



HIGH-POWER SOLAR STREET LIGHT



EverGen

MADE IN FRANCE



Sunna
DESIGN

l'intelligence
solaire **solar**
intelligence

EMBEDDED
INTELLIGENCEUNMATCHED
SERVICE CONTINUITYGROUPED
DETECTION

DATA SUPERVISION

EverGen is a **modular, kit-based solution** designed to adapt to a wide variety of environments and use cases.

Available with **three solar panel sizes** (200 Wp, 300 Wp, or 400 Wp) and **four battery capacities** (512 Wh, 1,024 Wh, 1,536 Wh, or 2,048 Wh), the system allows for fully customized energy sizing.

Fully configurable and **loaded with options**—such as group motion detection, external device power supply, and a solar/grid hybrid mode—EverGen delivers high-performance lighting for a **wide range of applications**: major and secondary roads, avenues, boulevards, and large parking lots.

The product ships as a kit and can be assembled easily on-site in **under 15 minutes**.



1

SOLAR PANELS

Tilted at 25° or 45°.

N-Type TOPCon cells for maximum energy efficiency and a lifespan of over 30 years.

2

EVERGEN POWER CASE

Battery pack that boosts EverGen's performance, featuring:

☑ LIFEP04 BATTERY

High-performance battery with optimized thermal management.

☑ SUNNACORE EMS

Electronic board with Bluetooth connection.

Intelligent energy management system maximizing battery lifespan.

3

MECHANICAL STRUCTURE

Optimized design (only 5 components) for quick and easy assembly.

Easily accessible hatch for Power Case installation and maintenance.

4

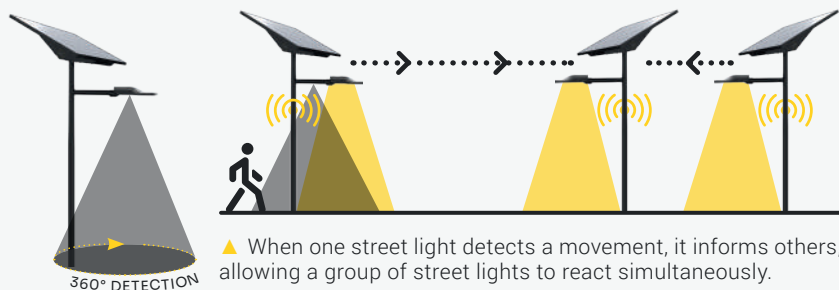
HIGH-EFFICIENCY LED MODULES

Up to 210 lm/W.

Compatible with the most advanced light fixtures on the market.

■ GROUPED DETECTION *(optional)*

Street lights equipped with grouped detection contain sensors and transmitters allowing them to communicate with neighboring street lights.

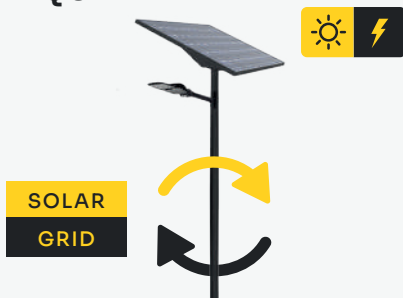


■ EXTERNAL ELECTRICAL EQUIPMENT & HYBRID POWER



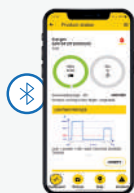
Rise On

Solar lighting can be used to power an external electrical device (camera, sensors...)



The perfect union between renewable solar energy and an electrical grid source to guarantee reliability and durability.

■ DATA SUPERVISION



(included)



(optional)

☒ LOCAL SUNNAPP

Install your street lights and interact with your products via long-range Bluetooth.

☒ REMOTE SUNNA CLOUD

Monitor your street lights in real-time and perform preventive or curative maintenance on your products.



Installation and commissioning support



Tracking and performance history



Registration and management of the park



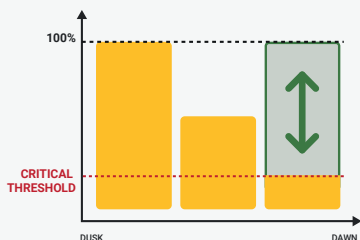
Management of lighting profiles

SMART ENERGY MANAGEMENT



Integrated within the EverGen range, the **SunnaCore** features advanced **autonomy management** to ensure sufficient battery energy for **optimal service 365 nights a year**, even during periods of low solar irradiation.

CUSTOMIZED LIGHTING PROFILES

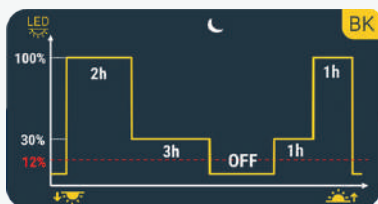


Our lighting profiles are optimized based on daily sunlight levels.

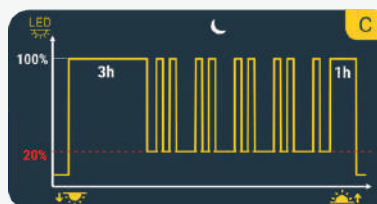
By analyzing recent weather data and the battery's available energy, the system automatically adjusts light intensity to prevent outages and ensure maximum lighting availability.

SAMPLE LIGHTING PROFILES

Thanks to the embedded intelligence of our **SunnaCore EMS**, our lighting systems offer **customized lighting profiles** tailored to the specific needs of each project. The system automatically regulates light output to prevent outages and ensure optimal availability. It also enables the creation of **motion-sensing profiles**, further maximizing the streetlight's autonomy.



Example of a standard scenario
100% (2 h) / 30% (3 h) / 0% / 30% (1 h) / 100% (1 h)



Example of a motion-detection scenario
100% (3 h) / 20% + detection 100% / 100% (1 h)

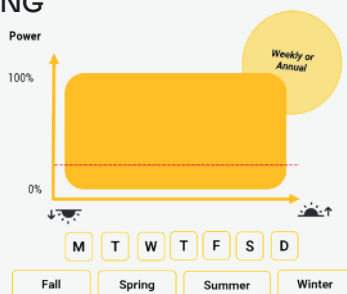
WEEKLY OR ANNUAL SCHEDULING

Two programming modes are also available (non-cumulative), allowing lighting profiles to be adjusted based on the project's timeline:

Weekly: up to 2 profiles per week.

or

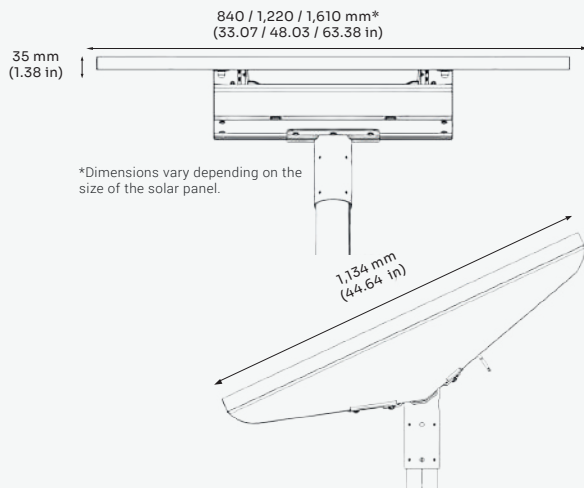
Annual: up to 2 profiles per year.



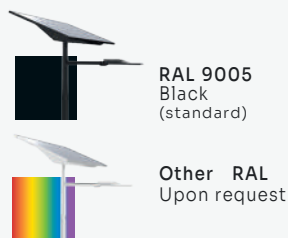
GENERAL	Structure material	Galvanised steel
	Effective Projected Area	200 Wp: 0.42 m ² (4.52 ft ²); 25° / 0.70 m ² (7.53 ft ²); 45° 300 Wp: 0.58 m ² (6.24 ft ²); 25° / 0.98 m ² (10.55 ft ²); 45° 400 Wp: 0.77 m ² (8.29 ft ²); 25° / 1.29 m ² (13.88 ft ²); 45°
	Recommended pole*	Galvanized steel; Top mounting: Ø89 mm (3.5 in)
	Weight (excluding pole)	Between 47.6 kg (103.6 lbs) and 68.5 kg (149.9 lbs) (depending on PV and battery power)
	Options	Remote supervision / Motion sensor (individual and group) / Hybrid mode (solar/grid) / External device power supply
	Carbon footprint	94.13 kg CO2 eq
	System warranty	6 years included (can be extended up to 10 years)
SOLAR PANELS	Certificates	CE, FCC, IP65, IK08 (in the process of certification)
	Technology	Photovoltaic module (monocrystalline N-Type TOPCon cells)
	Power	200 Wp, 300 Wp, 400 Wp
	Electrical characteristics (per panel)	200 Wp: VOC = 47.26 V / VMP = 41.65 V / ISC = 5.17 A / IMP = 4.95 A / Cells number = 66 300 Wp: VOC = 47.26 V / VMP = 41.65 V / ISC = 7.76 A / IMP = 7.42 A / Cells number = 66 400 Wp: VOC = 47.26 V / VMP = 41.65 V / ISC = 10.34 A / IMP = 9.89 A / Cells number = 66
	Tilt angle	25°, 45°
	Structure	Anodized aluminum alloy
	Lifespan	> 30 years at 82% of initial power
BATTERY	Recyclability rate	Up to 96%
	Technology	LiFePO4
	Voltage	25.6 V
	Capacity	512 Wh, 1,024 Wh, 1,536 Wh, 2,048 Wh
	Operating temperature range	-20°C to +60°C (-4°F / +140°F)
	Lifespan	> 10 years
	Recyclability rate	Up to 65%
SUNNACORE EMS	LED output power	20 at 150 W (or 2 x 80 W)
	LED output voltage range	32-50 V (or 50-120 V optional SunnaCore EMS Max)
	Operating temperature range	-40°C to +70°C (-40°F / +158°F)
	Charging technology	Integrated MPPT
	Lifespan	> 10 years
	Recyclability rate	100% for precious and base metals

* Included depending on project

DIMENSIONS



COLORS





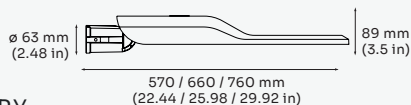
DARKSKY
APPROVED
Reduces light pollution
Certified by DarkSky.org



TECHNICAL SPECIFICATIONS

LED module	High-efficiency LEDs - Geometry according to Zhaga (Book 15)
Luminous flux	4,200 to 29,600 lm
Power	60 W, 80 W, 150 W
Lighting efficacy	Up to 210 lm/W after optical losses
Color temperatures	Amber (< 2% blue light), 2200 K, 2700 K, 3000 K, 4000 K
Options	Backlight shield
Material	Cast aluminum luminaire with tempered protective glass
Weight	Elektra S: 4.8 kg (10.58 lbs) / Elektra M: 7.9 kg (15.43 lbs) / Elektra L: 9.2 kg (19.84 lbs)
Lifespan	Over 100,000 hours (L80B50)
Mechanical resistance	IK10, IP66, corrosion resistance 1,500 hours according to ISO 9227
Recyclability rate	Up to 95%
Certificates	ENEC, ENEC+, Dark Sky, EN 60598, CEE

DIMENSIONS

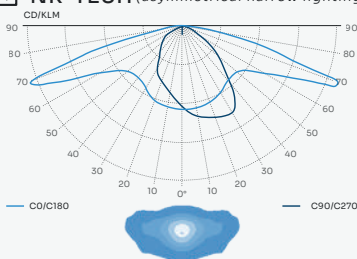


PHOTOMETRY

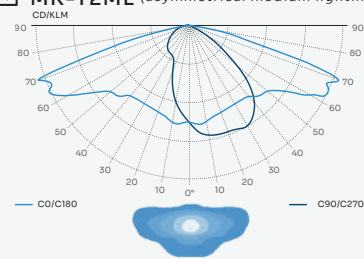
0% light emitted upwards with all optics (ULOR = 0).

Optional backlight shield available. IES / LDT files available on request.

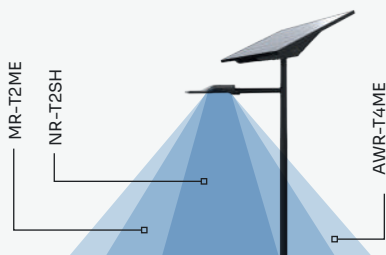
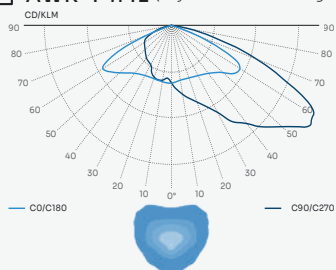
NR-T2SH (asymmetrical narrow lighting)



MR-T2ME (asymmetrical medium lighting)

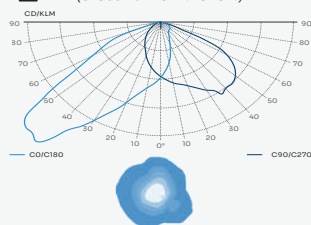


AWR-T4ME (asymmetrical wide lighting)

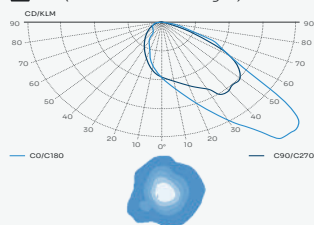


Upon request

CL (crosswalk on the left)



CR (crosswalk on the right)





TECHNICAL SPECIFICATIONS

LED module	High efficiency LED - Multichip Technology (IP66)
Luminous flux	3,320 to 26,560 lm
Power	40 W, 80 W, 150 W
Lighting efficacy	Up to 165 lm/W after optical losses
Color temperatures	2200 K, 2700 K, 3000 K, 4000 K
Options	Backlight shield / Motion sensor (individual or grouped)
Material	Aluminium
Weight	Nano S : 1.5 kg (2.20 lbs) / Nano M : 2.8 kg (4.41 lbs) / Nano L : 5 kg (11.02 lbs)
Lifespan	Over 100,000 hours (L80B50)
Mechanical resistance	IK10, IP66
Recyclability rate	Up to 95%
Certificates	EN 60598, CEE, ENEC

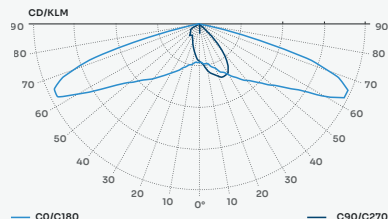
DIMENSIONS



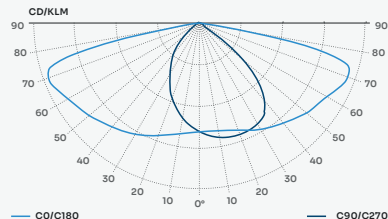
PHOTOMETRY

Optional backlight shield available. IES / LDT files available on request.

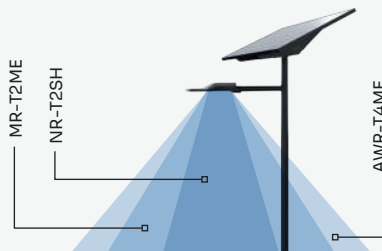
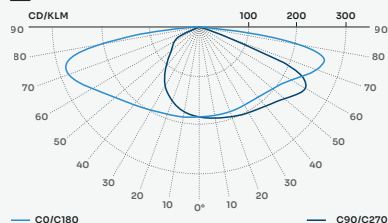
NR-T2SH (asymmetrical narrow lighting)



MR-T2ME (asymmetrical medium lighting)



AWR-T4ME (asymmetrical wide lighting)



SOLAR GENERATOR CODIFICATION

MODEL	SELLER	WIND	PRODUCT TYPE	COLOR (RAL)	TREATMENT	PV PANEL TILT	TENON ADAPTER																	
E3	EverGen	SD	Sunna Design	X	Standard	S	Single	9005	Black	C3H	C3H	25	25° tilt	EU	Universal									
																W	High wind	Other RAL upon request	C5M	Seaside C5-M	45	45° tilt	US	US version

PV SIZE		BATTERY TECH.		BATTERY CAPACITY		LED DRIVER		FIXTURE PROVISION		MOTION SENSOR		REMOTE MONITORING		OPTION	
200	200 Wp	L	LiFePO4	0512	512 Wh	LV	32-50 Vdc	X	None	X	No	X	No	XX	No
300	300 Wp			1024	1024 Wh	HV	50-120 Vdc	S	Single	M	Yes	C	Yes	HY	Hybrid
400	400 Wp			1536	1536 Wh			D	Dual					RO	Rise-On
				2048	2048 Wh										

FIXTURES CODIFICATION

FIXTURE CODE		MOTION DETECTOR		CCT		OPTICS		BACKLIGHT SHIELD		RAL	
RE01C	Elektra	0	Without	NS	Amber	A	AWR-T4ME	0	Without	9005	Black
				22	2200 K	M	MR-T2ME	1	With		
				27	2700 K	N	NR-T2SH				
				30	3000 K	R	Crossing R				
				40	4000 K	L	Crossing L				
RU00C	Nano	0	Without	22	2200 K	A	AWR-T4ME	0	Without	9010	White
				27	2700 K	M	MR-T2ME	1	With	8019	Brown grey
				30	3000 K	N	NR-T2SH			9005	Black
				40	4000 K						

PARKING LOT



APPLICATIONS

ROADS



DEVICE POWER SUPPLY





2025-A



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