



80W

# ALL-IN-ONE SOLAR LED STREET LIGHT SPECIFICATION

**SSL-SL 9000** is a high power solar street lamp with integrated solar panel. The lamp has an integrated solar panel with a high quality long life Li-Fe-PO battery and a LED illumination system with special to illuminate street areas with uniform and strong light. The design is optimized to have 15 years service interval with zero maintenance. The install and forget design is very important for a no problem long time operation and reduced life cycle costs. All the design and development is European and all components are high quality equipment.

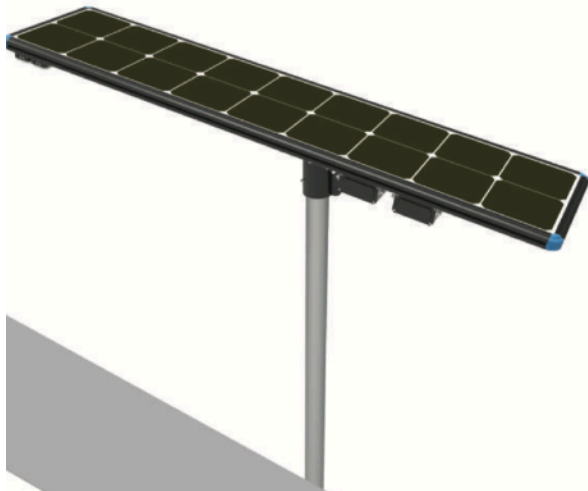
Key for reliability is the long life battery. This lamp use a high quality Li-Fe-Po battery with typical 15 years life time and not as usual Li-Po battery that normally are worn out in less 3 years. The battery is outside housing so it operates at lower temperature than fully in integrated designs.

The lamp have a PIR sensor for presence control and a light switch to turn on and off depending on ambient light. Solar panel is a 2 laminated glass design that have far better life time than single glass + plastic foil designs.

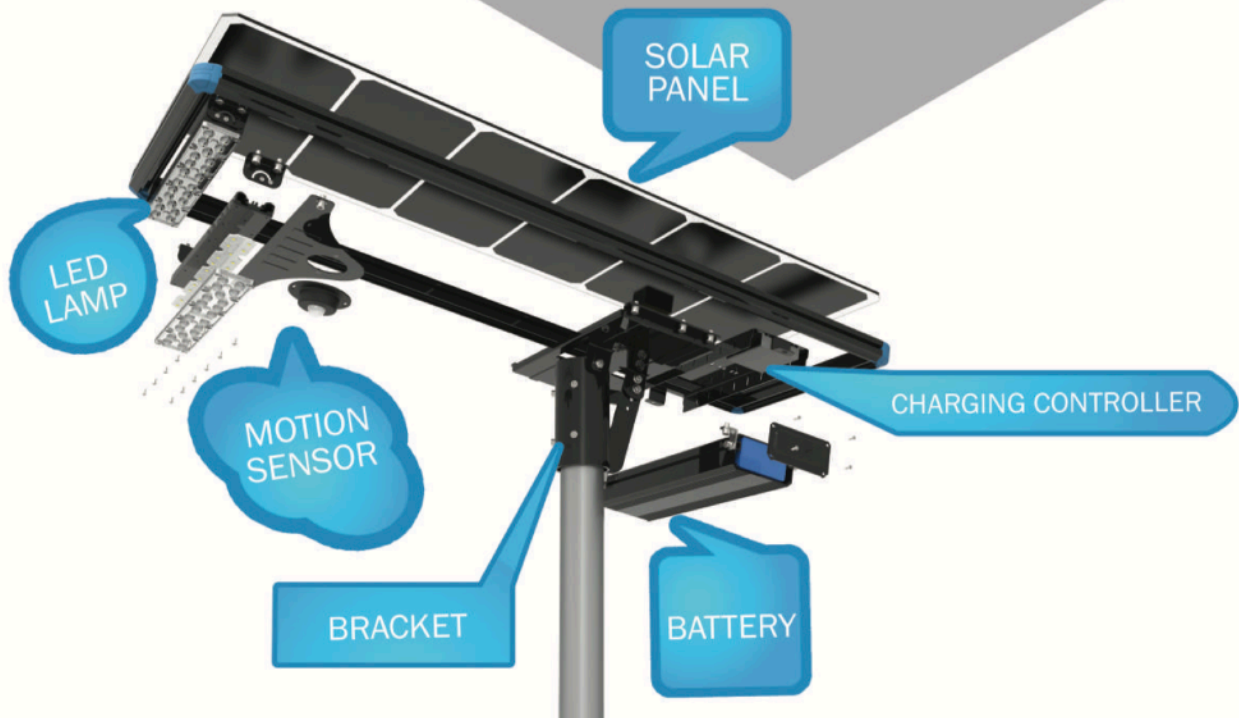


## INTRODUCTION:

The All-in-One solar LED street light is the newest technology for solar street lights. With its all-in-one design, its solar panel, LED lamp, lithium battery and charging controller are all integrated into one single body. With this new technology, there is no need for cables or any digging of underground spaces to store its battery. Installation can also be done very quickly. Additionally, this solar LED street light is comprised of the latest intelligent lighting system. The lamp works automatically based on the time of day. It has three settings including a motion sensor, time-control and internet control, to meet different requirements. There will be no need for unnecessary settings after installation. Compared to traditional solar street lights, it is much easier to install and transport, with a longer lifespan than lead-acid batteries and is also cheaper to maintain.



## PRODUCT STRUCTURE



Pole diameter is typical 55-65 mm for standard street lamp poles. The battery is easy to change but the Li-Fe-PO is designed for 15 years life cycle. The installation of battery under the solar panel makes it better protected against solar heat. MPPT charger gives substantially more charging than the normal PWM chargers. Combined with mono crystalline cells this secure best charging by sunlight only.



### 1 Designed in Germany

All of our products are designed by our R&D team in Germany. They are all solo patented in the market, which is great for your brand promotion and price campaign



### 2 Monocrystalline Solar Panel

We use class A monocrystalline solar panel as our charging source. Its 24% charging efficiency is much higher than normal monocrystalline (17%) or polycrystalline.



### 3 LM80 PHILIPS LED

High brightness and low light decay LM80 certified Philips LED is adopted for our lamp, which is famous LED brand all over around the world. It can still stay 99.3% brightness after 10000 hours.



### 4 Lithium Battery

The level-A standard LiFePO4 lithium battery is used for our lamp. It not only has a 5 times longer lifespan than lead-acid batteries but it also has charging depth, high/low temperature protection. It increases the lifespan of a battery to 12 years.



### 5 MPPT Charging Controller

As the heart of solar LED street light, the controller has played an important role. We use a MPPT(Maximum Power Point Tracking) charging controller as our solution. Its charging efficiency is 20%-30% higher than a PWM solution. It also has protection against over-current, over-voltage, over-heating for a long lifespan



### 6 Intelligent Lighting

Our lamp has used the latest intelligent lighting system. The lamp can work automatically based on day and night. It has three working ways(Motion Sensor/Time Control/Internet Control) according to different requirements. There will be no more setting after your installation.



Sunnytek solar has worked with solar applications and street lamps since many years and this is the alternative 1 we use in tropical installations. Reliability and no problems is priority nr 1 for us rather than lowest costs.

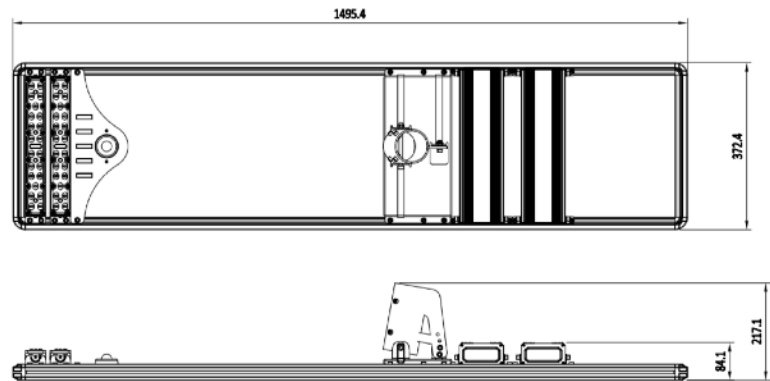
Large solar panel combined with a large battery gives best reliability when it is less sunny. The PIR detector adds extra operation hours.



**PRODUCT PICTURE**



**PRODUCT SIZE**



**DATA SHEET**

LIGHTING		BATTERY	
Efficiency	200-240LM/W	Technology	LiFePO4(Lithium Iron Phosphate)
LED Chip	Philips 3030 (certified per IESNA LM-80 TM-21)	Lithium Battery	512WH
CCT	3000K/4000K/5000K/5700K	Autonomy	3 Rainy days
Life span	50 000 hours (12 years)	Lifespan	12 years
Max power	80W	CHARGING CONTROLLER	
Nominal power	40W	Technology	MPPT(Maximum Power Point Tracking)
Typical Luminous Flux	8000-9600LM	Lifespan	12 years
Beam angle	80°x150°	GENERAL	
Working way	Motion Sensor/Time Schedule	Dimensions	1495*372*84MM
PHOTOVOLTAIC PANEL		Weight	17.8KG
Technology	Mono-crystalline photovoltaic panels	IP	IP66
Power of PV Module	100Wp	Working Temperature	-20°C to +60°C
Lifespan	25 years	Recommended Installation Height	7-9M
		Recommended Installation Distance	25-35M
		Recommended Diameter of Top mounting	55-65MM

**LUX DATA**

