SUNGRACE

Technical Specification of Solar Home Lighting Systems Model : 1

General

Application	Solar Powered Home Lighting System
Use	Indoor
Operating Temperature	0 to 50^0C
Duty Cycle	~4 Hrs
Number of days of autonomy	3 days

System Components

Module	
Module Type	Mono / Poly Crystalline Sillicon
Open circuit voltage	>/=21V
Module power @ 16.4V @STC	18/20Wp
Module mounting frame	Provided
Material	Galvanished Iron Frame
Battery	
Type	Flooded Lead Acid (Tubular) or VRLA SMF Lead Acid
Battery voltage	12V
Battery capacity @ C/10	20Ah
Battery Box	Provided
Material	MS sheet, Powder coated / Galvanished finish
Luminary	
Lamp Type	CFL 4 pin
Number of Luminary	1 nos.
Lamp wattage	9W
Rated light output (lumens)	600±5%
Lamp colour temperature	5200K (Day light)
Light coverage	$>180^0$
Light output degradation after 1000 ON/OFF (2 min On & 4 min OFF)	<10%
Nominal working voltage	12V DC
Inverter type	Quasi sine wave, Free running
Inverter efficiency	>82%
DC component at the output voltage	Nil
Lamp starting	Soft start (Pre-heated)
Preheating time	<5 seconds
Power consumption @ 12V DC Input	9.9W ±10%
Fixing	Wall mounting with screws
Charge Controller	
Charge controller type	Series pulsed two step
Charging current	3A Max.
Charge controller efficiency	>92%
Idle consumption	<5mA
Indications	Charge and Low battery
Protection	Overcharge, Deep discharge, Reverse polarity, Module reverse current flow, Overload
Connecting Wires	
Module to charge controller	1 mm^2wire with fork terminals- 5 mtrs
Battery to charge controller	1.5 mm^2 wire with fork terminals – 0.4/0.65 mtrs
Luminary to charge controller	1 mm^2 wire with fork terminals- 5 mtrs.

Specification & other details mentioned in this sheet subject to change without any prior notice.