



200W

**ALL-IN-ONE
SOLAR LED
STREET LIGHT
SPECIFICATION**



LM80

SALT
SPRAY

VIBRATION

INTRODUCTION

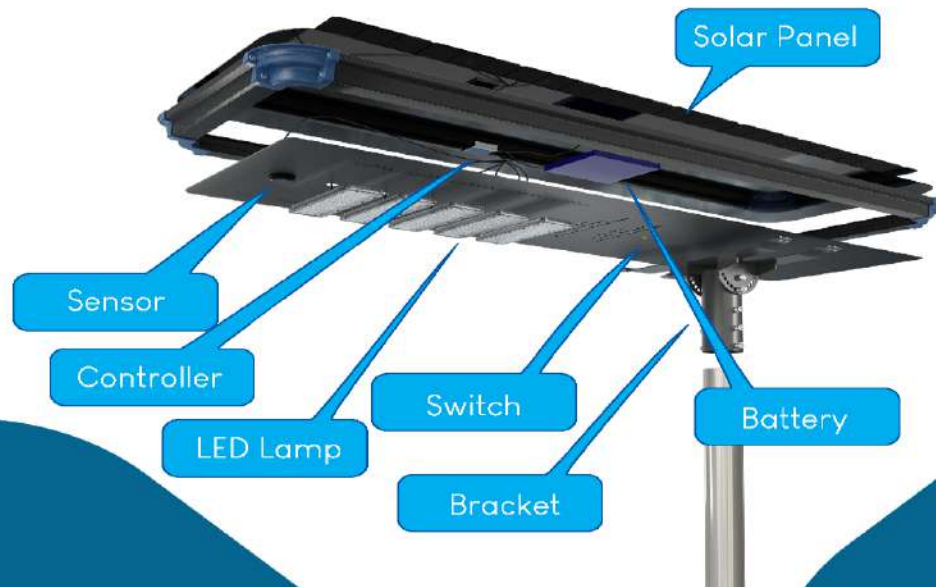
The All-in-One solar LED street light represents cutting-edge technology in the realm of solar street lighting. Its revolutionary design incorporates the solar panel, LED lamp, lithium battery, and charging controller into a single unified unit, eliminating the need for cumbersome cables or underground battery storage facilities. This not only streamlines installation but also accelerates the process.

Furthermore, this solar LED street light is equipped with the latest intelligent lighting system, ensuring it functions seamlessly according to day and night cycles. With two versatile settings, including a motion sensor and time-based schedule, it effortlessly caters to diverse requirements, eliminating the need for post-installation adjustments.

Compared to conventional solar street lights, the All-in-One model offers several advantages. It simplifies installation, making it more efficient and cost-effective. Moreover, it boasts a longer lifespan when compared to lead-acid batteries, making it a cost-effective and eco-friendly choice.



PRODUCT STRUCTURE



UNIQUE SALES POINT

1

Designed in Germany

Our R&D team in Germany meticulously designs all our products, each boasting a unique solo patent. This not only enhances brand promotion but also mitigates the need for price campaigns.

PATENTED

2

Monocrystalline Solar Panel

Our primary energy source is a class A monocrystalline solar panel, boasting a remarkable 24% charging efficiency, far surpassing the typical monocrystalline (17%) and polycrystalline panels.



3

LM80 PHILIPS LED

Our lamps feature LM80 certified Philips LEDs, ensuring superb brightness and minimal light decay. Even after 10,000 hours, they maintain an impressive 99.3% brightness.

PHILIPS

4

Lithium Battery

Our lamps feature premium LiFePO4 lithium batteries with a lifespan five times longer than traditional batteries, enhanced by deep charge cycles and temperature protection, ensuring up to 12 years of reliable use.



5

MPPT Charging Controller

Our MPPT (Maximum Power Point Tracking) charging controller boosts charging efficiency by 40% over PWM models and protects against over-current, over-voltage, and overheating for a longer lifespan.



6

Intelligent Lighting

Our lamp integrates a smart lighting system that adjusts to day and night, featuring a Motion Sensor mode for responsive lighting and a Time Schedule mode for preset illumination, catering to diverse needs.



UNIQUE SALES POINT

7

Adjustable Bracket Angle

The bracket angle is adjustable from 0 to 90 degrees, allowing precise alignment of solar panels to accommodate specific latitude and longitude requirements in various countries.



8

High Output Optical LED lens

Our patented optical LED lens delivers exceptional brightness at 120-140lm/w, along with an expansive 80°150-degree beam angle for superior illumination.



9

Easy Maintenance

Our designs feature an effortless plug-and-play system for quick spare parts replacement. This substantially reduces maintenance labor expenses while significantly boosting project ROI.



10

Anti-theft

Anti-theft is a crucial consideration for our solar street lights. Our lamps feature exclusive anti-theft screws, making it virtually impossible to remove them from the pole without our specialized tool.



11

Anti-storm

We've engineered a robust swing frame structure for our lamp, ensuring exceptional wind resistance and safety, particularly when mounted on tall poles. This design can withstand winds up to 176km/h.



12

Anti-rust

Rust poses a significant threat to the longevity of solar street lights. Our lamps are crafted from aluminum, providing a reliable anti-rust solution ideal for seaside installations.



PRODUCT PICTURE



Front



Back

DATA SHEET

GENERAL INFORMATION

MAIN FEATURE

- Patent Design From Germany
- Strong Supply Chain Management from China
- Certificated from Third Party
- Only Specialize in Solar LED Street Lighting
- Wide Distribution Network

MODEL NUMBER	
Material	Aluminum alloy
Dimension	1697*587*165MM
Weight	29.6KG
IP	IP66
Working Temperature	-20°C~+65°C
Recommended Installation Height	9-11M
Recommended Installation Distance	40-45M
Recommended Diameter of Top Mounting	75-80MM
Quantity in 20" Container	188PCS
Quantity in 40" Container	425PCS
Lifespan	12 Years
Certification	CE/ROHS/IP66/IK08/C-TICK/FCC

PHOTOVOLTAIC PANEL

MAIN FEATURE

- A bypass diode is integrated to mitigate power loss due to shading.
- The construction features white tempered glass, EVA resin, a weatherproof film, and an anodized aluminum frame for enhanced durability and performance.
- IEC 61215 and IEC 61730 for solar panel quality and safety.
- ISO 9001:2015 for Quality Management Systems, ensuring consistent product quality and customer satisfaction.
- ISO 14001 for Environmental Management Systems, demonstrating commitment to environmental responsibility.

MODEL NUMBER			
Solar Cell	Mono 182mm	Power Tolerance	±5%
Pmax	180W	Max. Power Temperature	-(0.5±0.05)%/°C
Voc(V)	43.2V	Open Circuit Voltage Temperature	-(160±10)mV/°C
Isc(A)	5.25A	Short Circuit Current Temperature	(0.065±0.015)%/°C
Vmp(V)	36V	Max. System Voltage(V)	600V
Imp(A)	5A	Lifespan	25 Years
Operating Temperature	-45°C~+85°C	Certification	CE, ROHS, IEC61215, IEC 61730

LITHIUM BATTERY

MAIN FEATURE

- Lithium Iron Phosphate (LiFePO4) Batteries: Safety and Energy at Its Peak
- Engineered for Superiority: Combining the Safest Lithium Chemistry with High Energy Density
- Absolute Safety: Featuring Advanced Automatic Protection Systems
- Unmatched Longevity: Offers Over 4000 Cycles at 50% Depth of Discharge for Sustained Efficiency and Durability
- Exceptional Versatility: Performs Reliably in Extreme Temperatures Ranging from -20°C to 65°C
- Hassle-Free: Requires No Maintenance After Installation

MODEL NUMBER			
Battery Voltage	25.6V	Charge Cut-off Voltage	29.2±0.1V
Battery Capacity	1076WH	Discharge Cut-off Voltage	22±0.1V
Battery Cell Type	LiFePO4 6000mA 3.2V 32700	Storage Temperature	5°C~35°C
Battery Grade	A Grade	Operating Temperature	-20°C~ 65°C
Quantity per pack	56 Pieces	Lifetime	12 Years
Array Mode	8 in series and 7 in parallel	Certification	CE, ROHS, MSDS, UN38.3

CHARGING CONTROLLER

MAIN FEATURE

- IP68 waterproof rating with a buttonless design for enhanced water resistance.
- Over 99.9% MPPT efficiency and up to 98% power generation efficiency to improve performance and reduce costs.
- Up to 98.4% charging and 97.4% driving efficiency, advanced battery management, and smart charging to extend battery life by 50%.
- Intelligent energy management, automated lighting control for greater efficiency, customizable lighting schedules, and dimming options.
- Supports 2.4G wireless and infrared connectivity and control, with comprehensive safety measures for battery and solar panel protection.
- Includes safeguards against reverse connections for batteries and solar panels, prevents battery-to-solar discharge, and protects against low voltage and LED circuit anomalies.

MODEL NUMBER			
Technology	MPPT(Maximum Power Point Tracking)	Output voltage range	16~50V(12V), 32~50V(24V)
Working Mode	Motion Sensor/Time Schedule	Max. output power	80W(12V), 160W(24V)
Battery type	Lithium battery	Max. charge efficiency	98.40%
Rated system voltage	12/24V	Max. Sensing Height	10M
Max. charge current	10A	IP	IP68
Charge voltage range	0~30V	Lifetime	12 Years
Solar panel Max. Power	130W(12V), 260W(24V)	Certification	CQC,CE,RoHS

LED LAMP

MAIN FEATURE

- Outfitted with ultra-bright Philips LEDs, ensuring top-notch quality and luminosity.
- Complies with LM80 LED testing standards, affirming its reliability.
- Boasts a wide beam angle for expansive illumination.
- Includes a high-grade LED lens tailored for street lighting needs.
- Employs high-efficiency LEDs for extended durability and lower energy usage.
- Provides a diverse spectrum of color temperatures, including customizable options for specific needs.

MODEL NUMBER			
Max Power	200W	Chip Type	Super Brightness A Grade
Lamp Efficiency	120~140LM/W	LED Quantity	320pcs
Luminous Flux	24000~28000LM	Light Distribution Type	Type I/Type II/Type III
Color Temperature	3000K/4000K/5000K/6000K	Beam Angle	80°~150°
CRI	>80	Lifespan	50,000 Hours(12 Years)
LED Chip	Philips 3030	Certification	IESNA LM-80/TM-21