SOLAR STREET LIGHTING

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Solar street lighting system is an ideal lighting system for the illumination of streets, squares and cross roads located in areas that are not connected to the power grid.

This fully integrated system combines the latest and most innovative technologies available providing years of convenient and trouble free lighting. Fully assembled factory tested kits are available with or without mounting poles.

The standalone solar photovoltaic street lighting system comprises of a Compact Fluorescent Lamp (CF Lamp) as 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.

Solar street light system is available either with automatic dusk to dawn operation or with a pre-set timer.

FEATURES

- More than 2 days of autonomy
- Automatic Dusk to Dawn Controller (DTDC) / Timer operation
- Highly efficient charge controller and Inverter
- Two step charging algorithm
- Temperature compensated set points
- Weather proof luminaries
- All necessary protection
- UV stabilised bowl and canopy
- Anodised aluminium reflectors

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Specification of Solar Street Lighting Systems

General

Application	Solar Powered Street Lighting for rural areas
Use	Outdoor
Operating Temperature	0 to 74^{0}C
Duty Cycle	12 Hrs
Number of days of autonomy	4 days

System Components

Module	
Module Type	Mono / Poly Crystalline Sillicon
Open circuit voltage	>/=21V
Module power @ 16.4V @STC	74Wp / 37Wp(2nos)
Module mounting frame	Provided
Material	MS frame, Galvanished finish
Battery	
Type	Flooded Lead Acid (Tubular) or VRLA SMF Lead Acid
Battery voltage	12V
Battery capacity @ C/10	75/65Ah
Battery Box	Provided
Material	MS sheet, Powder coated / Galvanished finish
Luminary	
Lamp Type	CFL 4 pin
Lamp wattage	11W
Rated light output (lumens)	900±5%
Lamp colour temperature	5200K (Day light)
Light coverage	>180^0
Light output degradation after 1000 ON/OFF (2 min On & 4 min OFF)	<8%
Nominal working voltage	12V DC
Inverter type	Quasi sine wave, Free running
Inverter frequency	24-28 kHz
Inverter efficiency	>80%
Lamp current crest factor	<1.6
DC component at the output voltage	Nil
Lamp starting	Soft start (Pre-heated)
Preheating time	<5 seconds
Lamp power @Inverter Frequency	11W
Lamp current @ Inverter Frequency	150mA
Power consumption @ 12V DC Input	13.5W ±10%
Fixing	Pole mounting with mounting brackets
Charge Controller	
Charge controller type	Series pulsed two step
Charging current	6A Max.
Charge controller efficiency	>92%
Idle consumption	<5mA
Indications	Charge and Low battery
Protection	Overcharge, Deep discharge, Reverse polarity, Module reverse current flow, Overload
Pole	
Height	4 Meters
Diameter	3" ± 5%
Material	Painted /Galvanished Iron (GI) pipe
Connecting Wires	
Module wire	2.5 mm^{2}wire with fork terminals
Battery to light unit wire	2.5 mm^2 wire with ring and fork terminals
Sensing wire	0.5 mm^2 wire with ring and fork terminals

Specification & other details mentioned in this sheet subject to change without any prior notice. Please feel free to contact us at the following address. We assure you our best service always.

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