

SOLAR LED STREET LIGHTING

Super NovaNM Range

Wireless Remote Monitoring and Control
Easy Installation, long Service life, cost effective

The Multiple Benefits of Silicon CPV Solar Powered Street Lights:

- Looks like a normal street light with a specially designed light envelope
- 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
- Lightweight – from 40Kg to 100Kg depending on model
- Easy to install and safe to use
- Computer-controlled EMS
- No costly or complicated pipe-laying or underground wiring required
- No cabling required
Battery Integrated under the solar Panel.
- Solar panel 25 year service life
- Special chemistry NiMH battery designed for 10 year service life in elevated temperatures
- Remote wireless connectivity
- No costly maintenance required
- Stylish and integrated design
- Suitable for 6 to 14 meter height poles
- Robust and weather-tolerant



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 over 80,000 hours, the self-contained units are not only lightweight (less than 40kg for Super Nova+ 1) but require no special tools or heavy lifting equipment to install. In fact they literally take just 90 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 along the road exactly where required.

Silicon CPVs street Lighting solution advantages:

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.

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	Super Nova 1NM	Super Nova 2NM	Super Nova 3NM	Super Nova 4NM
Maximum Light Output ((Lumens) Phase 1	11,060	16,600	22,120	33,200
Total Light Output ((Lumen Hours) @80% DoD	99,840	149,760	199,680	299,520
Battery - Type	NiMH			
Battery Capacity (Wh)	624	936	1,248	1,872
Battery - Service Life	10 Years at 65% DoD and at 45° ambient			
Light Source - Type	High Efficiency LED, 4000K Colour Temperature			
LED Power (Maximum)	80W	120W	160W	240W
Light Head Lifetime	80,000 to LM80 specifications			
LED Efficiency	200 lumens / Watt			
Optical Efficiency	>93%			
Solar Panel (W)	200W	300W	400W	600W
Solar Cells	Very High Efficiency – Proprietary Solar Cells (Greater than 20%)			
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 light level option is user selectable			
Light Hours	Programmable trigger levels from “Dusk to Dawn”			
Optics	8 different light profiles available for each light			
Recommended Pole Height	6 – 8 m	8 – 10 m	10 – 12 m	12 – 14 m
Pole Spacing	5 times Pole height for T2 Optics (IENSA Type II)			
Typical Light level (Dependant on Pole height)	18 Lux Average, 35 Lux Maximum, 10 Lux Minimum			
Dimensions (L x W) cm (Provisional)	125 x 97	145 x 97	2 x 125 x 97	2 x 145 x 97
Weight (Kg) (Provisional)	40	60	80	100
Operating Temperature	-20°C to +60°C			
Protection Rating	IP67			
Standards Compliance	BS 5489:2003 EN13201, ME4a, IESNA Type II or Type III			