

# SOLAR STREET LIGHTING - PYRAMID RANGE – G4

## Multiple Benefits of Silicon CPV Solar Powered Street Lights:

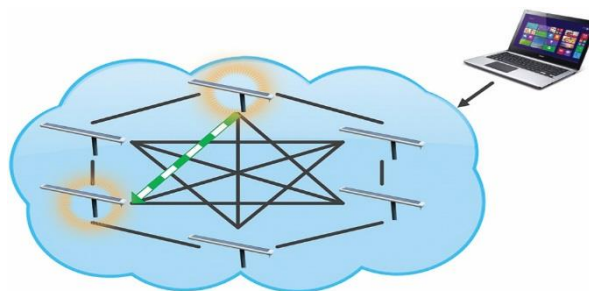
- Solar Panels vertically integrated into pole structure for maintenance free operation
- 10-year battery guarantee
- Solar panel 25-year service life
- High Efficiency LED's 200lu/W
- Optical efficiency >93%
- Battery bank charge controller, LED driver, communication interface all in a single removable cartridge
- Computer-controlled EMS
- Treated Aluminum main body
- No costly or complicated pipe-laying or underground cabling required
- Special chemistry lithium battery designed for 10- year service life in elevated temperatures
- Remote wireless connectivity
- Uses free electricity from the sun, environmentally friendly and pollution-free
- Stylish & integrated design.



## GSM or Internet based remote management

Our vision is simple – to develop and manufacture advanced Solar LED Street Lighting systems that will greatly reduce the cost of generating clean electricity from the sun's energy. Silicon CPV's solar powered street lights are the most economic, reliable and versatile means of providing street lighting. With a high efficiency long-life light source of up to 80,000 hours, the self-contained units are not only lightweight (less than 19kg per unit).

The economic advantage of solar lighting is very clear – deploying a solar light requires no timely and often costly overhead or underground electrical wiring. Further, not having to provide additional electricity from the grid for lighting avoids the incredible expense of power plants and electrical distribution equipment. The self-contained unit simply converts sunlight during the daytime into electricity and stores it into the battery.

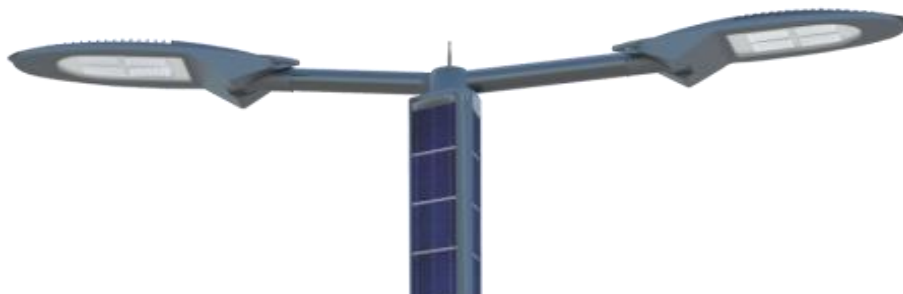


After sunset, the solar panel will detect a drop in ambient light and the system will automatically turn on the light. The LED light source complete with integrated lens ensures that all light produced is directed along the road exactly where required.

## Pyramid Range

- From 10,500 to 31,700 Lumens
- **10 Year Battery Life**
- IENSA Type II, Type III and Type IV Optics
- Pole height from 6m to 12m
- Pole spacing up to 5 times pole height
- Built-in wireless communications link for remote monitoring and management
- Very quick and easy installation
- Solar lighting can save the owners large amounts of money by eliminating trenching, wiring and electricity costs and also ensures that there are few or no landscaping issues

- Compared to traditional grid-tied lighting, the solar LED lights do not require timers and their LED fixtures eliminate regular maintenance visits. In more remote places, solar lights are also a way to help prevent theft
- Solar lights are good for the environment. Using only the limitless clean energy from the sun, they have the benefit of using less material and labour to install, further reducing the carbon footprint.



Specifications	Pyramid Single 8m – G4	Pyramid Twin 8m – G4	Pyramid Single 10m – G4	Pyramid Twin 10m – G4	Pyramid Single 12m – G4	Pyramid Twin 12m – G4	Pyramid Max 12m – G4
Maximum Light Output Phase 1 (Lumens)	10,500	2 x 9,600	13,600	2 x 12,500	16,600	2 x 15,300	31,700
Battery - Type	Lithium						
Capacity (Wh)	714	1,428	952	1,905	1,190	2,381	2,381
Battery - Service Life	10 Years at 65% DoD and at 45° ambient						
Light Source - Type	High Efficiency LED, 5000K Colour Temperature						
Light Out Put (Lumen Hours) 50% DoD	76,781	153,562	99,994	199,987	122,016	244,032	232,128
Number of LEDs	192	2 x 192	192	2 x 160	192	2 x 192	192
Light Head Lifetime	80,000hrs to LM80 specifications						
Optical Efficiency	>93%						
Main Body	Aluminum Alloy						
Pole Integrated Solar Panels	324W	324W	432W	432W	540W	540W	540W
Solar Panel - Service Life	25 Years						
Controller	Microprocessor based Energy Management and Wireless Communications						
Wireless Network	Proprietary Wireless Network allows Remote Management and Control of Lights using Internet or GSM. One gateway per 100 lights and all the gateways report to a central control room.						
Light Control	Intelligent Adaptive Light level control based on energy received or a predefined user selectable light level						
Light Hours	Programmable trigger levels from "Dusk to Dawn"						
Optics	Option for 8 different light profiles available for each light						
Integrated Pole Height	8 meters	8 meters	10 meters	10 meters	12 meters	12 meters	12 meters
Pole Spacing for T2 Optics	5 times Pole height for T2 Optics (IENSA Type II)						
Average Light level (Lux)	20	20	20	20	19	19	35
Weight (Kg)	80	90	90	100	120	130	120
Operating Temperature	-20°C to +60°C						
Protection Rating	IP66						
Standards Compliance	BS 5489:2003 EN13201, ME4a, IESNA Type II or Type III						

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