



ALL-IN-ONE SOLAR STREET LIGHT

# iSSL Series



10 YEAR  
WARRANTY

| Sol<sup>®</sup>

# iSSL Series



IDEAL FOR  
RETROFIT PROJECTS



PATENTED BLACKOUT  
PREVENTION ALGORITHM



PLUG & PLAY DESIGN



BUILT TO RESIST SEVERE  
WEATHER

The iSSL Series is the world's most reliable all-in-one solar lighting solution and the result of 10 years of research and development. All the products in the iSSL® range offer unrivaled performance, thanks to its high-density NiMH battery technology and patented energy management system (EMS) that ensure optimal efficiency throughout the year.

All iSSL models are compatible and can be controlled by a smartphone monitoring application, SunnAPP, with a motion detection option.



1

## HORIZONTAL SOLAR PANELS

*Uniquely designed for high-wind environments and the southern US states*

*Self-cleaning coating prevents dust accumulation*

2

## HIGH-DENSITY NiMH BATTERY

*Wide temperature range (-40°F to 158°F)*

*Long lifespan (average of 12 years)*

3

## SUNNACORE EMS

*Electronic board with integrated Bluetooth connection LED driver*

*Patented blackout prevention algorithm*

4

## HIGH-EFFICIENCY LED MODULE

*Tiltable from 0° to 30°*

*Up to 175 lm/W*

5

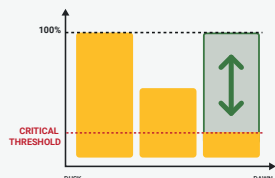
## PREVENTS COPPER-WIRE THEFT

*Fully off-grid solution with all components positioned at the top of the pole.*

■ **SIZED FOR YEAR-ROUND PERFORMANCE**

The iSSL Series system is sized to its exact location and operating requirements to ensure reliable, uninterrupted performance 365 days/ year. We base our calculations on 20 years of NASA data and the location's shortest day of the year.

- **PATENTED BLACKOUT PREVENTION ALGO-**



In addition to the solar sizing calculations described above, iSSL series feature an embedded SunnaCore Energy Management System (EMS) that uses patented, AI-based algorithms to prolong lighting performance.

Using data insights gleaned in the field, the system automatically evolves its output based on the amount of energy available.

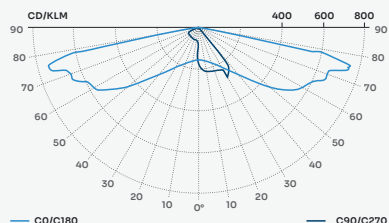
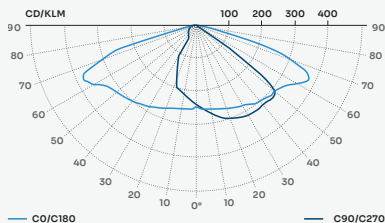


## COLOR TEMPERATURES

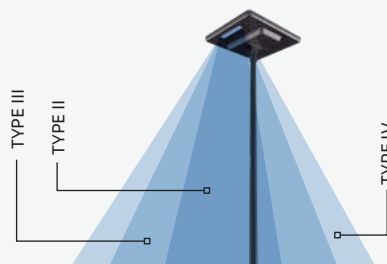
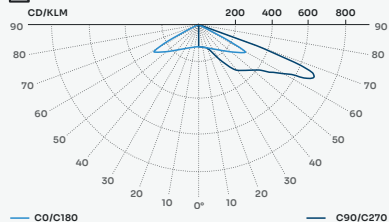


## LIGHT DISTRIBUTION

☒ TYPE II

☒ TYPE III

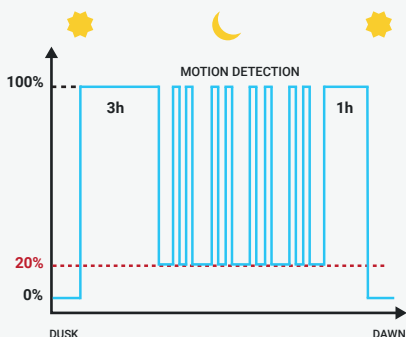
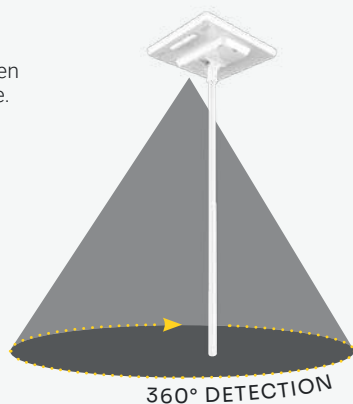
☒ TYPE IV



## ■ MOTION SENSOR

(optional)

- ☑ Switch on, or increase light output when detectomg movement around the pole.
- ☑ Preserves battery life
- ☑ Optimal energy consumption
- ☑ No light pollution
- ☑ Enhanced security



To ensure adequate night time visibility while optimizing energy, Sol offers a motion detection option that uses an infrared sensor to detect pedestrians, cyclists, and slow-moving cars.

**Saves up to 80% energy in low-traffic areas.**

## ■ ASSET MANAGEMENT



### ☑ SUNNAPP LOCAL CONTROLS *(included)*

Configure and monitor your systems' performance via long-range Bluetooth.



Geolocation & asset management



Performance tracking



Diagnostics & troubleshooting



# iSSL Series



10 YEAR  
WARRANTY



**iSSL+**

**iSSL Maxi  
Road**

**iSSL Maxi  
Area**

**iSSL Maxi 4**

FIXTURE

SOLAR PANELS

BATTERY

ELECTRONICS

GENERAL

LED module	High efficiency LED light engine - Multichip Technology (IP 67)		
Luminous flux	1,750 lumens	3,500 lumens	7,200 lumens
Wattage	10 W	20 W	40 W
Lighting efficacy (after optical losses)	Up to 175 lm/W (4000 K)		
Color temperature	2700 K, 3000 K, 4000 K		
Lifespan	50,000 certified hours		
Certificates	EN 62031; EN 62471		
Technology	Photovoltaic module (Monocrystalline silicon)		
Power	50 Wc	80 Wc (2x40 Wc)	160 Wc (4x40 Wc)
Electrical characteristics (per panel)	Isc = 3,07 A / Voc = 22,68 V Imp = 2,70 A / Vmp = 18,5 V	Isc = 2,19 A / Voc = 24,17 V / Imp = 2,01 A / Vmp = 19,9 V	
Panel dimensions	39.4 x 13.8 in (1000 x 350 mm)	30.5 x 13.8 in (776 x 350 mm) (x2 Solar panels)	30.5 x 13.8 in (x4 Solar panels)
Lifespan	> 20 years at 80% of initial power		
Tilt	Horizontal (0°)		
Structure	Frameless		
Certificates	IEC 61215; IEC 61730 I & II		
Battery technology	NiMH battery, maintenance free, extreme temperature resistance		
Voltage	12 V	24 V	
Capacity	120 Wh	240 Wh	480 Wh (2x240 Wh)
Operating temperature	-40°F / +158°F (-40°C to +70°C)		
Lifespan	12 years in intertropical zone / 15-20 years in temperate zone		
Certificates	EN 62133		
Technology	SunnaCore®		
Communication	Bluetooth		
Input voltage	12 V	24 V	
Open circuit voltage	22,5 V	45 V	
Max. charge / discharge current	4,2 A		
Electrical protection	Electronic fuse		
Water resistance	IP65 with sealed plugs		
Material	ABS PMMA casing (70% recycled) and aluminum		
EPA	1.72 ft² (0.16m²)	1.58 ft² (0.147 m²)	2.91ft² (0.27m²)
Mounting	Top mounting Ø2.38 in OD (60 mm)		Mount Ø3 in. OD (76 mm)
<b>Weight</b> (without pole)	28.7 lbs (13 kg)	42 lbs (19 kg)	92.6 lbs (43 kg)
Options	Motion sensor (range: 10 ft to 16 ft. (3 to 5 m) depending on mounting height) / Anti-theft screws / Local supervision / Bird spikes		

\*Only available with motion detection

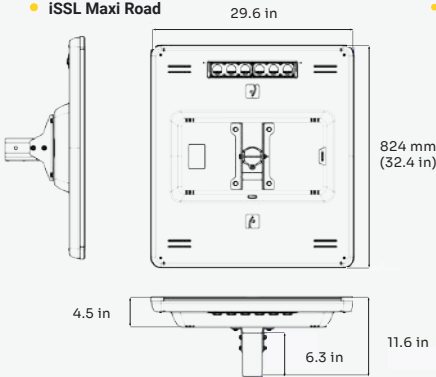
■ PRODUCT ORDER KEY

CODE		COLOR T*	MOTION SENSOR	LIGHTING PROFILE		COLOR	OPTICS
SD420	Maxi Road	3 3000K CCT	0 No	0A	100% (3h) / 40% / 100% (1h)	0 White	20 IES Type II
SL420	iSSL Maxi Road	4 4000K CCT		0B	60% from Dusk to Dawn	1 Dark Bronze	10 IES Type III
SL422	iSSL Maxi Area	0 5700K CCT		0M	100% (5h) / 40% / 100% (1h)	2 Black	00 IES Type IV
SL426	iSSL Maxi 4		1 Yes	0C	100% (3h) / motion / 100% (1h)		
				0L	20% default + 100% (on motion)		

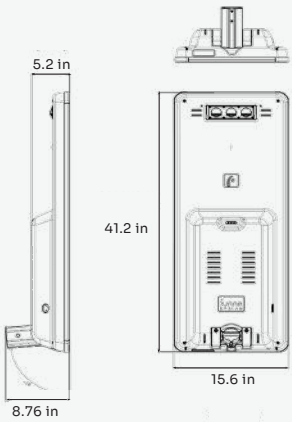
\*The lighting profile's availability depends on your location's solar insulation. An autonomy calculation may be needed to confirm that the profile is sustainable in your location.

■ DIMENSIONS

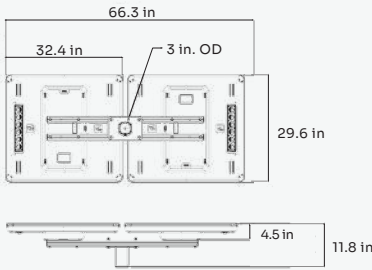
● iSSL Maxi Road



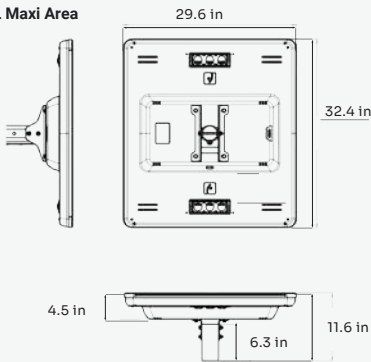
● iSSL+



● iSSL Maxi 4



● iSSL Maxi Area



■ COLORS



RAL 9010  
White



RAL 8019  
Dark bronze



RAL 9005  
Black

## ■ WHY SOL?

Choosing Sol means investing in quality, reliability, and innovation in solar lighting.

With 35 years of experience, 160,000 installs, 23 patents, and a deep, ongoing commitment to research and development, we have an unmatched record of delivering durable, low-maintenance solutions that provide cost savings and environmental benefits.



### **Comprehensive product portfolio**

Sol is the only solar lighting manufacturer that offers both integrated, all-in-one products and modular systems.



### **Industry-leading warranty**

We offer a 10-year warranty on the entire system, including the battery.



### **Meet and maintain IES targets**

Our systems are guaranteed to IES recommended light levels, without dimming or premature shut-off.



### **Engineered for low maintenance**

Thanks to careful solar sizing and local and remote monitoring options, maintenance is greatly reduced or eliminated.

## ■ OUR SERVICES

At Sol, we aim to be trusted solar advisors—not just a supplier. That means we're here to assist you through all stages of your solar street lighting project, from the initial site assessment to financing to installation and after-sales support.

### • DETAILED ASSESSMENT & PROPOSAL

We provide custom detailed specification packages for each project, including solar sizing, product features and options, and a photometric study (lighting layout) in AG132 or IES format.



► Typical turnaround time: 24 hours

### • AFTER-SALES SUPPORT

In addition to the 10-year warranty we offer on all products, Sol's technical specialists are committed to providing responsive, qualified service throughout the relationship.



Many of our customers have been with us for more than 20 years, using our retrofit program to upgrade their lights to the latest technology without investing in an entirely new system.

### • FINANCING OPTIONS

A growing variety of options are making it more financially viable for cities, businesses, utilities, and more to transition to solar lighting—and reap the benefits.

Whether you need a little or a lot to complete your solar lighting project, funding is available, and our team is ready to help you find it.



► Scan to learn more about financing your lights.



## SPORT FIELDS



## APPLICATIONS



## PARKING LOT

## PATHWAYS





2025



Sol by Sunna Design  
990 Biscayne Boulevard, Office 701  
Miami, FL 33132 USA  
+1 800 959 1329



[sales@solarlighting.com](mailto:sales@solarlighting.com)



[www.solarlighting.com](http://www.solarlighting.com)

**Sol**®

A DIFFERENT LIGHT