

INTEGRATED SOLAR STREET LIGHT WITH MPPT CHARGER & DRIVER

With maximum power point tracking (MPPT) algorithm, this is ideal for Lithium Ferrous and Li-Ion Battery streetlights.

COMPLIES WITH MNRE SPECIFICATION

Smart MPPT algorithm tracks the peak power point of a solar panel & delivers about 15 to 30% more current compared to PWM based charge controllers.

Three stage charging using microcontrollers delivers constant current, constant Voltage & Float/ trickle charging.

LED driver with dimming high efficiency constant current LED drivers with Automatic Dusk to Dawn & Timed dimming.

Deep discharge trip feature protects battery with only micro-amp idle current under prolonged storage in discharged state.

Fully protected from reverse polarity of battery & panel, over charge, over heat, reverse discharge, LED short.

FEATURES

- Timed dimming control.
- Low Idle current.
- Automatic dusk to dawn operation.
- All electronic protection.
- Temperature compensated charging.
- Charge & battery status indication.
- Driver protected for open circuit.
- Auto recovery from deep discharge trip at sunrise.
- Front LED Indication

GREEN for charge status

RED for driver status

TECHNICAL SPECIFICATION

Parameter	Range
Solar panel	Mono/ Polly crystalline
Panel rating	75Wp/ 100Wp
Panel VOC	23V (max)
MPPT tracking range	17 to 18V
Battery voltage	12.8V (nom)
Battery type	LiFePO4/ Li-Ion/ Lead Acid
Conversion efficiency	95% (min)
Idle current	<10mA
Driver max voltage	30V (max)
LED driver type	Constant current
LED driver output	350mA to 850mA
LED power options	9/12/15/20W
Dimming control	Customized for Full/ Half/ Quarter power
Temperature compensation	Provided for the battery type
GREEN LED (Charge status)	OFF - Night/ No solar Flashing - Charging Battery fault - 0.1S Flash ON - Full charge
RED LED (Driver status)	OFF - 0.1S/ 5S Flash Full power - 1.8S/ 2S Flash Dim state - 0.2S/ 2S Flash Trip - 0.2S Flash



*Note: Specification may change as result of continuous improvement of the product. Contact factory for latest update. Picture shown is that of the PCB. Actual model will come in enclosure as specified.