



DC HOME LIGHTING SYSTEM HLS25ME



PRODUCT INTRODUCTION

- The power box which has a External 12v battery and a advanced MPPT based solar charge controller also charges battery via solar or even by AC power using the included DC adapter through electricity.
- runs DC load
- There is LCD display showing all parameters This product has many variations by way of battery capacity (stored power) and solar panels (battery charging)that can be used all offering different back up times otherwise the functions remaining the same.

PACKAGE CONTENTS

- 1. Solar Home Lighting With 3 DC Port and 2 USB for Mobile Charger
- 2. 40W to 380 W Panel (Optional)
- 3. 12V 7AH to 12V 100AH Battery (Optional)
- 4. AC Charger (Optional)
- 5. DC Bulb / Tube 7 W-2 No (Optional)
- 6. DC Fan (Optional)
- 7. DC TV (Optional)

Parameter	Value
Panel Voltage	17V-45 V
Solar Charging Current	25 AMP
Grid Charging Current (Optional)	4 AMP
Charge Controller Technology	MPPT
Battery Charging Voltage	14.2V
Battery Low Disconnect	10.2V
Over Charge Cut-off Voltage	14.2V
Fuse Rating	30A
Panel recommended	40-380 W
Load	100

Flat plate, Tubular, GEL, AGM, Li Ion chemistries

OTHER SPECIFICATIONS

0°C to 55°C **Operating Temperature** DC Output 4 DC Output For tube and Fan. 2 USB Port total 100W With Dusk Dawn selectable

DISPLAY

PV Current

It incorporates 2 line LCD to showing following parameters Company Name **Battery Status PV Voltage**

KWHD (Kilo watt hour in a day) KWH in a month

Battery Voltage

Battery Current

PROTECTION

Battery deep discharging

Battery over charging

Short Circuit

Over Temperature

Battery / PV reverse protection







FEATURES

- Fuse provided to protect short circuit condition
- System in-built protection against battery over-charge & deep discharge
- In-built blocking diode provided to prevent reverse flow of current through PV module
- It has high efficiency SMPS charger. It implements a smart maximum peak power tracking (MPPT) algorithum that tracks the peak power point of a solar panel, irrespective of operating conditions.
- Increase life of battery by :
 - Using Battery State of Charge SOC% for controlling depth of discharge.
 - Normal battery voltage base controls also protect battery along with SOC controls.
 - It runs Perodic Finishing loop for better charging.
- It implements a low battery disconnect feature to prevent the battery from discharging below a certain charge state. Battery is disconnected on the basis of cell voltage.
- Battery Voltage settings are optionally temperature compensated thermistor based temperature sensor supported.
- Suppose two modes of operation for load.
 - Normal On/ Off via switch Auto mode.
 - Use Dusk Dawn monitoring & Load is switched on only during Dusk after a factory programmable delay. Duration of load on is also programmable.
- Maintains Solar Energy Meter for solar energy produced in a day & for last 30 days.

Protect Solar Charge Controller from direct Sunlight & Water.

Panel open circuit voltage should not to do be more than specified voltage

*Specification are subject to change without prior notice due to constant improvement in design & technology.

Authorised Dealer



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