



Solar Street Lights

Resilient Cities

and the importance of this concept

Resilient cities create systems that sustain, adapt, and grow as future uncertainties unfold, including emergency situations, like power outages, or other challenges. With a resilient infrastructure in place, a city can withstand unexpected shocks and stresses more easily and bounce back from them, as quickly as possible.

An important component of a Resilient City infrastructure is street lighting. A resilient city must find sustainable ways to react and provide safety to their inhabitants, in case of a blackout. Traditional street lighting cannot meet this challenge, simply because it is grid powered.

As a reference, the U.S. electrical infrastructure, despite being among the most modern and reliable in the world, suffers many blackouts.

Power outages in USA in 2017

3,526
power outages

36.7 Million
people affected

81 minutes
average duration

Source: http://pqlit.eaton.com/ll_download_bylitcode.asp?doc_id=33318

New All-in-One Solar Street Lights

Features:

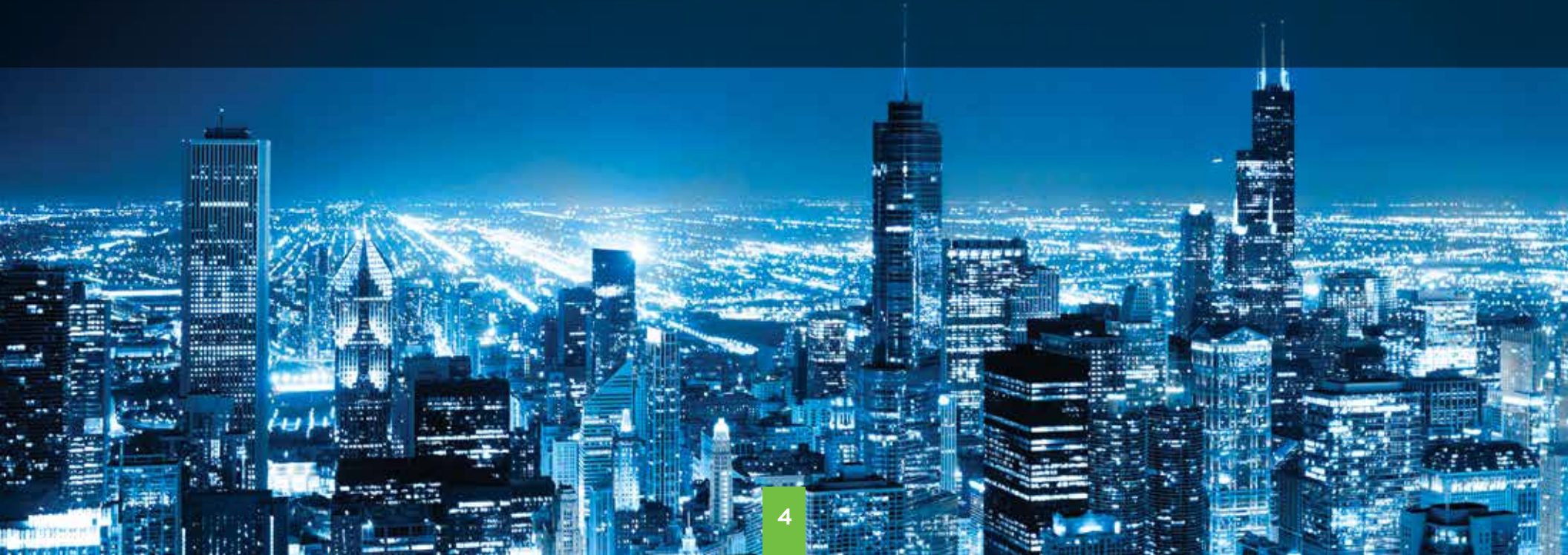
- All components inside a single IP66 enclosure
- Lithium-ion batteries, for longer life and compact size
- Microwave sensor for modulating output
- >170 lumens per watt (brightest)
- 3-year warranty
- 145 miles/hour wind speed rating (hurricane resistant)
- Super low-profile aluminum housing
- 5000°K ultra-white color temperature
- Two different models and three different pole designs



Model SL-4A, technical data

This is our top-of-the-line model, offering the highest intensity and maximum area coverage, especially recommended for highways and other roads, with vehicle speeds over 45 miles/hour. With a beam angle of 150° along the road and 70° across it, this model can be installed on 23 ft (7 meters) tall poles, at 100 feet (30 meters) of distance between poles, for maximum coverage. Total coverage area is 6,000 square feet (600 m2) per lamp.

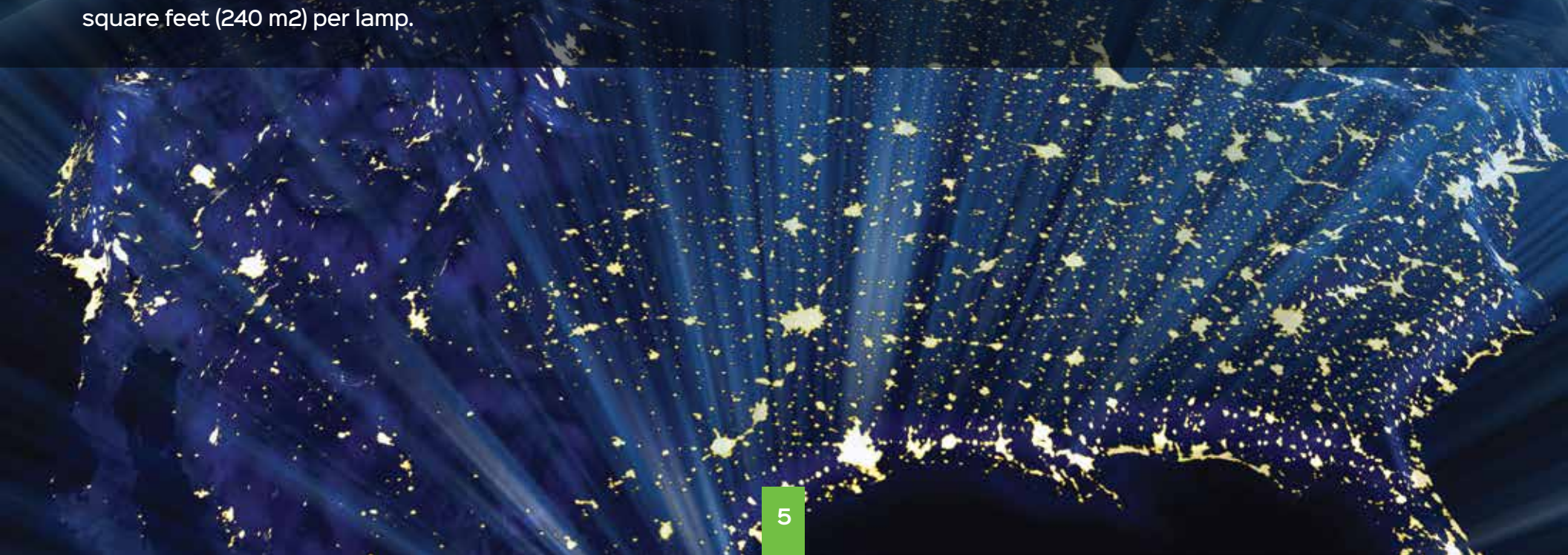
MODEL SL-4A (Suitable for highways)			
Model:	SL - 4A	Operating time:	12 hours
Total luminous flux:	6,947 lumens	Color Temperature:	5,000 °K (cool white)
PV panel:	75 Watts	Recommended installation height:	6 to 8 meters
Battery:	538 W-h	PV panel conversion rate:	17%
Lighting efficiency:	>170 lumen/W	Operating temperature:	-10° to 60°C
Beam angle:	150° x 70°	Warranty:	3 years
Enclosure rating:	IP66	Lamp module dimensions:	1,063 x 526 x 50 mm
Recommended installation distance (between poles)		25 to 30 meters @ 7 meters off the ground	
Coverage area @ 7 meters off the ground		600 m²	



Model SL-2A-E, technical data

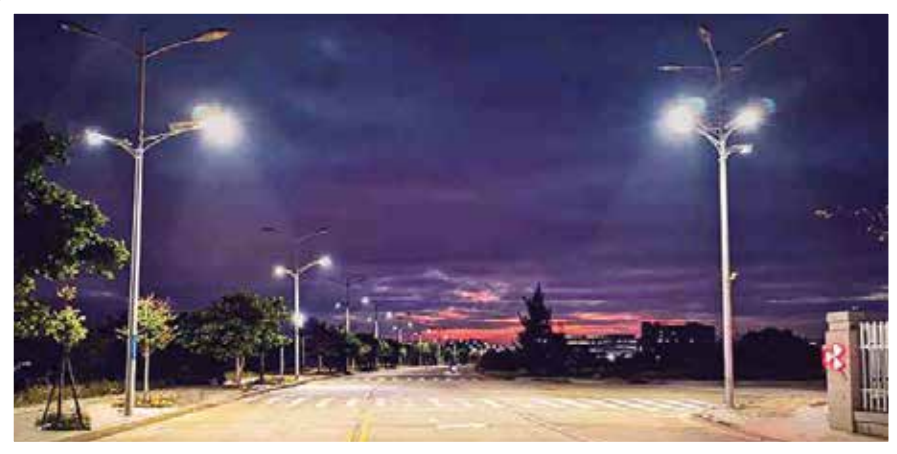
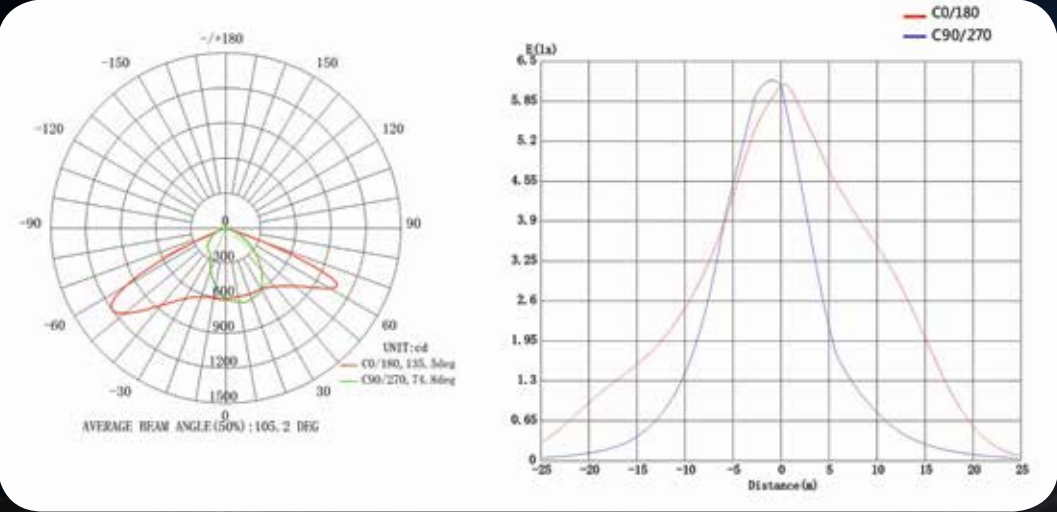
This is our smaller model, offering the same great features and brightness of our SL-4A model, but in a smaller size. It is suitable for parks, parking lots, property perimeter illumination, and urban streets with vehicle speeds below 45 miles/hour. With a beam angle of 150° along the road and 70° across it, this model can be installed on 17 ft (5 meters) tall poles, at 67 feet (20 meters) of distance between poles, for maximum coverage. Total coverage area is 2,400 square feet (240 m2) per lamp.

MODEL SL-2A-E (Suitable for urban streets, parks and parking lots)			
Model:	SL - 2A - E	Operating time:	12 hours
Total luminous flux:	1,979 lumens	Color Temperature:	5,000 °K (cool white)
PV panel:	30 Watts	Recommended installation height:	4 to 6 meters
Battery:	128 W-h	PV panel conversion rate:	20%
Lighting efficiency:	>170 lumen/W	Operating temperature:	-10° to 60°C
Beam angle:	150° x 70°	Warranty:	3 years
Enclosure rating:	IP66	Lamp module dimensions:	677 x 367 x 50 mm
Recommended installation distance (between poles)		15 to 20 meters @ 5 meters off the ground	
Coverage area @ 7 meters off the ground		240 m²	

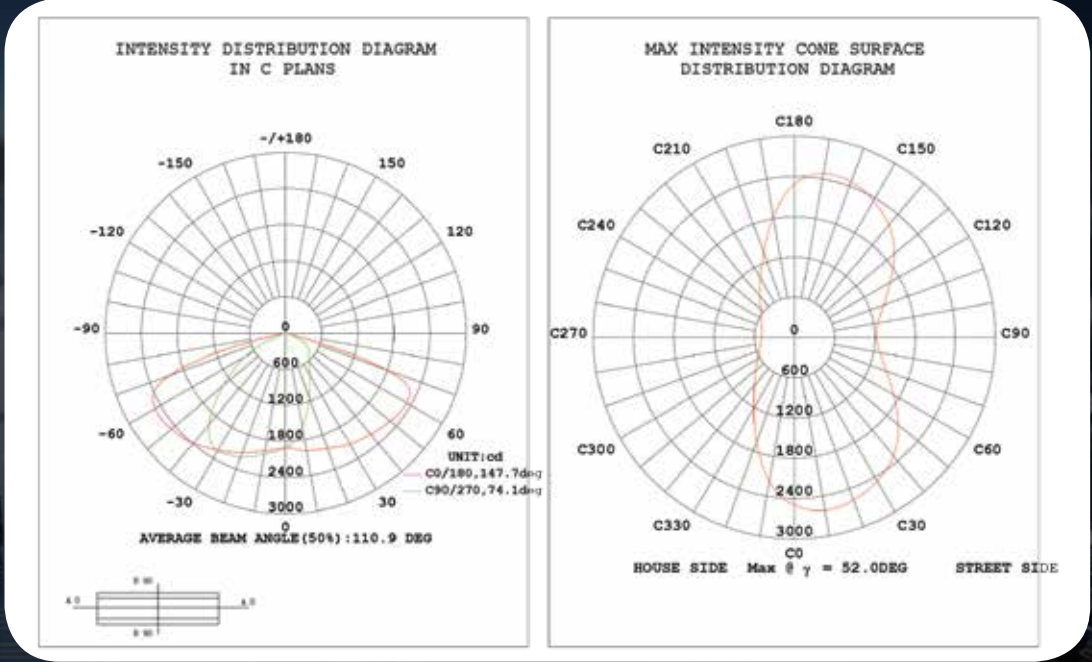


Our RADIANT solar street lights have undergone strict laboratory testing, to ensure the best performance, and the most accurate catalog data. Please refer to the following intensity distribution diagrams (a.k.a. batwing curves), for both models.

Model SL-2A-E:



Model SL-4A:



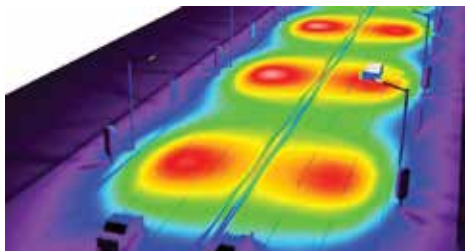
Only reliable and long-lasting components are part of our product



Specially designed polarized lenses to improve light projection, and uniform light distribution:



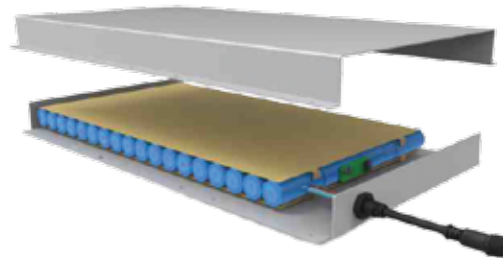
Infrared image showing our luminaries' light projection and coverage at ground level:



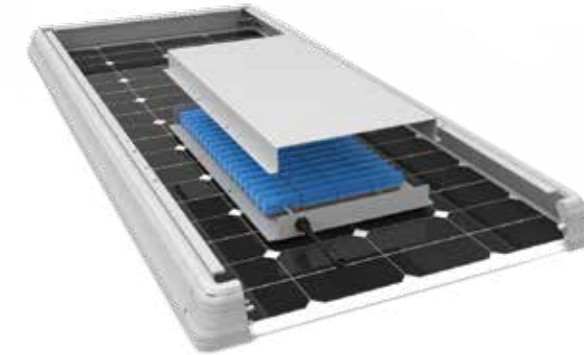
Smart digital controller, to modulate output depending on a signal from the microwave type sensor. It also manages the battery usage to ensure a long service life:



Lithium-ion batteries. This is the latest technology and the same one used in electric cars, laptop computers and cell phones. Ultra-compact and longer lasting:



Monocrystalline silicon photovoltaic panels, with a high conversion rate of 20% (this is 30% higher than polycrystalline panels):



Sturdy yet simple modular enclosure design, made of corrosion-resistant cast aluminum for high heat dissipation. Provides easy access to all components. Low-profile at just 2" (50 mm) overall thickness.



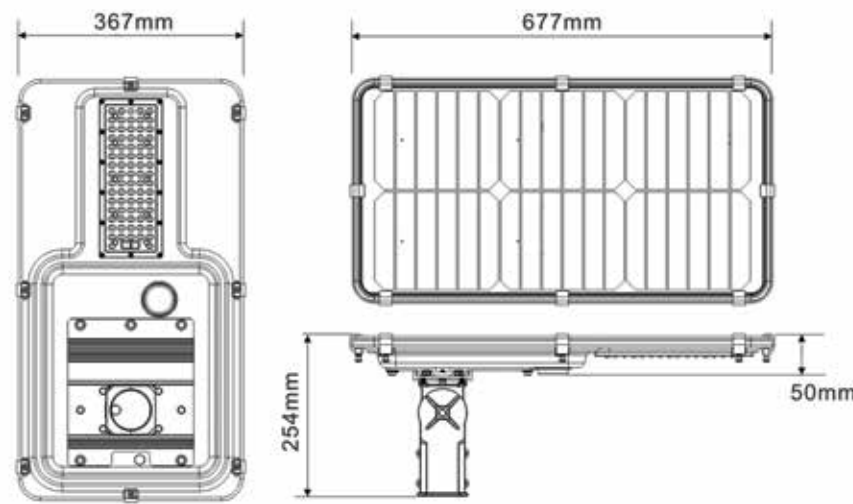
Optional hot-dipped galvanized steel light poles (galvanized inside and out for the best corrosion protection). Our poles come in three different designs and two different heights: 5 and 7 meters (17' and 23')



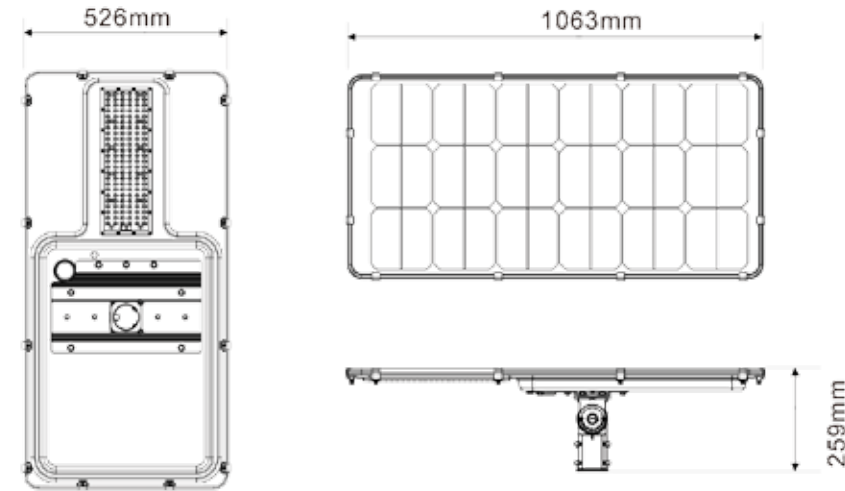
Dimensional Data



Model SL-2A-E:

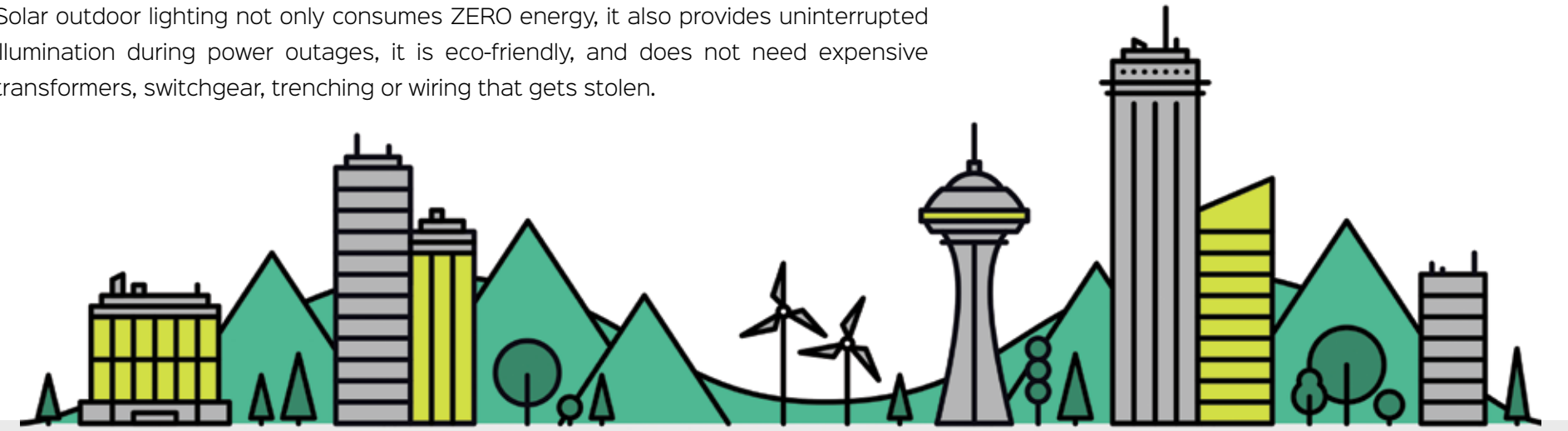


Model SL-4A:



Green Cities Use Solar

Solar outdoor lighting not only consumes ZERO energy, it also provides uninterrupted illumination during power outages, it is eco-friendly, and does not need expensive transformers, switchgear, trenching or wiring that gets stolen.

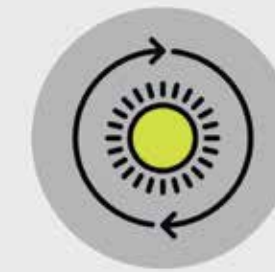


Do not live in the past

Traditional street lighting consumes huge amounts of energy. As an example, the United States has about 38 million street lights, that consume 31 MWh of electricity per year. To replace them with solar lights, would be equivalent to removing 4 million cars from the road. Another growing issue in many cities is the theft of copper wires, which is equivalent to a long term blackout in the area where the wires are stolen. Grid-powered street lighting still uses technology developed in the 19th century, it is a thing from the past, that sooner or later needs to be replaced.



Smart Investment
Solar lighting increases property values.



Reliability
Solar lighting works during a power outage



Safety
Solar lighting operates with low voltages (12V) so it is inherently safe.



Green energy
Solar lighting is the sustainable alternative



RADIANT Solar Street Lights are exclusively
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