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Wireless Intelligent Solar Street Light

No.1

To be Professional,
and to be the leader

CONTENTS

YANTAI XUTAI NEW ENERGY TECHNOLOGY CO.,LTD Company Profile PAGE01-02

YANTAI XUTAI NEW ENERGY TECHNOLOGY CO.,LTD Company Show PAGE03-06

Wireless Intelligent Integrated Solar LED Street Light Product Advantage PAGE07-12

Wireless Intelligent Integrated Solar LED Street Light Product Introduction PAGE13-16

Wireless Intelligent Integrated Solar LED Garden Light PAGE17-18

PAGE19-26 Wireless Intelligent Integrated Solar LED Street Light

PAGE27-30 Solar Garden Light Series

PAGE31-32 Automatically sunshine tracking Solar System

PAGE33-36 Wireless Intelligent Integrated Solar LED Landscape Light

PAGE37-38 Cases

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Wireless Intelligent Integrated Solar LED Street Light

Company Profile

Established in 2010, Yantai Xutai New Energy Technology Co., Ltd. is a high-tech company specialized in R&D, production, sales of solar photovoltaic lighting products and its supporting solutions (high enterprise no: Gr201637000511). Suntisolar is brand for overseas market.XUTI·NEO, Miaosha and Zhishengyuan are all in the family brands of domestic market. We devote our company to be the leader in solar lighting field.

In the past years, the company has been insisting on taking science and technology as the forerunner, taking innovation as the driving power, and constantly increasing the investment in R&D. The company has a professional product R&D team and comprehensive development capability in product modeling, single chip microcomputer, electronic circuit and mechanical structure. Suntisolar has successfully developed various types of products and obtained a number of national patents. We are approved with CQC, UL, CE, ROHS, SAA, FCC, ISO9001 and ISO 14001 certification. The products are sold to Europe, America, Africa, Southeast Asia etc. and have been highly commented by customers. The company has developed into the world's leading outdoor lighting R&D and manufacturing base.

The company has a sales team specialized in international and domestic market. And a complete customer service system has been established in order to provide quick response and bring value-added service to the customers.
Suntisolar is a high-end lamp brand specially designed for commercial lighting and architectural lighting. It mainly uses intelligent solar energy and LED technology combining with leading industry design and circuit design, and brings the best green energy saving and lighting experience to the customers.
We insist on the quality policy of "Honesty - based, quality survival". Based on the pursuit of excellent quality, we save energy and improve lighting conditions, ease energy crisis and reduce greenhouse effect, improve earth's ecology and benefit the whole mankind. "Novel design, premium products, perfect service" is our sincere and eternal promise to customers.

Company Honor

[Company Culture]

- Natural &Energy-saving
- Humanistic Harmonious
- Innovative Thinking
- Valuable Life

Company Activities

Marketing Dept

International Business Dept

R&D Dept

Chip Workshop

Welding Workshop

Battery Testing

Assembly Line

Production

Testing Room

Warehouse

Finished Product Workshop

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Future Anticipation

2018
Guangya Exhibition in Guangzhou
Dubai Exhibition
Shanghai International Lighting Exhibition
Yangzhou Exhibition
"Invention patent" of automatic sunlight tracking design
The solar energy landscape lamp series is launched
The separate intelligent solar landscape lamp is launched
Beijing Lighting Exhibition

2017
Shortlisted in final round for 6th National Innovation Entrepreneurship Competition
122nd Canton Fair
Guangya Exhibition in Guangzhou
Hongkong International Lighting Exhibition
Japan Photovoltaic Exhibition

2016
Granted as "Technology Center" of Yantai City
Launching of 4th generation solar street light of Z86 series
Shanghai International Lighting Exhibition
Thailand Exhibition
Granted with high-tech enterprise certificate

2015
Launching of 1st solar garden light
Extension of company area to 6, 000 square meters
Guangya Exhibition in Guangzhou
Beijing Lighting Exhibition
Guanghou Photovoltaic Exhibition

2014
Company trademark registration
Launching of 3rd generation solar street light of Z63 series
More than 20 patents granted
Yangzhou Exhibition
Dubai Exhibition
Introduction of battery life tester

2013
Launching of 2nd generation solar street light of C61 series
Beijing Lighting Exhibition
Guangya Exhibition in Guangzhou

2012
Launching of 1st generation solar street light of C51 series
1st fully automatic production line introduced
SMT welding machine introduced

2011
Establishment of R&D laboratory for joint cooperation with institutes in universities
Photoelectric tester introduced

2010
Establishment of company

XUTAI Industrial Communication

- Established cooperation with many agents of provincial level and prefecture level
- Our lamps are sold to 26 provinces and distributed to the prefecture level city.

XUTAI Strategic Cooperation

- Reaching a long-term strategic cooperation agreement with China Lighting Association, Shandong Lighting Association, Korea customer, Thailand customer, Japan customer, Mexico customer ect.
- Our lamps are sold to Europe, Gabon, Nigeria, Africa, India, and many other countries.

XUTAI Exhibition Glance

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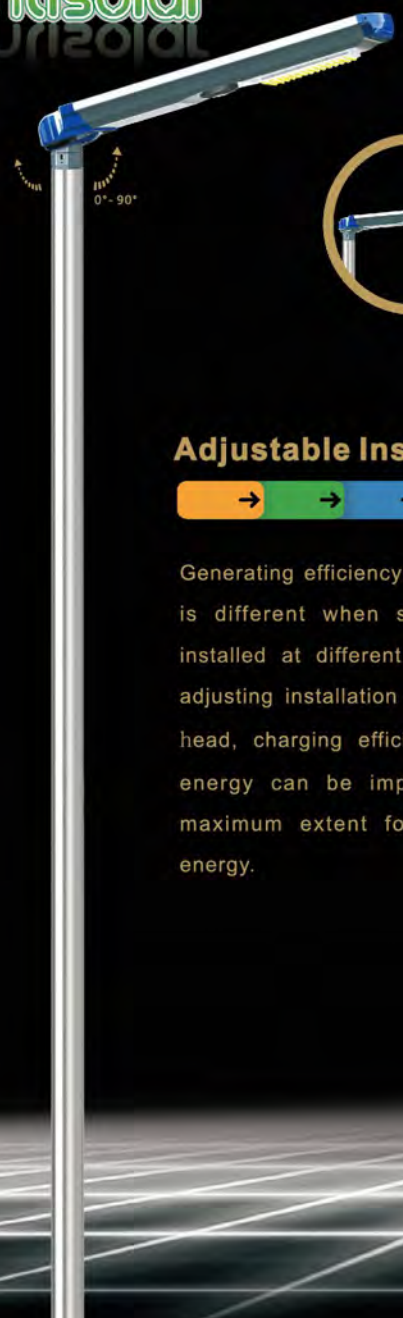


Adjustable Installation Angle

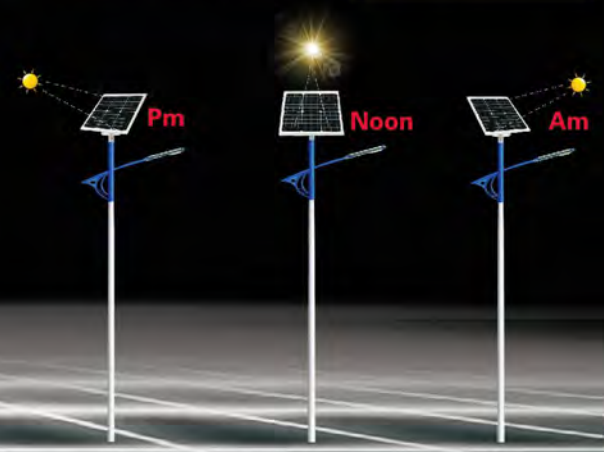
Generating efficiency of solar panel is different when street light is installed at different positions. By adjusting installation angle of lamp head, charging efficiency of solar energy can be improved to the maximum extent for full use of energy.

Automatic

Sunlight Tracking System

Equipped with automatically sunshine tracking system with high precision, solar panel is always kept 90°±2°angle. Compared with traditional solar street light, it improves charging efficiency by more than 50%.

Sunlight Tracking Demonstration of Solar Panel



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Intelligent Self Cleaning
Solar Street Light

CE FC RoHS CQC CCC

Technical Parameter

- Solar panel:Highly-efficient monocrystalline silicon imported
- Battery:Highly-efficient built-in lithium battery
- Emitting angle: Wide-angle
- Transparent materials:ADC12/AL6063
- Light source type:SMD/COB
- Luninous efficiency:160-170lm/W
- Color temperature:3000K-6500K
- Ambient temperature : -30~+70℃
- Light source : LED chip imported from America
- Protection level:IP 65

INTELLIGENT SELF CLEANING
Solar Street Light

Technical Advantage

(1) Clean up the solar panels to ensure that the surface of the solar panels is clean.

(2) Compared with traditional solar street light, the charging efficiency will be doubled.

(3) Extend the working life of solar panels.

(4) Suitable for areas with sandstorm and pollution.

Cases Show

Weak Light Charge

Weak Light Charge
7-10 Rainy Days
Free of Maintenance

Self-developed microcomputer intelligent control system has maximum power point tracking (MPPT) charging mode. Even in the continuous cloudy and rainy days, it can also maximize the absorption of light energy. Compared with normal solar street light, it can improve more than 40 percent generating capacity,so as to maintain the best lighting effect at night and achieve the 365 days continuous work.

Intelligent Remote Control

- Customized working mode based on users'demand.
- Remote data control for the lights switch ON-OFF, working hours and working power, etc.
- Real-time monitoring of working

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— Street Light Monitoring System —

1.Imported LED Chips.
2.Adjustable LED Module angle.
3. Long working life of lithium battery.
4.Professional wide-angle lighting design to meet the technical requirements of street lighting.
5.The surface of lanterns is treated by anti-static spraying, anti-corrosion and anti-salt fog.
6. High-efficiency monocrystalline silicon solar panels.
7.Protection level IP65, internet remote control available.
8. Easy Installation.

>Camera parameters

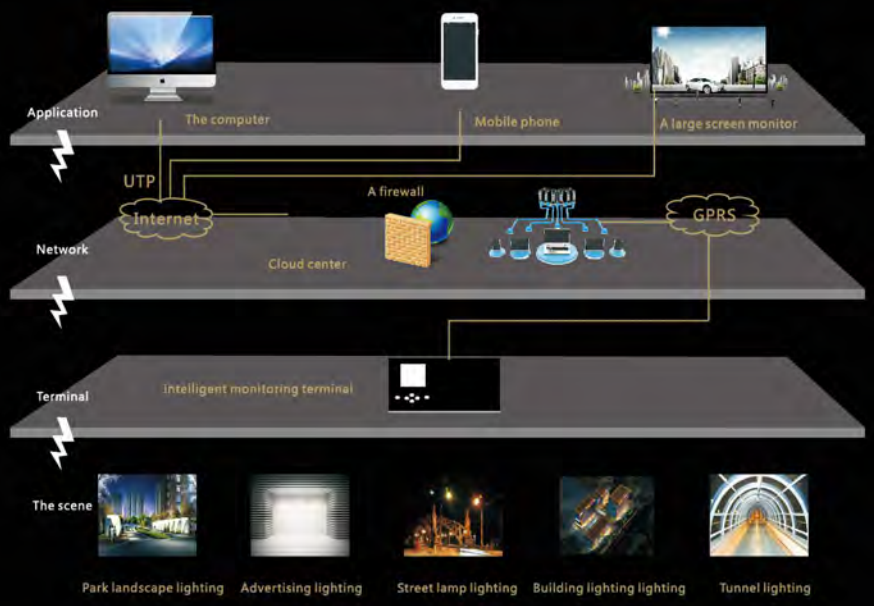
> Lens: 4mm, horizontal shooting angle: 78 degrees (2.8mm, 6mm, 8mm, 12mm optional)
> Shooting Angle Adjustment: Horizontal: 0 ~355, Vertical: 0 ~75.
> Maximum image size: 2560 x 1440
> Video compression standard: H.265
> Storage function: TF card 128G local storage, 5-7 days video record available
> Support protocols: TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, Bonjour
> Power consumption: Max 5W
> Infrared irradiation distance: 10-30 meters
> Protection level: IP67. IK10
> Dimensions (mm): Ø111 *82.4
> Net weight: 460g

Working Principle

Intelligent City Solution

The intelligent street lamp management system uses the combination of the point, line and face, and the combination of time control, light control and hand control. It realizes the "five remote" (remote control, remote measurement, remote communication, remote adjustment, remote viewing) function, controls the lamp brightness, fault detection and electricity information, checks the video of site situation and master the site situation at any time and any place.

Intelligent street lamp management system combines ZigBee wireless communication technology and GPRS network transmission. It is a two-way wireless communication technology with easy installation, low power consumption, strong reliability, long communication distance and low cost.



Functional Characteristics of Intelligent Street Lights :

Risk Reduction of Bad Weather

- To improve road safety under the bad weather.
- There is an integrated brightness sensor in the intelligent solar street light,it will turn on automatically when it is below the designed brightness threshold.

Intelligent Management

- Wireless remote single lamp control can be operated automatically according to the current under the conditon of non-manual control.
- The system can analysis and count energy consumption data of each lamp, each street and each area, and providing big data basis for urban construction planning.

Intelligent Monitoring

- Street lights can feed back their working status wirelessly.
- The system can detect damaged street lights in real time and report failure details to backstage personnel in time.

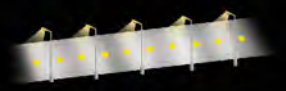
On demand of lighting

- Street lights can work under expected energy-saving mode without requiring site visit of users.
- During the period of low traffic flow,the street light can adjust the lighting brightness according to the energy saving strategy set by the users.

Street lamp intelligent management system can realize fine management, lighting brightness on demand and more flexible lamp control mode. It can control the switch and brightness of each lamp separately and realize the lighting of every other one lamp or one after two lamps.

100% working power during heavy traffic at nightfal

50% working power during lighter traffic at night



Lights work at intervals when there is almost no traffic after midnight

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A leading energy solutions supplier

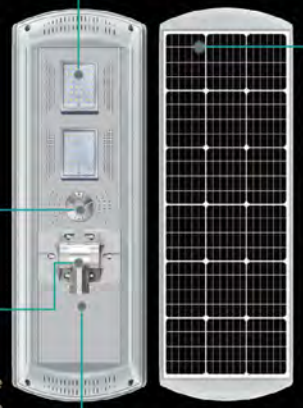
Wireless Intelligent Integrated Solar LED Street Lamp Product introduction

Definition

The wireless intelligent integrated solar LED street lamp is a highly integrated solar product. The simple shape blends the best green energy solution (solar panel, ultra bright semiconductor LED light source, lithium battery). Equipped with intelligent working system, it achieves low power consumption, high brightness, free maintenance, and 8 to 10 years of working life. It is the single innovative product from China in the solar energy field.

The charging and discharging efficiency of controller with built-in replaceable constant current module is up to 98%. Light on-off is automatic by light control, time control and internet control is also available. Protection Level is IP67.

Imported highly efficient LED Chip with luminous efficiency 170-180lm/w works with long life. LED Module angle is adjustable -15°~+15° with low dazzle, IP67. The adjustable angle guarantees best illumination effect.



Highly efficient monocrystalline silicon solar panel with imported silicon wafer is adopted, 18% exchange rate and over 20 years working life.

Installing base angle is adjustable from 0 to 90 degrees. It uses Japanese ADC12 aluminum, also known as No.12 Aluminum, Al-Si-Cu series aluminum alloy, which is a kind of pressure die casting aluminum alloy, oxidative resistant even exposed to air long term, good performance of corrosion and impact resistance, it is the ideal load bearing part for luminaries.

Battery module is replaceable, built-in automobile power lithium ion battery module is connected in series and multiple circuit by several consistent Grade A lithium battery cells. Over charging and discharging is protected by circuit board, plus protection box with IP65 level, the working life of battery is over 8 years.

Product Features

*Integrated Design-Integrated design of solar panel, lamp body, battery, LED module and controller, without embedded pipe fitting, easy installation and labor cost saving 90%;

*High Efficiency Design-Adopt high efficiency lithium battery, providing a service life of more than 10 years; Solar panels are made of high efficiency monocrystal silicon,with a life span of more than 25 years.

* Intelligent Design-It has independent innovation intelligent controller, automatic lifting system, remote control and intelligent monitoring system.

*Convenient Design - Working period and working power can be adjusted via hand - held offline control, and real-time status of system can be automatically detected.

*Multi-Angle Design-Angle of LED light source can be adjusted for best lighting effect. Installation angle of the light can be adjusted to collect solar energy at maximum extent.

* Humanized Design-LED light has no UV or IR Radiation, protecting human health.

* Fine Design-Anti-static spraying is adopted for surface treatment of the light to guarantee salt spray corrosion resistance and aging resistance.

*Energy-Saving Design-The light takes solar energy as energy sources which is inexhaustible .

* Resistance-Free Design-Waterproof plugs granted with 3C certificate are adopted for internal connection cables without generating any resistance while ensuring quality and safety.

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Model
XT595SETY15/20-J/D5 **15/20W**

Solar Photovoltaic/Electricity

Wireless Intelligent Integrated Solar LED Garden Light

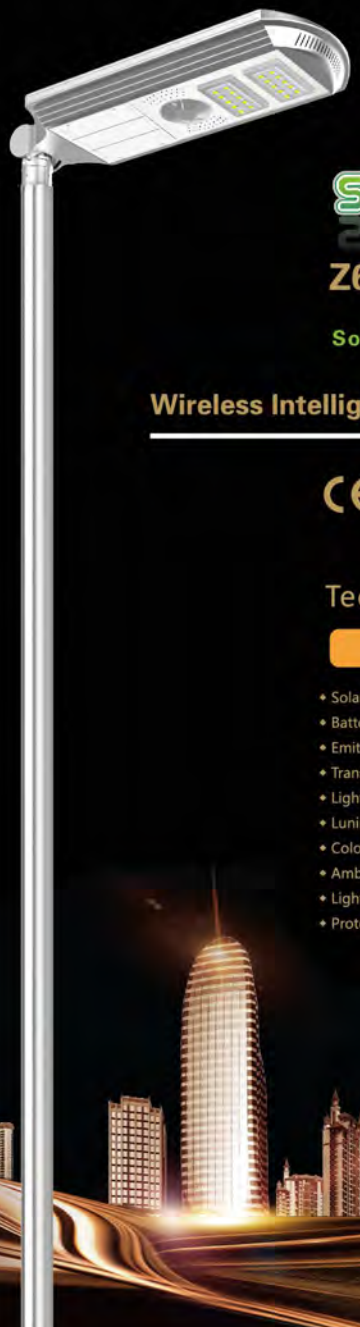
CE FC RoHS CQC CCC

Technical parameter

- Solar panel:Highly-effcient monocrystalline silicon imported
- Battery:Highly-effcient built-in lithium battery
- Emitting angle: C0~180 160°/T90~270 85°
- Transparent materials : ADC12/AL6063
- Light source type:COB/SMD
- Luninous efficiency:160-170lm/W
- Color temperature:3000K-6500K
- Ambient temperature : -30~+70℃
- Light source:LED chip imported from America
- Protection level:IP 65

Note: The actual product shall prevail

Cases Show



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Z66 Series>>> 20/30/40W

Solar Photovoltaic/Electricity

Wireless Intelligent Integrated Solar LED Street Light

CE FC RoHS CQC CCC

Technical parameter

- Solar panel:Highly-efficient monocrystalline silicon imported
- Battery:Highly-efficient built-in lithium battery
- Emitting angle: C0~180 160°/T90~270 85°
- Transparent materials:ADC12/AL6063
- Light source type:SMD/COB
- Luninous efficiency:160-170lm/W
- Color temperature:3000K-6500K
- Ambient temperature : -30~+70℃
- Light source : LED chip imported from America
- Protection level:IP 65

Note: The actual product shall prevail

Cases Show

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S86 Series>>> 30/40W

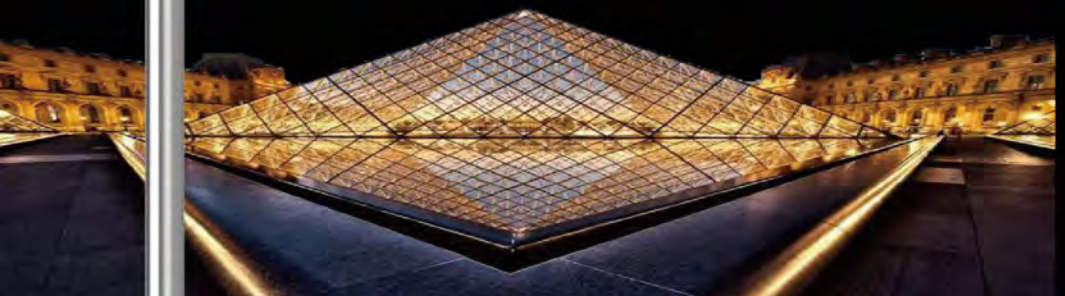
Solar Photovoltaic/Electricity

Wireless Intelligent Integrated Solar LED Street Light

CE FC RoHS CQC CCC

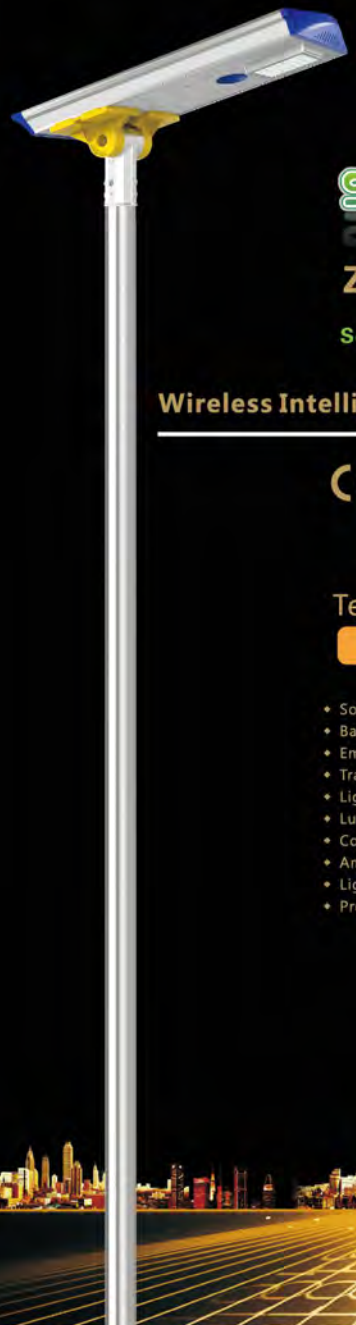
Technical parameter

- Solar panel:Highly-efficient monocrystalline silicon imported
- Battery:Highly-efficient built-in lithium battery
- Emitting angle: C0~180 160°/T90~270 85°
- Transparent materials:ADC12/AL6063
- Light source type:SMD
- Luninous efficiency:160-170lm/W
- Color temperature:3000K-6500K
- Ambient temperature : -30~+70℃
- Light source : LED chip imported from America
- Protection level:IP 65



Note: The actual product shall prevail

Cases Show



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Z86 Series>>> 40/50/60/70/80W

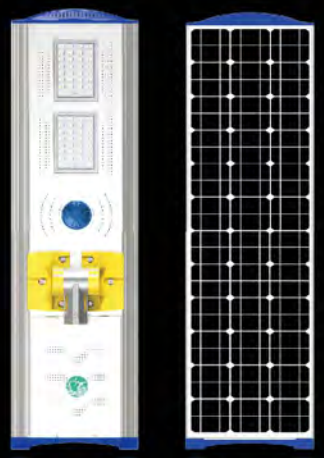
Solar Photovoltaic/Electricity

Wireless Intelligent Integrated Solar LED Street Light

CE FC RoHS CQC CCC

Technical parameter

- Solar panel:Highly-effcient monocrystalline silicon imported
- Battery:Highly-efficient built-in lithium battery
- Emitting angle: C0~180 160°/T90~270 85°
- Transparent materials:ADC12/AL6063
- Light source type:SMD/COB
- Luninous efficiency:160-170lm/W
- Color temperature:3000K-6500K
- Ambient temperature : -30~+70℃
- Light source : LED chip imported from America
- Protection level : IP 65



Note: The actual product shall prevail

Cases Show

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Z88 Series>>> 80W/100W/120W

Solar Photovoltaic/Electricity

Wireless Intelligent Integrated Solar LED Street Light

CE FC RoHS CQC CCC

Tecehnical parameter

- Solar panel:Highly-efficient monocrystalline silicon
- Battery:Grade A Lithium Ion Battery of model 32650
- Emitting angle: C0~180 150°/ T90~270 80°
- Transparent materials:ADC12/AL6063
- Light source type:SMD/COB
- Luninous efficiency:160-170lm/W
- Color temperature:3000K-6500K
- Ambient temperature : -30~+70℃
- Light source : LED chip imported from America
- Protection level:IP 65

Note: The actual product shall prevail

Cases Show

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Solar Garden Light Series

SIMPLE INSTALLATION, CONVENIENT LIFE

Solar Lawn Light

XT-CPD2206/2205/2204

Technical parameter

- LED chip : 2835
- Module quantity (pcs) : 1
- Power (W) : 2W
- Solar panel (W) : 5V/4.5W
- Battery (Ah) : 3.2V/7,000mAh
- Control mode : Light Control+Time Control
- Charging time (1,000W/m2) : 6h
- Material : Aluminium+ PC
- Dominant hue : Black
- Beam angle (°) : C0~180 120°/ T90~270 120°
- Protection level : IP65

XT-CPD4105/4104/4103

Technical parameter

- LED chip : 2835
- Module quantity (pcs) : 1
- Power (W) : 2W
- Solar panel (W) : 5V/4.5W
- Battery (Ah) : 3.2V/7,000mAh
- Control mode : Light Control+Time Control
- Charging time (1,000W/m2) : 6h
- Material : Aluminium+ PC
- Dominant hue : Black
- Beam angle (°) : C0~180 120°/ T90~270 120°
- Protection level : IP65

XT-CPD5006/5005/5004

Technical parameter

- LED chip : 2835
- Module quantity (pcs) : 1
- Power (W) : 2W
- Solar panel (W) : 5V/5W
- Battery (Ah) : 3.2V/4,000mAh
- Control mode : Light Control+Time Control
- Charging time (1,000W/m2) : 6h
- Material : Aluminium+ PC
- Dominant hue : Black
- Beam angle (°) : C0~180 120°/ T90~270 120°
- Protection level : IP65

XT-CPD4805/4804

Technical parameter

- LED chip : 2835
- Module quantity (pcs) : 1
- Power (W) : 1.5W
- Solar panel (W) : 5V/3W
- Battery (Ah) : 3.2V/4,000mAh
- Control mode : Light Control+Time Control
- Charging time (1,000W/m2) : 6h
- Material : Aluminium+ PC
- Dominant hue : Black/Grey
- Beam angle (°) : C0~180 120°/ T90~270 120°
- Protection level : IP65

XT-CPD5406/5405

Technical parameter

- LED chip : 2835
- Module quantity (pcs) : 1
- Power (W) : 1.5W
- Solar panel (W) : 5V/4.5W
- Battery (Ah) : 3.2V/7,000mAh
- Control mode : Light Control+Time Control
- Charging time (1,000W/m2) : 6h
- Material : Aluminium+ PC
- Dominant hue : Grey/Black
- Beam angle (°) : C0~180 120°/ T90~270 120°
- Protection level : IP65

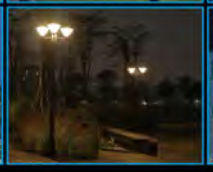
Solar Garden Light

XT-TYD1002

XT-TYD1003

XT-TYD2002

XT-TYD2003



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Solar Garden Light Series

SIMPLE INSTALLATION, CONVENIENT LIFE

Solar Wall Light

XT-BD2204

Technical parameter

- LED chip : 2835
- Module quantity (pcs) : 1
- Power (W) : 1.5W
- Solar panel (W) : 5V/4.5Wp
- Battery (Ah) : 3.7V/7,000mAh
- Net weight (kg) : 2.2kg±5%
- Gross weight (kg) : 5.4kg±5% (2pcs/box)
- Physical dimension (mm) : 260×260×300mm±5%
- Packing dimension (mm) : 730×340×310mm±5%

XT-BD4104

Technical parameter

- LED chip : 2835
- Module quantity (pcs) : 1
- Power (W) : 1.5W
- Solar panel (W) : 4V/4.5Wp
- Battery (Ah) : 3.2V/7,000mAh
- Net weight (kg) : 2.0kg±5%
- Gross weight (kg) : 5.32kg±5% (2pcs/box)
- Physical dimension (mm) : 260×260×310mm±5%
- Packing dimension (mm) : 730×340×310mm±5%

XT-BD6001

Technical parameter

- LED chip : 2835
- Module quantity (pcs) : 1
- Power (W) : 2W
- Solar panel (W) : 5V/5Wp
- Battery (Ah) : 3.2V/5,000mAh
- Net weight (kg) : 1.2kg±5%
- Gross weight (kg) : 3.76kg±5% (2pcs/box)
- Physical dimension (mm) : 200×200×250mm±5%
- Packing dimension (mm) : 610×310×270mm±5%

XT-BD3001

Technical parameter

- LED chip : 2835
- Module quantity (pcs) : 1
- Power (W) : 1W
- Solar panel (W) : 6V/3.5Wp
- Battery (Ah) : 3..7V/4,400mAh
- Net weight (kg) : 1.35kg±5%
- Gross weight (kg) : 4.4kg±5% (2pcs/box)
- Physical dimension (mm) : 230×230×250mm±5%
- Packing dimension (mm) : 610×310×320mm±5%

XT-BD5405

Technical parameter

- LED chip : 2835
- Module quantity (pcs) : 1
- Power (W) : 1.5W
- Solar panel (W) : 5V/4.5Wp
- Battery (Ah) : 3.2V/7,000mAh
- Net weight (kg) : 2.3kg±5%
- Gross weight (kg) : 5.8kg±5% (2pcs/box)
- Physical dimension (mm) : 260×260×370mm±5%
- Packing dimension (mm) : 786×360×310mm±5%

XT-TED0112/0118/0124

XT-TED0112	XT-TED0118	XT-TED0124
LED chip : 3030	LED chip : 3030	LED chip : 3030
Module quantity (pcs) : 1	Module quantity (pcs) : 1	Module quantity (pcs) : 1
Power (W) : 12W	Power (W) : 18W	Power (W) : 24W
Solar panel (W) : 12V/25W	Solar panel (W) : 12V/35W	Solar panel (W) : 12V/40W
Battery (Ah) : 7.4V/8,800mAh	Battery (Ah) : 7.4V/13,200mAh	Battery (Ah) : 7.4V/17,600mAh

XT-TED0215/0224/0230

XT-TED0215	XT-TED0224	XT-TED0230
LED chip : 3030	LED chip : 3030	LED chip : 3030
Module quantity (pcs) : 1	Module quantity (pcs) : 1	Module quantity (pcs) : 1
Power (W) : 15W	Power (W) : 24W	Power (W) : 30W
Solar panel (W) : 12V/25W	Solar panel (W) : 12V/35W	Solar panel (W) : 12V/40W
Battery (Ah) : 7.4V/8,800mAh	Battery (Ah) : 7.4V/13,200mAh	Battery (Ah) : 7.4V/17,600mAh

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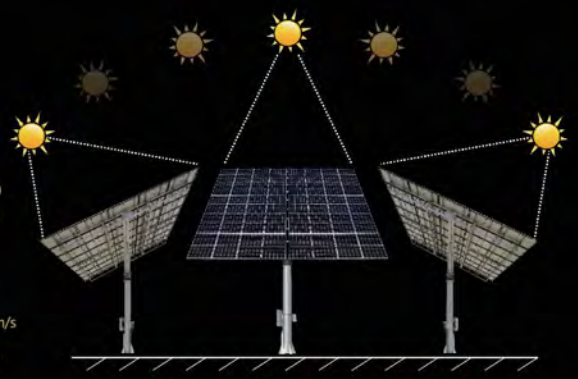
Automatically sunshine tracking Solar System

Technological innovation makes it impossible to achieve anything!

Automatically sunshine tracking Solar System

Technical parameter

- Control Method : Time Control
- Tracking accuracy : ≤1°
- Power Supply : DC24V/48V
- Driving Power : 90X2 (W)
- Daily Power Consumption : 0.2~0.5kWh
- Horizontal Tracking Angle : -120°~120°
- Vertical Tracking Angle : 30°~90°
- Material : Hot Dip Galvanizing Steel
- Maximum Wind Speed Resistance : 35m/s
- Common Wind resistant speed : 17m/s
- Designed Lifetime : >25 Years
- Operating Temperature : -25℃~65℃
- Certificate : CE



Sunshine Tracking Solar System Sktch

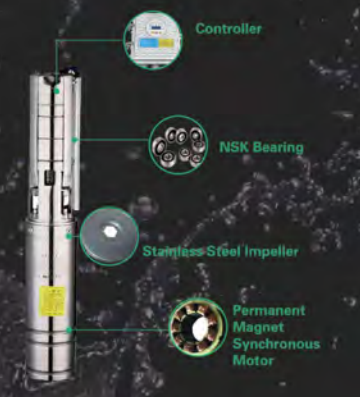
Advantages of Automatic Sunshine Tracking Solar System

- High Precision: The tracking system uses high precision astronomical algorithm to calculate the sun angle, which enables the system accurate and reliable position.
- Intelligent Feedback: Adopts premium brand inclination sensor to realize real-time automatic tracking.
- High power generation: Self-developed reverse tracking algorithm increases power generation efficiency by more than 50%.
- Manual control mode: The system has manual control mode, which can adjust the tracking angle manually.
- Intelligent wind resistance: External wind speed sensor enables the system to enter the maximum wind resistance working condition at any time.
- Power-off memory: Extra spare battery equipped in the system, which enable the system to keep the working data automatically once power off, and the system automatically operate after restarting.
- Weatherproof: The system uses industrial chips and aviation level clock sources to ensure the safe and stable operation in the range of - 40 ~ + 70 degrees without cumulative error.
- Intelligent communication: The system reads real-time data, fault feedback and other information.

Solar Water Pump

Technical parameter

- Solar Panel:270W A-class Polysilicon components
- Highest Lift:40m
- Max Flow:5m³/h
- Rated Power:420W-1000W
- Rated Voltage:48V-80V
- Rated Speed:3300r/min
- Rated Current:12A-18A
- Pipe Diameter:50mm
- Overall Size:D*H 120mm*630mm



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Wireless Intelligent Integrated Solar LED Landscape Lights

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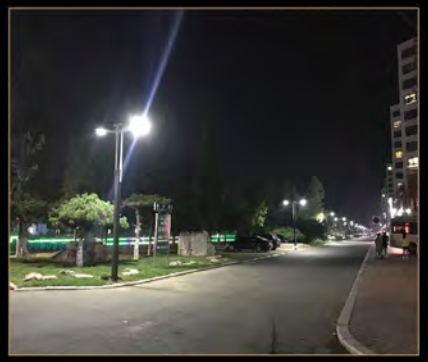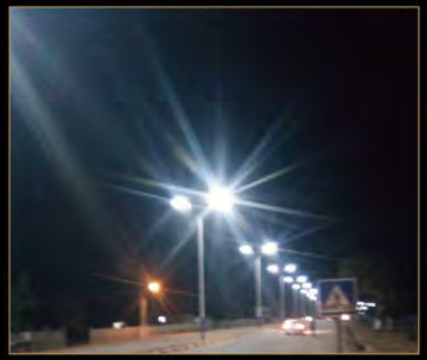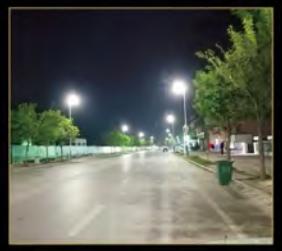
Wireless Intelligent Integrated Solar LED Street Light Design effect selection