SOSN Series

The SOLAR SUPERNOVA™

Solar Powered LED Area Lighting

SOLAS RAY™ LIGHTING
5935 West 84th St. | Indianapolis, IN 46278 | 1-888-391-4822 | www.SolasRay.com

Cat. #	Type
Notes	

CERTIFICATIONS / RATINGS

IP66 RoHS compliant CE

KEY FEATURES AND BENEFITS

- Convenient LED light, solar panel, and battery integrated into a single unit.
- Up to 19,500 lumens, 60 and 100 watt versions available.
- Highly efficient 195 lm/W.
- Selectable Color Temperature.
- High conversion efficiency mono-crystalline photovoltaic solar panel.
- Long life and high temperature resistance LiFePO4 battery.
- 9 hour charge can power light 4-6 days in intelligent control mode with factory settings, or 7-12 hours at full power.
- Optional remote control available for intelligent control reprogramming.
- Built in microwave motion sensor.
- Hybrid dual-powered option available - AC power takes over if battery is low.
- Highly efficient MPPT type charge converter.

SPECIFICATIONS

Wattage	60W / 100W
Color Temp	3000 / 4000 / 5000 Kelvin (Selectable)
Housing	Aluminum Alloy
Color	Silver Gray (RAL 870-3)
Lens	Polycarbonate
Lifetime	167,500 hrs L_{70}
Distribution Pattern	Type II
CRI	Ra70
Working Mode	Intelligent control
Control	Timer dimming / microwave sensor
Ambient Temperature	0°C (32°F) to 50°C (122°F) recommended, for colder temps - see Application Guide
Warranty	3 Year Limited Warranty

LUMENS

Model	60W	100W
Lumens	11,700	19,500

BATTERY (Built-In - non hybrid models)

With their high temperature resistance, large current discharge and long life cycle rating, LiFePO4 batteries are preferable for use in solar powered lights.

Type	LiFePO4 (Lithium Iron Phosphate)
Run Time	4 to 6 days (intelligent control factory settings) on full charge 7 to 12 hours at 100% brightness
Life Cycle	>2,000 cycles (D.OD. 80%)
Capacity	**60W**: 36Ah / 460.8Wh / 12.8V | **100W**: 36Ah / 921.6Wh / 25.6V
Charge Time	**60W**: 7.5 hours | **100W**: 9 hours

SOLAR PANEL (Built-In)

Mono-crystalline is the preferred type of panel for solar powered lights due to their superior efficiency and lifespan. Features a 21% conversion rate, which is 30% higher compared to traditional solar panels.

Type	High efficiency mono-crystalline
Charge Controller	MPPT (Maximum Power Point Tracking - DC to DC converter that finds the exact voltage/current where panel produces max power)

PRODUCT ORDERING SELECTION

SOSN	–		–	345S	–	T2	–		–	SP60	–	

Series
☑ SOSN

Watts
☐ 060 - 60W
☐ 100 - 100W

Kelvin (Selectable)
☑ 345S - 3K/4K/5K (Std)

Distribution Pattern
☑ T2 - Type II

Color
☐ GR - Gray (Std)
☐ BR - Bronze*
*Consult Factory

Mounting Options
☑ SP60 - 60mm Slip-Fitter (Included) (fits 2-3/8" tenon)

Other Options
☐ HYB - Hybrid Dual-Powered
☐ SOSN-REM - Programming Remote

Specifications and data are subject to change without notice.

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MOUNTING OPTIONS

#SP60 - 60mm Slip-Fitter (fits 2-3/8" tenon) (Included)

OTHER OPTIONS

#SONO-REM - Remote Control

Remote Control
Required to change intelligent control from default settings.

Must be ordered separately.

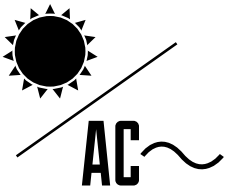
P/N: SONO-REM

It is highly recommended leaving the fixture set to factory programming. If reprogramming, special attention must be paid to power vs battery run-time tradeoff. Run-time at 100% power is 7-12 hours max.

☐ Include 1 SOSN-REM Remote Control

#HYB - Hybrid Dual-Power

HYBRID



Never run out of battery power
When the battery storage is depleted, the Solar Supernova™ will automatically switch to AC supplied power. When the solar power supply sufficiently recharges the battery, the system will automatically switch back to battery power.

Specifications
Input Voltage: 100-277 VAC, 50/60 Hz
Power Factor: >0.94 at full load
Surge Protection: 6kV line-earth / 4kV line-line

Features
- Constant current LED driver added
- Hybrid controller
- Battery: 230.4Wh for 60W / 460.8Wh for 100W

Note: Hybrid models require a different remote control than standard models.

☐ Include 1 SOSN-HYR Remote Control

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APPLICATION GUIDE

TEMPERATURE ZONE MAP

Temperature affects battery performance reducing the total output of a fully charged battery as it gets colder. Recommended use of the Solar Supernova™ for the above temperature zones are as follows:

Zone 1 - Not recommended for use in this zone.

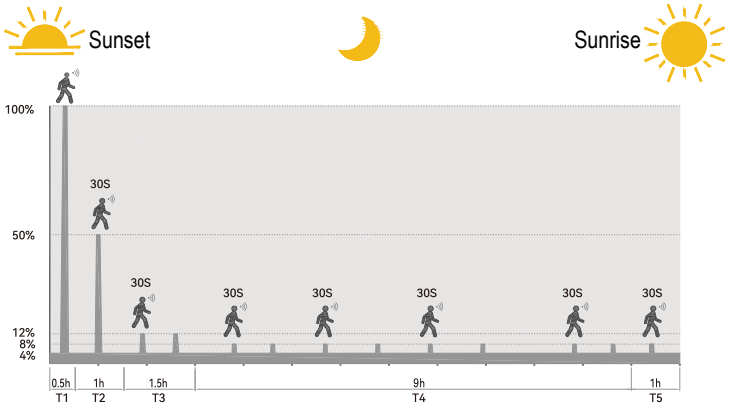
Zone 2 - May be used in this zone. We recommend reducing intelligent control settings to 1/2 brightness of factory default settings.

Zone 3 - Recommended for this zone.

INTELLIGENT CONTROL MODE

Factory default settings of intelligent control mode. Total run time = 12.5 hours.
Use optional remote to change settings (purchased separately).

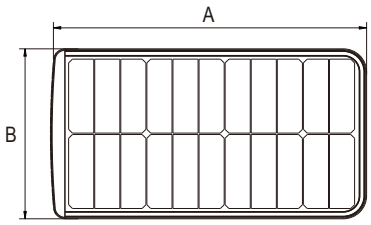
Time Period	T1	T2	T3	T4	T5
Length	1/2 hour	1 hour	1.5 hours	9 hours	1 hour
Motion Not Detected	100%	4%	4%	4%	
Motion Detected	100%	50%	12%	8%	
When motion is detected, light brightens for 30 seconds					

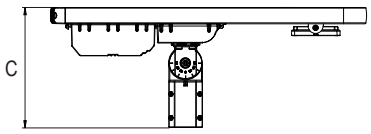


WEIGHTS, EPA AND DIMENSIONS

DIMENSIONS

Dim	60w	100w
A	42.32”	53.46”
B	14.29”	19.41”
C	9.92”	10.35”





WEIGHTS / EPA / BUG

Model	60w	100w
Weight	38.6 lb	56.2 lb
EPA	5.01 ft²	8.61 ft²
B (Back)	2	3
U (Up)	0	0
G (Glare)	2	3

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