



EPSOLAR EPHC10-EC Solar Charge Controller Instruction Manual

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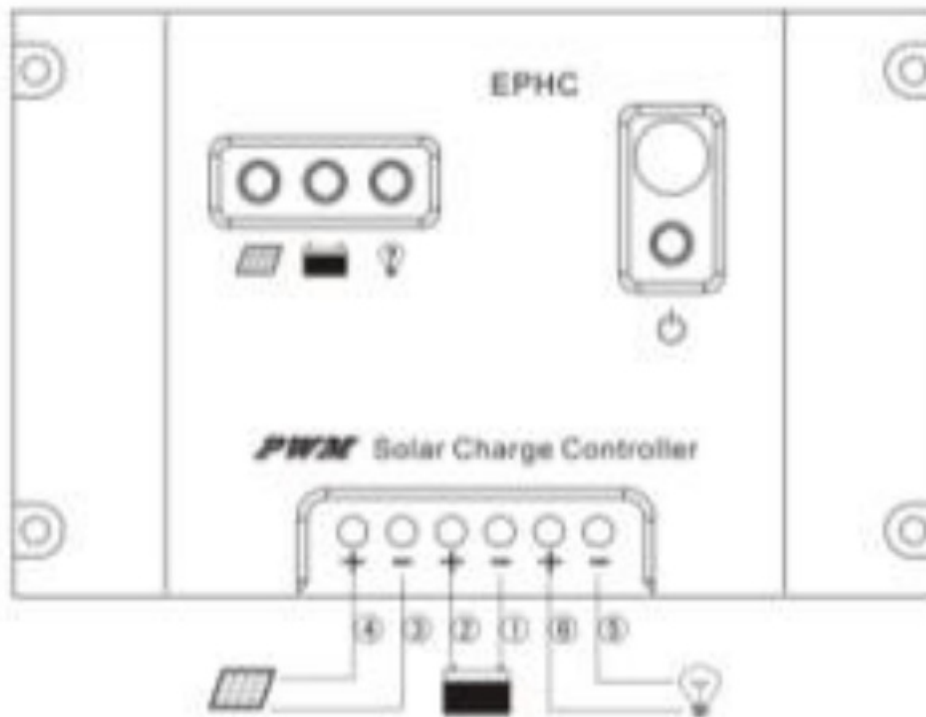


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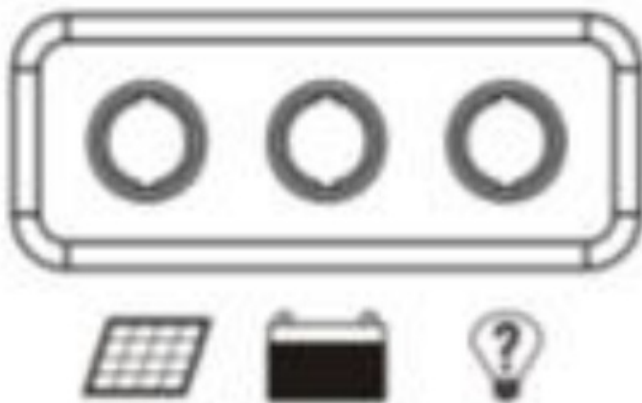
INSTALLATION

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

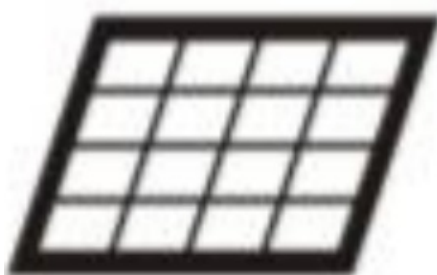


Note: carefully check before making each connection to be certain the polarity is correct

LED indicator



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



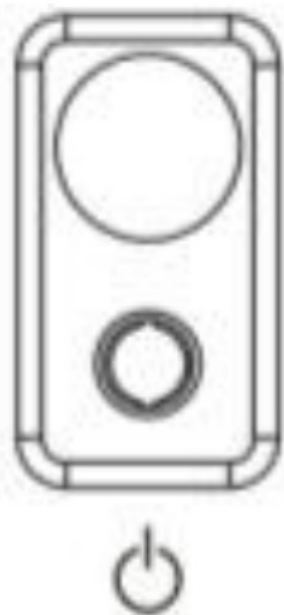
- Green ON when battery level in the right range. Green slowly flashing when battery level full. Yellow ON when battery level low. Red ON when loads cut of.



- Red slowly flashing when it's over load (The load amps is 1.25 times of rated current for 60 seconds, or the load amps is 1.5 times of rated current for 5 seconds) Red fast flashing when the load is short-circuit.



- Red ON when the switch is ON. Red OFF when the switch is OFF. The default status is ON.



1. The output will be cut off once there is over load or short circuit.

While short circuit occurs, the controller will have 4 automatic loads reconnect attempts. There will be 10s between the first three attempts and 20s between the 3rd and 4th attempts. For the fifth short circuit, the load can be only reconnected after 24hours. Anytime, please check the load and press the switch to reset the controller immediately.

While the over load occurs within 20s, press the switch and the load will be reconnected after 10s.

While the over load occurs over 20s, press the switch and the load will be reconnected immediately.

2. After over discharged, the load will be reconnected automatically when the battery is charged to 13.1V. (For 12V system only, for 24V, it is 26.2V) After over discharged, the load will be reconnected while you press the power switch. Please note the battery voltage needs to be over 12.5V. (For 12V system only, for 24V, it is 25V.)

To correct problem

1. Check wires
2. Reduce amps if needed
3. Reset controller
 - Disconnect battery +
 - Reconnect battery +

RATINGS (12V or 12/24V auto work)

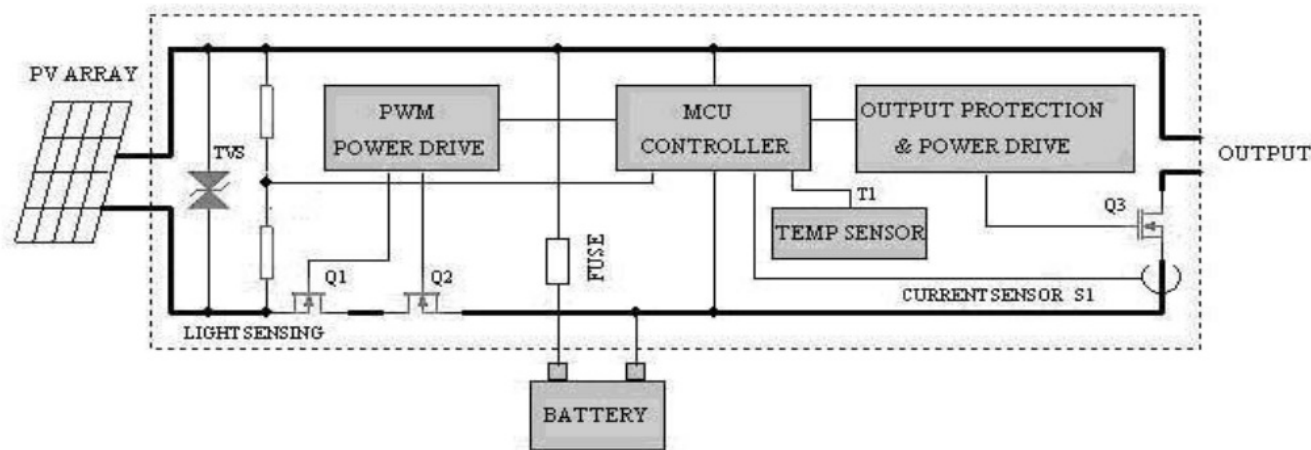
EPHC10-EC 170W or 10 A for Solar and Load

NOTES: For use with solar panels only

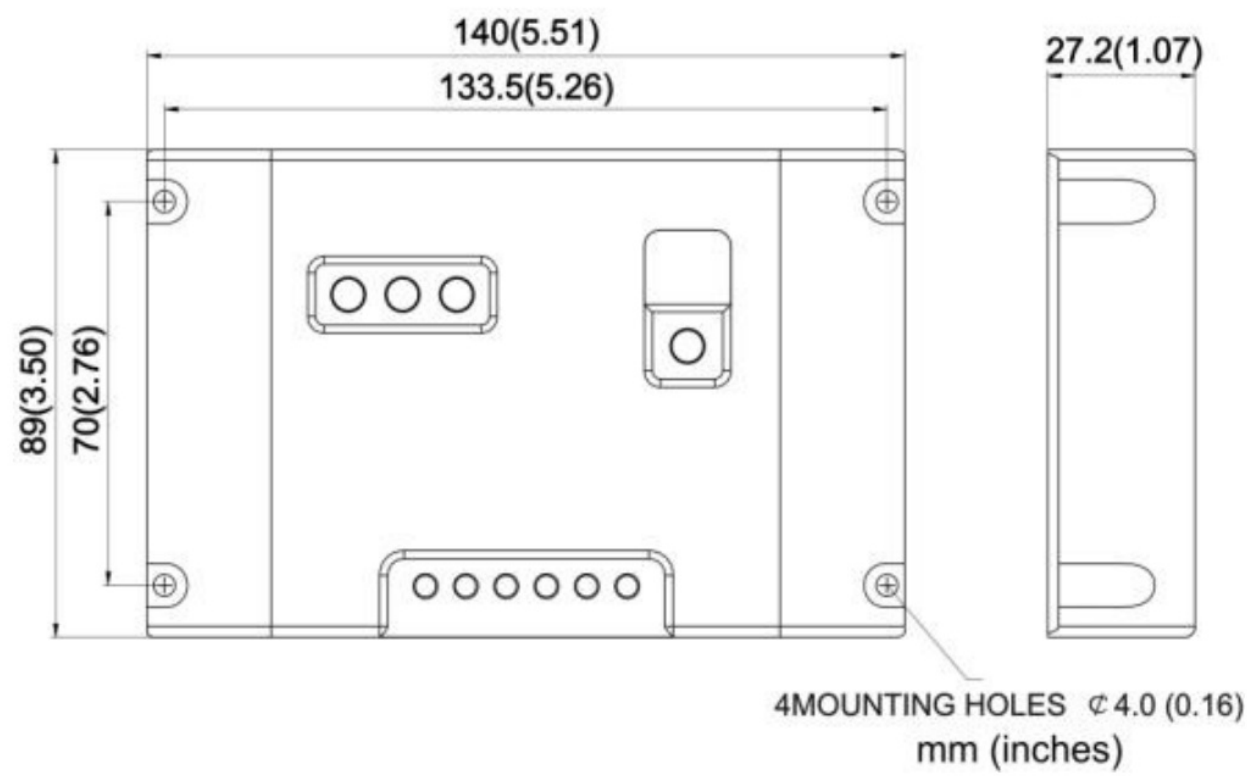
TECHNICAL INFORMATION


- **Equalization voltage** (60 minutes) 14.8 V
- **Boost voltage** (60 minutes) 14.4 V
- **Float Voltage** 13.7V
- **Low voltage Disconnect** 11.1 V
- **Low voltage Reconnect** 13.1 V
- **Note:** all is for 12V system only, use 2x for 24 V system
- **Microcontroller** digital accuracy
- **Type of Charging** Series PWM Temperature compensation charging
- **Electronic protections:** Short circuit and over current- load |Reverse polarity- battery |Reverse current at night |Limits high voltage to protect loads |Lightning protection
- **Topicalization** Conformal coated printed circuit board
- **Terminals** For wire sizes to 2.5mm²
- **Weights** 250g
- **Dimension** 140*89mm
- **Self-consumption** 6mA maximum
- **Temperature** -35°C to +55°C
- **Enclosure** IP30
- **Warranty** 1 year
- **Compliance** CE

SYSTEM MAIN CIRCUIT DIAGRAM



MECHANICAL DRAWING



<div><div><div>INSTRUCTION MANUAL</div><div><div>EPH10-EC Solar Charge Controller</div><div>EPH10-EC</div></div><div></div><div><div>INSTALLATION</div><div><div>1. Connect the solar panel to the controller.</div><div><div>2. Connect the battery to the controller.</div><div><div>3. Connect the load to the controller.</div><div><div>4. Connect the controller to the battery.</div></div></div></div></div></div><div><h2>EPSOLAR EPHC10-EC Solar Charge Controller [pdf] Instruction Manual</h2><p>EPHC10-EC Solar Charge Controller, EPHC10-EC, Solar Charge Controller, Charge Controller, Controller</p></div></div></div>
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References

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- [User Manual](#)

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