

## SOLAR LED Neighbourhood Bollard LIGHTING

**Easy Installation, No Cabling, Long Service Life and cost effective**

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

- 60° to 360° Light Coverage
- Uses free electricity from the sun so environmentally friendly and pollution-free
- Battery bank charge controller, LED driver, communication interface all in a single removable cartridge
- Easy to install and safe to use
- Computer-controlled EMS
- No costly or complicated pipe-laying or underground wiring required
- No cabling required
- One unit so no separate battery
- Unbreakable Vertical Solar panel 25-year service life
- Special chemistry lithium-ion battery designed for 5-year service life in elevated temperatures
- Remote wireless connectivity
- No costly maintenance required
- Stylish and integrated design
- Robust and weather-tolerant
- Traffic accidents and pedestrian injuries decline as visibility increases



### No Electricity Bills, No Grid Connection and No Carbon Emissions!

Our vision is simple – to develop and manufacture advanced Solar LED Lighting systems that will greatly reduce the cost of generating clean electricity from the sun's energy.

Silicon CPV's solar powered Neighbourhood Bollard lights are the most economic, reliable and versatile means of providing area lighting.

With a high efficiency long-life light source of up to 50,000 hours, the self-contained units are not only lightweight (less than 19kg per unit) but require no special tools or heavy lifting equipment to install. In fact they literally take just five minutes to install!

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 exactly where required.

## Neighbourhood Bollard Range

- From 1,200 to 1,500 Lumens
- 5 Year Battery Life
- 360 degree Light coverage
- Pole Height from 1m
- Pole Spacing 10m to 15m
- Unbreakable Vertical Solar Panels
- 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	Neighbourhood Bollard 1m
Maximum Light Output Phase 1 (Lumens)	1500
Battery - Type	Lithium
Capacity (Wh)	95
Battery - Service Life	5 Years at 80% DoD and at 45° ambient
Light Source - Type	High Efficiency LED, 5000K Colour Temperature
Total Light Out Put (Lumen Hours) 90%	15000
LED Power (Maximum)	12W
Light Head Lifetime	60,000hrs to LM80 specifications
Optical Efficiency	>93%
Main Body	Aluminum Alloy
Solar Panels Vertically Integrated in Pole	50W
Solar Panel Size	2 x 960 x 172
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 200 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"
Integrated Pole Height	1 meter
Recommended Pole Spacing	10 meters -15 meters
Weight (Kg)	20
Operating Temperature	-20°C to +60°C
Protection Rating	IP68

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Part Code: Bollard Range