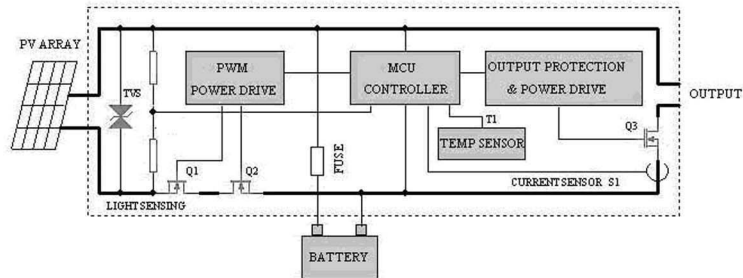
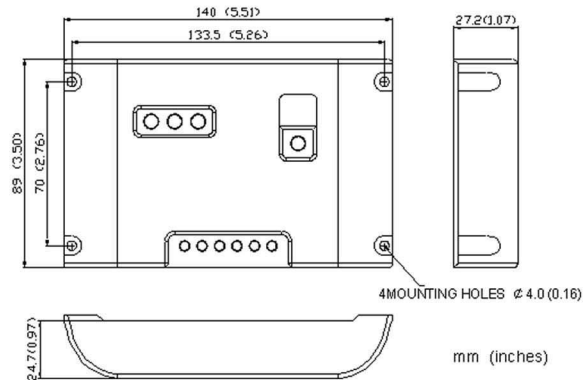


## SYSTEM MAIN CIRCUIT DIAGRAM



## MECHANICAL DRAWING

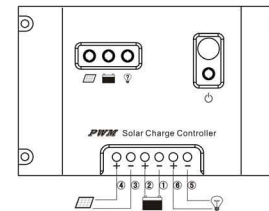


## INSTRUCTION MANUAL

-----For solar charge controller  
 -----ELECSUN 10A 12/24V-I



## INSTALLATION



- Connect wires in order indicated 1-6
- Use with 12V or 24V batteries only
- Use with 12V or 24V systems only
- Do not exceed Solar and Load ratings 10A , depending on version

## LED INDICATOR



Green ON when solar is charging battery  
Green blink when the system over voltage



Green ON when battery level in the right range  
Green slowly flashing when battery level full  
Yellow ON when battery level low  
Red ON when loads cut off



Red slowly flashing when its over load  
(the load amp is 1.25 times of rated current for 60 seconds, or the load amp is 1.5 times of rated current for 5 seconds)  
Red blink when the load is short-circuit.



Red ON when the switch is ON.  
Red OFF when the switch is OFF.

Please note:

1. the output will cut off once there is over load or short circuit. While short circuit for 1st time, the controller will resume to work automatically after 30 seconds. Check the load, press the switch to start when it happened again.
2. After over discharged, the controller will resume to work when the battery is charged to 13.1V. (for 12V system only, for 24v, use 2X)  
After over discharged, the controller will resume to work while you press the power switch, note the battery voltage needs to be over 12.5V.

## To correct problem

1. Check wires
2. Reduce amps if needed

## 3. Reset controller

- Disconnect battery +
- Reconnect battery +

## RATINGS (12/24V auto work)

ELECSUN-10A12/24V-I 170Watts or 10 Amps for Solar and Load

**NOTES: For use with solar panels only**

## TECHNICAL INFORMATION

- Regulations point 14.4 Volts
- Low voltage Disconnect 11.1 Volts
- Low voltage Reconnect 13.1 Volts

**Note: all is for 12V system only, use 2x for 24 Volt system**

- Microcontroller digital accuracy
- Type of Charging Series PWM & stat of charge(SOC)  
4 Stages: equalization, PWM, Boost and Float, temperature compensated charging
- Electronic protections Short circuit and over current-solar and load  
Reverse polarity-solar, load, battery  
Reverse current at night  
Limits high voltage to protect loads  
Lighting protection
- Tropicalization
- Terminals Conformal coated printed circuit board
- Weights For wire sizes to 2.5mm<sup>2</sup>  
250g
- Dimension 140\*90.5mm
- Self-consumption 6mA maximum
- Temperature -35°C to 55°C
- Enclosure IP22
- Warranty 1 years
- Compliance CE