

# SOLAR STREET LIGHTING SYSTEM



Solar Street Lighting system with 11W CFL Lamp is an ideal lighting systems for the illumination of streets, squares and cross roads located in areas that are not connected to the power grid. The solar streetlights unique design is the result of 10 years experience in solar photovoltaic manufacturing and system integration.

## FEATURES :

- Battery charging indicator, Low battery indicator, Dust and jet proof light unit, Temperature compensated set points, High reliability, Low maintenance, No fuel dependence, Easy installation, Clean energy, Power for any location.
- A cost effective solution for street lighting
  - 100% powered by Sun
  - Unsurpassed Reliability
  - Proven reliability
  - Meets MNES (Govt. of India) specifications
  - Environment Friendly
  - Solar panels reduce fossil fuel consumption, eliminating pollution
  - Self-Contained System
  - No wiring, No delays for Installation
  - No routine maintenance
  - No electric bills
- The stand alone solar photo voltaic Street lighting system comprises a compact fluorescent lamp as a light source, re-chargeable lead acid battery for storage, PV modules for charging the battery, suitable electronics for the operation of the lamp and safe charging and discharging of the battery and mechanical hardware for fixing these sub systems.

## Technical Specifications

General	
Application	Solar street lighting
Use	Outdoor
Duty cycle	12 Hrs
Lamp switching	Automatic dusk to dawn control
Number of days of autonomy	3 Days
SPV Module	
Module power @ 16.4V (STC)	75Wp
Battery	
Battery type	Flooded lead acid (Tubular)
Battery voltage	12V
Battery capacity @ C/10	75Ah

Electrical - Charge controller	
Charge controller type	Series pulsed two step, built into the lighting luminary
Charging current	6A Max.
Charge controller efficiency	>92%
Idle consumption	<5mA
Indications	Charging and low battery
Protections	Against module reverse current flow, overcharge, deep discharge, reverse polarity and over load
Fuse	Provided
Lighting luminary	
Lamp type	Compact Fluorescent Lamp (CFL), 4 Pin, Single U
Lamp wattage	11W
Rated light output (Lumens)	900 ± 5%
Lamp colour temperature	4700° K (Cool white)
Light coverage	> 180°
Rated Lamp life (Average)	>8000 Hrs
Nominal working voltage	12V DC
Inverter type	Quasi Sine wave, Free running
Inverter frequency	24-28 kHz
Inverter efficiency	> 82%
Lamp power (Typ.) @ high frequency	11W
Connecting Cables	
Module to charge controller	2.5 sq mm with ring terminals
Battery to charge controller	2.5 sq mm wire with ring and fork terminals
Battery sensing cable	0.5 sq mm wire with ring and fork terminals
Mechanical	
Pole	Al painted (MS) pipe of 2.5/2" diameter and 4.5 m height
Module mounting frame	MS frame
Battery box	Dimensions 560x280x310 mm Material MS sheet paint,
Lighting luminary	
Fixing	Pole mounting with mounting brackets, CF Lamp in base up configuration
Canopy (Case)	Injection moulded engineering plastic, weather, water and insect proof
Bowl (Light diffuser)	UV stabilised, non yellowing acrylic
Reflector	Highly reflective anodised aluminium
Colour (Canopy)	Black