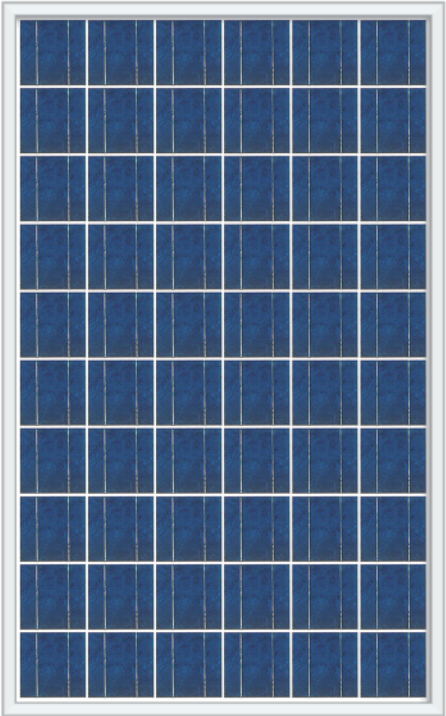
机械参数

表面最大负载	2400Pa
冰雹撞击测试	227 克球从 1 米高处坠落
玻璃类型	透光率高, 含铁量低, 3.2mm 钢化玻璃
边框	铝合金
尺寸	1580mm(长)X1060mm(宽)X45mm(高)
重量	22.5kgs
绝缘电压	3600VDCmax
工作温度	-40°C + 85°C
储存温度	-40°C + 85°C
电缆长度	1000mm



POLY-CRYSTALLINE SOLAR PAME

多晶硅太阳能电池板

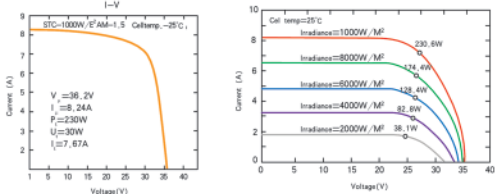


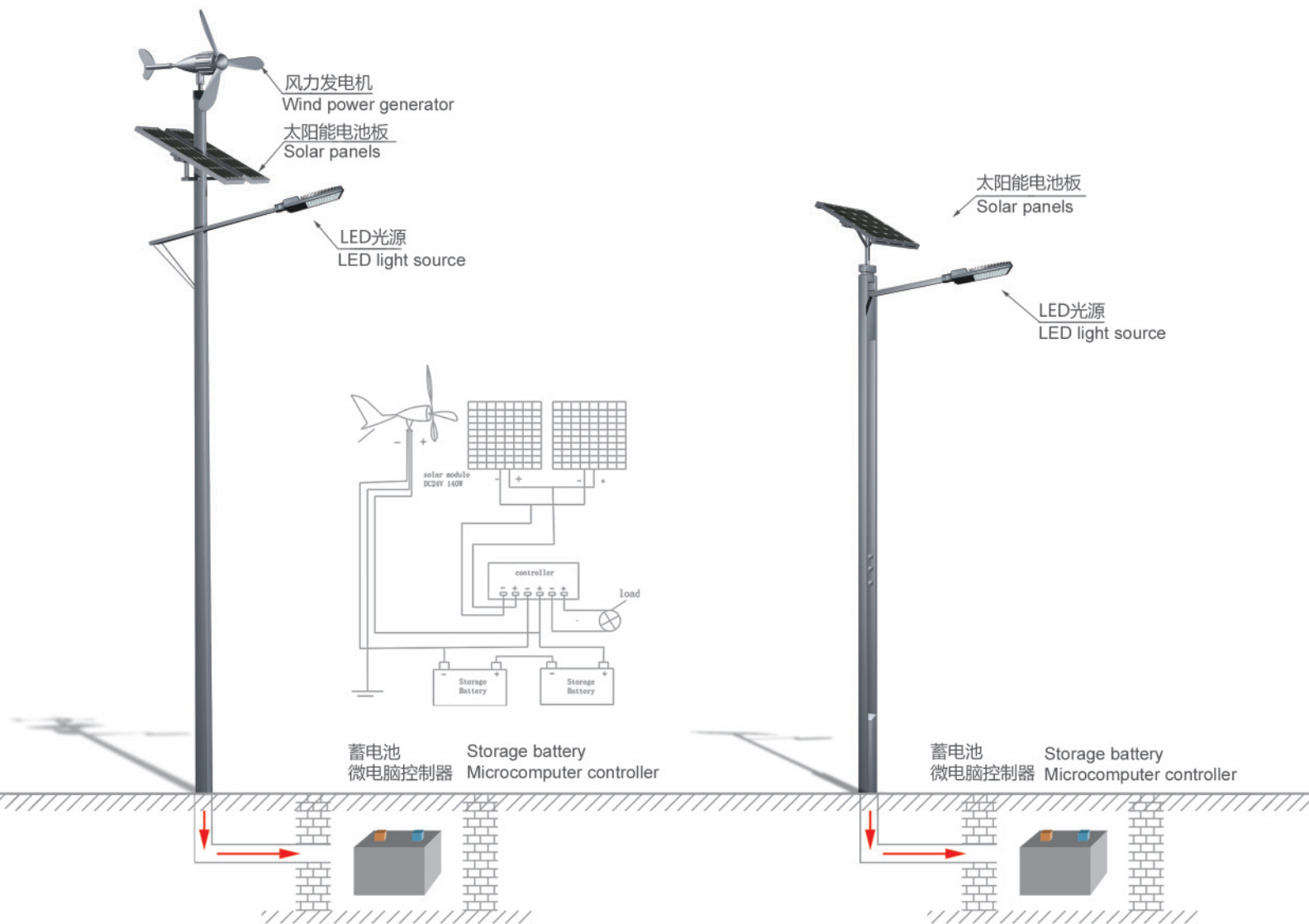
电力参数

型号	BD215P-20	BD220P-20	BD225P-20	BD230P-20	BD235P-20	BD240P-20
峰值功率	215W	220W	225W	230W	235W	240W
功率公差	±3%	±3%	±3%	±3%	±3%	±3%
开路电压	36.5V	37.0V	37.0V	37.0V	37.0V	37.2V
短路电流	8.03A	8.10A	8.16A	8.22A	8.29A	8.33A
峰值电压	29.3V	29.5V	29.6V	29.8V	30.0V	30.2V
峰值电流	7.34A	7.45A	7.60A	7.72A	7.83A	7.95A
电池片转换效率	15.0%	15.4%	15.8%	16.2%	16.4%	16.8%
组件效率	13.21%	13.52%	13.83%	14.14%	14.44%	14.75%
最大系统电压	1000VDC					
型号	6" (156mm)*6" (156mm) poly 60pcs (6*10)					
旁路二极管	3pcs 9A					
峰值功率温度系数	-0.38%/°C					
开路电压温度系数	-0.32%/°C					
短路电流温度系数	-0.08%/°C					
电池正常工作温度	45°C (±2)					
标准测试条件	辐照度 1000W/M², 光谱分布 AM1.5, 太阳能电池表面温度 25°C					

机械参数

表面最大负载	2400Pa
冰雹撞击测试	227 克球从 1 米高处坠落
玻璃类型	透光率高, 含铁量低, 3.2mm 钢化玻璃
边框	铝合金
尺寸	1580mm(长)X1060mm(宽)X45mm(高)
重量	22.5kgs
绝缘电压	3600VDCmax
工作温度	-40°C + 85°C
储存温度	-40°C + 85°C
电缆长度	1000mm





太阳能灯工作原理

白天电池板将太阳能转化成电能通过控制器将电流存入蓄電池，天黑时电池板电压会逐渐降低，当电压小于控制器规定的电压时控制器会使蓄電池供电给负载；当天逐渐变亮时，电池板电压逐渐增大，电压大于控制器规定的电压时控制器会截断蓄電池对负载的供电。这就是太阳能路灯的光控原理。

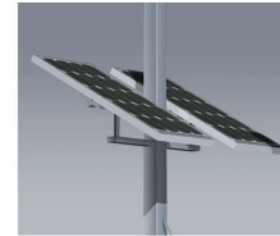
Solar energy light brief introduction:

The solar energy is converted into electricity stored in the battery by the solar panel through the day time. The solar panel voltage will decrease gradually in the dark time. When the solar panel voltage is lower than stipulated voltage, the controller will make the battery supply electricity to load; When the day become bright, the solar panel voltage increase gradually. After the voltage is larger than stipulated voltage, the controller will stop the battery supplying the electricity to load. This is working principle of solar street light.



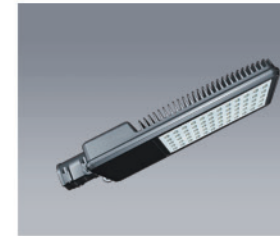
风力发电机

- 微弱风下也能发电的三叶片最优设计；
 - 抑制风扇声的静音运转；
 - 耐强风水平偏向式保护功能
- Wind power generator
- The weak wind can also power the three-leaf optimal design;
 - The inhibition of fan sound silent operation;
 - high Feng Shui Ping bias type protection function.



太阳能电池板

- 将光能高效转换为电能的装置；
 - 太阳能电池板由多个单元复合构成，每个单元利用半导体P-N极产生的光电，将光能转换成电能。
- Solar panels
- energy efficient electric energy converter device;
 - The solar panel is composed of a plurality of unit of each unit, using semiconductor P-N pole photoelectric, light energy is converted into electric energy.●high Feng Shui Ping bias type protection function.



大功率LED光源

- 采用进口高效芯片专利封装，比传统路灯节能60%；
 - 路面均匀度达到0.7以上，照度均匀无光斑现象；
 - 显色性高：还原物体本来颜色，美化城市环境；
 - 环保健康：LED无汞、无紫外线、无辐射、更有利于环境保护和人眼的健康。
- High power LED light source
- Adopt imported high performance chip patent packaging, than the traditional energy-saving lamps60%;
 - pavement evenness achieves 0.7 above, uniform illumination without spot phenomenon;
 - high color: reduction of objects it color, beautify the city environment;
 - The environmental health: LED no mercury, no UV, no radiation, is more conducive to environmental protection and human health.



微电脑控制器

- 防止过充和过放电功能；
 - 时控和光控功能；
 - 强风保护功能
- The microcomputer controller
- preventing overcharge and over discharge;
 - The time control and light control function;
 - The strong wind protection function.



蓄電池

- 采用高效能、免维护蓄電池，可在无风、无日照条件下连续工作5天。
- Storage battery
- Uses the high efficiency, maintenance-free batteries, can be in calm, no day lighting conditions to work for 5 consecutive days.

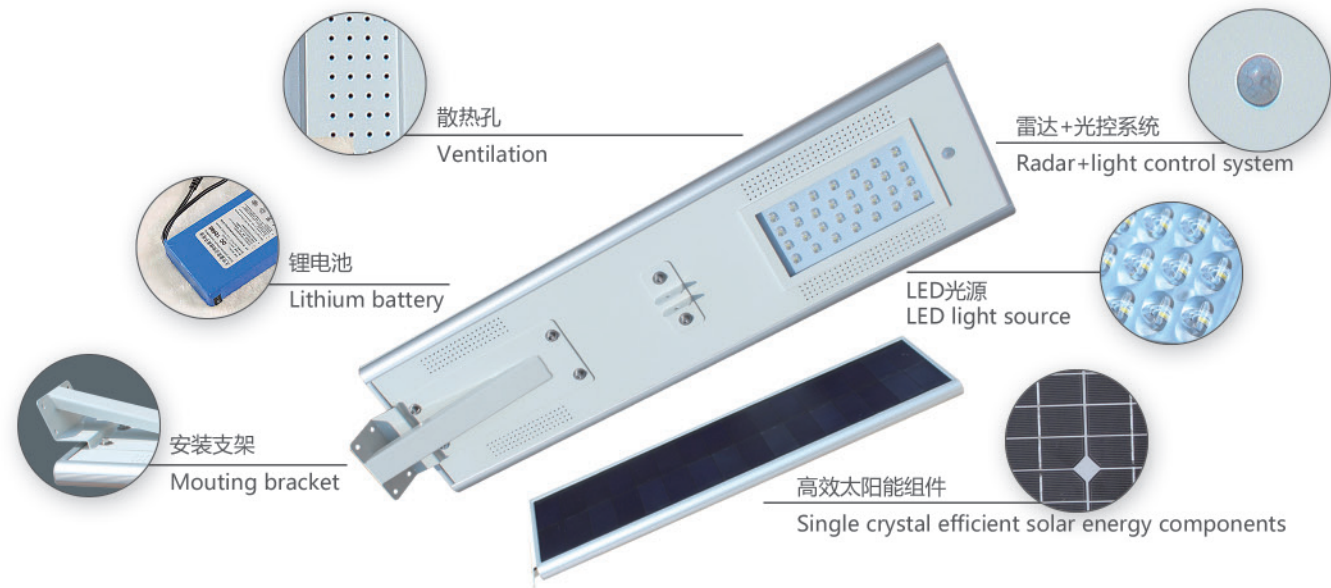


锂电池

- 锂电池体积小、重量轻、优化的智能管理系统，可实时监控和保护锂电池的充、放电电流及单体电压。具有极高的能量密度，超长的循环寿命，良好的温度特性，稳定的安全性能等优点。
- lithium battery
- The intelligent management system with small volume, light weight and optimization can monitor and protect the charging and discharging current and single voltage of lithium battery in real time. It has the advantages of high energy density, long cycle life, good temperature characteristics, stable safety performance, etc,

一体化太阳能

INTEGRATED SOLAR ENERGY



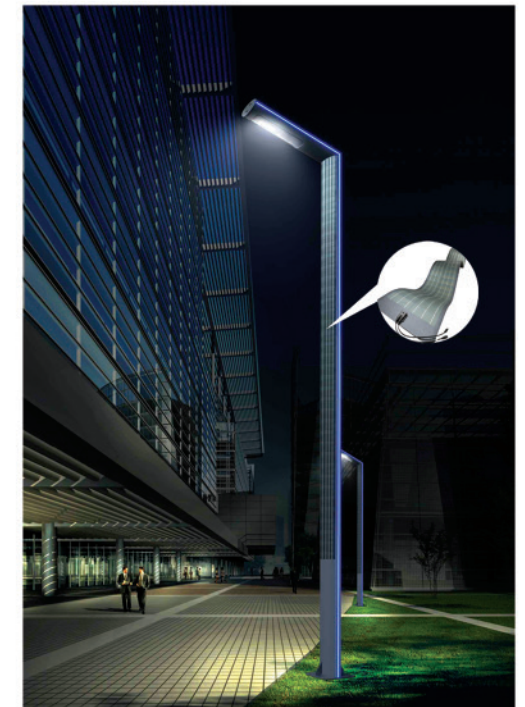
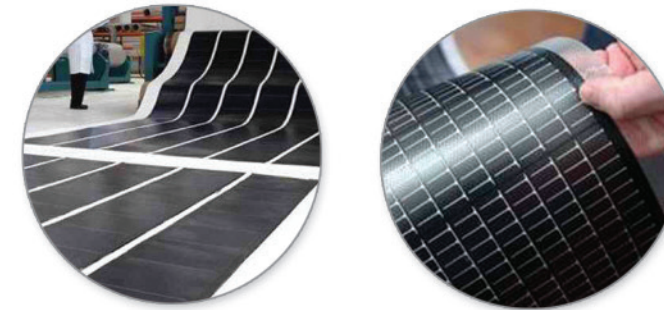
SO-TYN-001

软膜太阳能

SOFT FILM SOLAR ENERGY

● 柔性太阳能路灯是一款造型美观、功能实用、耐候性强的太阳能路灯。
 ● 时尚、现代的外观设计，灯体主要结构采用高压铸铝组成，经过 VCL 喷涂工艺，具有抗冲击、耐腐蚀的优点。
 ● 采用柔性薄膜电池技术，节能环保、高光电转换效率，可在弱光条件下发电，在阴霾气候条件下能连续工作 5-7 天。

● flexible solar street lamp is a solar street lamp with beautiful shape, practical function and strong weather resistance.
 ● fashionable and modern appearance design. The main structure of the lamp body is made of high-pressure cast aluminum. After VCL spraying process, it has the advantages of impact resistance and corrosion resistance.
 ● adopt flexible membrane battery technology, energy saving and environmental protection, high photoelectric conversion efficiency, can generate electricity under low light conditions, and can work continuously for 5-7 days under haze climate conditions.



SO-TYN-002



SO-TYN-003

软膜太阳能

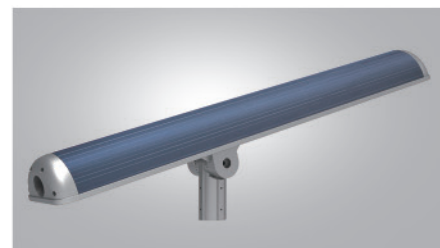
SOFT FILM SOLAR ENERGY



SO-TYN-004



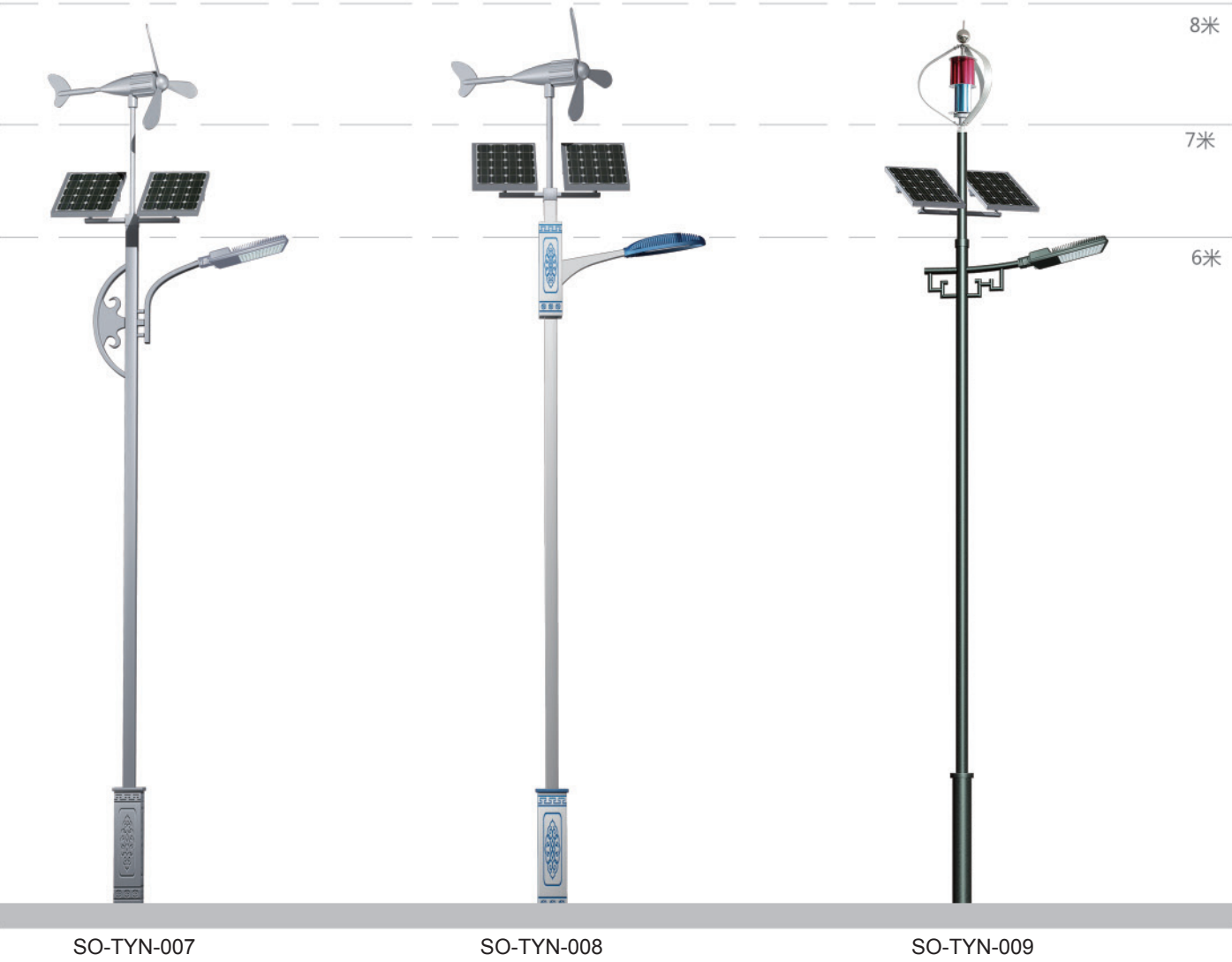
SO-TYN-005





风光互补路灯系列
Wind-solar Street Lamp Series

- 光源离地高度：5-8m
 - 适用光源：LED
 - 太阳能电池：高转换率单晶硅或多晶硅太阳能电池组件
 - 蓄电池：全密封免维护铅酸蓄电池
 - 控制系统：微型电脑智能控制
 - 照明时间：8-10 小时
 - 适用地区：年日照时间大于 2200 小时的地区
 - 环境温度：-20℃ ~60℃
 - 风机：400W
- 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
 - Fan: 400W





SO-TYN-011

太阳能路灯系列 Solar Street Lamp Series

- 光源离地高度：5-8m
- 适用光源：LED
- 太阳能电池：高转换率单晶硅或多晶硅太阳能电池组件
- 蓄电池：全密封免维护铅酸蓄电池
- 控制系统：微型电脑智能控制
- 照明时间：8-10 小时
- 适用地区：年日照时间大于 2200 小时的地区
- 环境温度：-20℃ ~60℃

- 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



SO-TYN-013



SO-TYN-014



SO-TYN-015

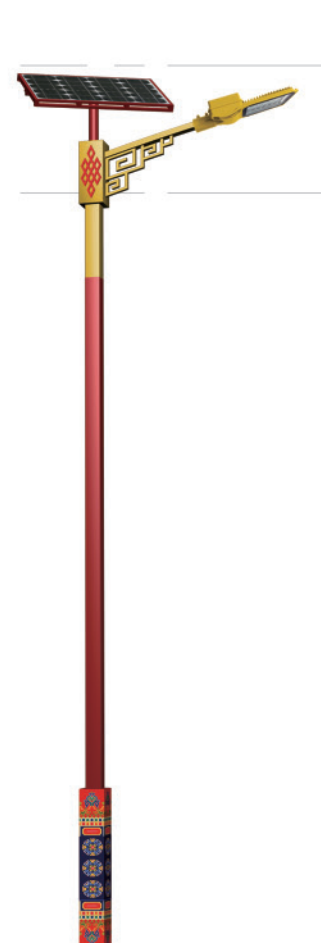
8米



SO-TYN-016



SO-TYN-017



SO-TYN-018

7米

6米