

## SOLAR MPPT HOME LIGHTING SYSTEM

The SAURA JYOTHI HLS-MPL-20 is a Solar Home Lighting System for Rural Electrification. It has a high efficiency MPPT solar charger controller with inbuilt high life Lithium Ferrous Battery.

Four 4 DC output is provided for connecting LED lamps and DC fans. It also comes with a USB port for mobile charging.

It is fully protected against battery and solar panel reverse connection, overload at DC output, battery overcharge, deep discharge and no load. It is also protected against reverse discharge at night.

### TECHNICAL SPECIFICATIONS

Parameter	Range/ Value
Panel capacity	100Wp
Panel type	Polly/ Mono Crystalline
No. of cells	36
Panel VOC	23V (max)
VMP	17-18V
Panel Termination	Terminal Block
Type of charger	MPPT
Max Charging current	10A
Charging method	CC-CV-Float
Charge Voltage	14.4V
Idle Current	< 10mA
LED Indication	Green LED (Charge) <ul style="list-style-type: none"> <li>- Charging- Flashing</li> <li>- Full Charge – ON</li> <li>- Battery defect- 0.1S flash</li> <li>- Low PV- 0.1S/ 2.5S flash</li> <li>- Night- OFF</li> <li>-</li> </ul> Red LED (Output) <ul style="list-style-type: none"> <li>- Overload - 0.5S/2.5S flash</li> <li>- Short circuit- 0.1S flash</li> <li>- Battery Low- 1S flash</li> <li>- Output OFF- OFF</li> <li>- Output ON- ON</li> </ul>
Protection	Battery reverse, Panel reverse, Output short circuit, Output Overload, Night reverse discharge, Overcharge, Battery deep discharge.
Max Load	75W
Overload/ short restart	30 sec
Internal Battery type	LiFePO4/ Li-Ion
External Battery type	Lead Acid
Battery capacity	6AH/ 12.8V
Battery Low trip	10.8±0.2V
Battery reconnect	12.8±0.2V
USB port for mobile	2A, 5.5V
Enclosure	Powder coated MS Protection class IP21