

SOLAR HOME LIGHT



Solar Home System is a user friendly and effective light source using the sunlight to provide reliable and cost effective electricity. The Solar Home System is an ideal light source and a viable solution for household electrification in rural areas.

The solar Home System comprises of a rugged PV module for charging the battery, (a flooded Tubular type / VRLA Battery to store the electric charge), a charge controller for the safe charging and discharging of the battery, 2/3 light units (Luminaries) with an efficient inverter and 7/9/11 W Compact Florescent Lamp and DC Fan.

FEATURES

- Elegant and efficient luminaries
- Micro controller based electronic circuit
- All necessary protection
- UV stabilised acrylic light diffuser
- Non-polluting
- Available in different configurations
- Safe & easy to install

Model	Lamp	DC Fan	Battery	SPV Module	Luminaries	Duration
SGH9/1220	9W	-	12V20Ah	SGM1220	1	3-4Hrs.
SGH9/1237	9W	-	12V40Ah	SGM1237	2	3-4Hrs.
SGH9F/1237	9W	<16W	12V40Ah	SGM1237	1	1-2Hrs.
SGH9F/1274	9W	<16W	12V75Ah	SGM1274	2	2-3Hrs.
SGH9/1274	9W	-	12V75Ah	SGM1274	4	3-4Hrs.

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Technical Specification of Solar Home Lighting Systems

SGH9/1220	SGH9/1237	SGH9F/1237	SGH9F/1274	SGH9/1274
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General

Application	Solar Powered Home Lighting System				
Use	Indoor				
Operating Temperature	0 to 50°C				
Duty Cycle	~4 Hrs	~4 Hrs	1-2 Hrs	2-3 Hrs	~4 Hrs
Number of days of autonomy	3 days				

System Components

Module					
Module Type	Mono / Poly Crystalline Silicon				
Open circuit voltage	>=21V				
Module power @ 16.4V @STC	18/20Wp	37/40Wp	2x37Wp or 74Wp		
Module mounting frame	Provided				
Material	Galvanized Iron Frame				
Battery					
Type	Flooded Lead Acid (Tubular) or VRLA SMF Lead Acid				
Battery voltage	12V				
Battery capacity @ C/10	20Ah	40Ah	75Ah		
Battery Box	Provided				
Material	MS sheet, Powder coated / Galvanized finish				
Luminary					
Lamp Type	CFL 4 pin				
Number of Luminary	1	2	1	2	4
Lamp wattage	9W				
Rated light output (lumens)	600±5%				
Lamp colour temperature	5200K (Day light)				
Light coverage	>180°				
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 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				
DC Fan					
No. of Fan	-	-	1	-	
Rated Power	<=15W				
Nominal Voltage	12V				
Charge Controller					
Charge controller type	Series pulsed width, two step charging				
Charging current	3A Max.		6A Max.		6A Max.
Load current	3A Max.	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				
Connecting Wires					
Module to charge controller	1 mm ² wire - 5 mtrs		2.5 mm ² wire - 5 mtrs		
Battery to charge controller	1.5 mm ² wire - 0.4/0.65 mtrs		2.5 mm ² wire - 0.4/0.65 mtrs		
Luminary to charge controller	1 mm ² wire - 5 mtrs.		2.5 mm ² wire - 0.2 mtrs.		

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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