

5A MPPT Solar Panel Regulator Controller Battery Charging 9V 12V 24V Auto Switch(6.8)

Feature:

- 1.A real MPPT solar maximum power point tracking, automatic intelligent charge management, low power consumption.
- 2.Scope: 1w-100w, 9v-28v is suitable 9V 12V 18V 24V solar panels to the batteries, nickel-cadmium, nickel hydrogen, lithium batteries(battery)charging, wind turbines solar street lamps.
- 3.Input and output terminals are made of high-end switching power supply for high-frequency low-impedance electrolytic capacitors(LOW ESR), ensure that the output ripple. Can effectively filter out the switching power supply glitches.
- 4.Ultra-low pressure designed to achieve low power consumption and high efficiency, professional adaption adaptation of solar panels.
- 5.The output voltage can be adjusted, CC-CW automatic control (can support single or multi-lithium batteries or lithium iron phosphate or lead-acid batteries, high-power

LED, etc.)

6.The charge current is set by an external resistor (Preset 5000Ma / 2000Ma)

7. Deeply depleted battery trickle charge

8.Charge status and the charging status indication for LED

9.Solar cell maximum power point tracking, the output current is greater than the solar panel current, real ultra-efficient MPPT, support 8-28V, 100W solar energy within large current charging with a solar panel (recommended that each mould) multiple modules connected in parallel to expand the charging current

10.The use of imported dual-frequency low on-resistance MOS pipe, 10A large current double diodes, high efficiency flat power inductor current sense resistor constantan, low dropout perfect protection against reverse, reverse does not work, put an end to the anti-then damage the charge sheet.

Specification:

1. Input voltage: DC 8-28V(Prohibition AC input)

2. Output voltage: DC 5-26V stepless.
(6V battery can be charged either 12 or 8.4V, 12.6v, 16.8v lithium battery
7.2v, 10.8v, 14.4v lithium iron phosphate battery
2-4 string lithium batteries, lithium iron phosphate charge management board)
3. Output current: Maximum charge current 5A
4. Charge indicator: Fast charging red light long bright red and blue lights flash alternately charged. Full automatic stop.
5. MPPT function: MPPT maximum power point automatic tracking, to maximize the full use of solar charging
6. Low pressure: 1V (as is the step-down voltage regulator, the input voltage is at least higher than the output 1V)
7. Operating temperature: Industrial grade(-40 \hat{a} ,,f to 85 \hat{a} ,,f)
8. Load regulation: $\pm 1\%$
9. Voltage regulation: $\pm 0.5\%$
10. Conversion efficiency: max.93%; peak: 95%, different lighting conditions vary.

11. Charging: automatic intelligent three-stage charging mode. Self-tracking solar power charge current automatically adjust the size.
12. No-load current: 3MA even weak morning sunlight can easily start automatically, eliminating manual switch.
13. Input reverse polarity protection: Yes. Exclusively designed ultra-low dropout prevention MOS transistor reverse polarity protection, input reverse is not working.
14. Output reflux protection: Yes. Effectively prevent nocturnal reflux battery electric charge sheet.
15. Connection: There are terminals
16. MPPT voltage: Adjustable, MPPT solar modules in different voltage is different. MPPT control technology using charge sheet charging efficiency ratio control scheme in general or a DC-DC step-down power MCU+PWM lift about 30%. Make full use of solar energy, and low-power operation. Reduce power loss.
17. PWM Switching Frequency: 300KHz
18. Size: 57x36x10mm

Note: The first charge in advance regulate the output voltage and please closely monitor the battery voltage

prevent overcharging. Do not unprotected lithium batteries.

Debugging method:

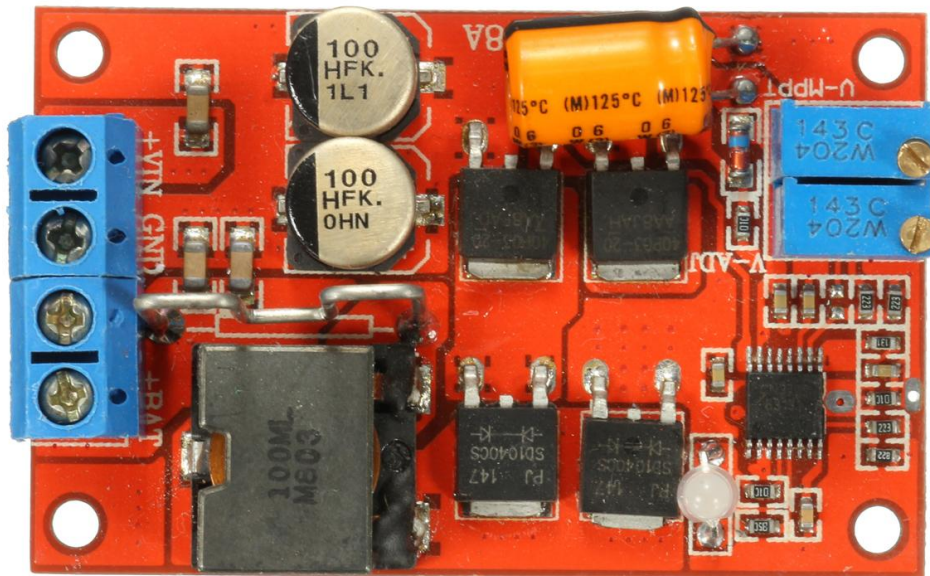
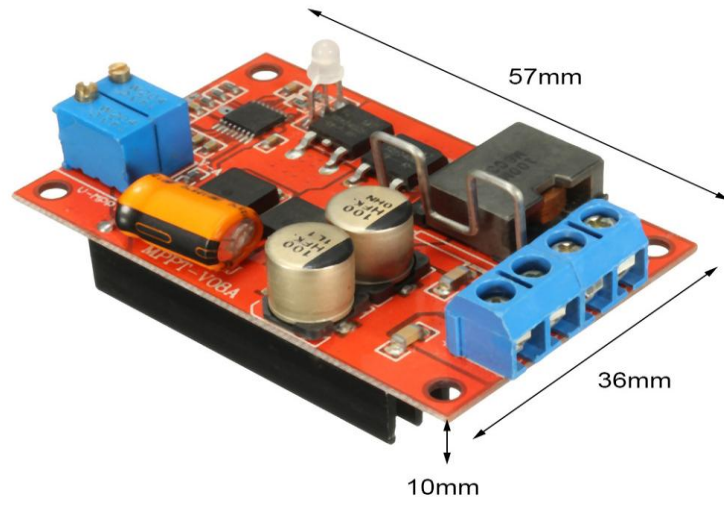
Step1: Connect the solar cell, do not take the bottle to be charged, if the output voltage in step2. If there is no transfer of small output counterclockwise slowly until the output voltage MPPT.

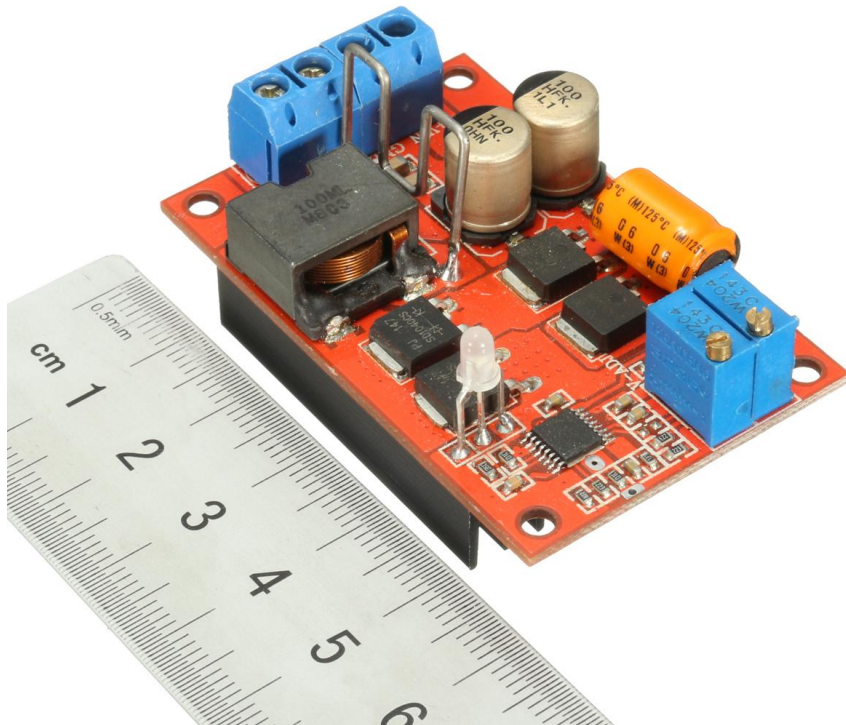
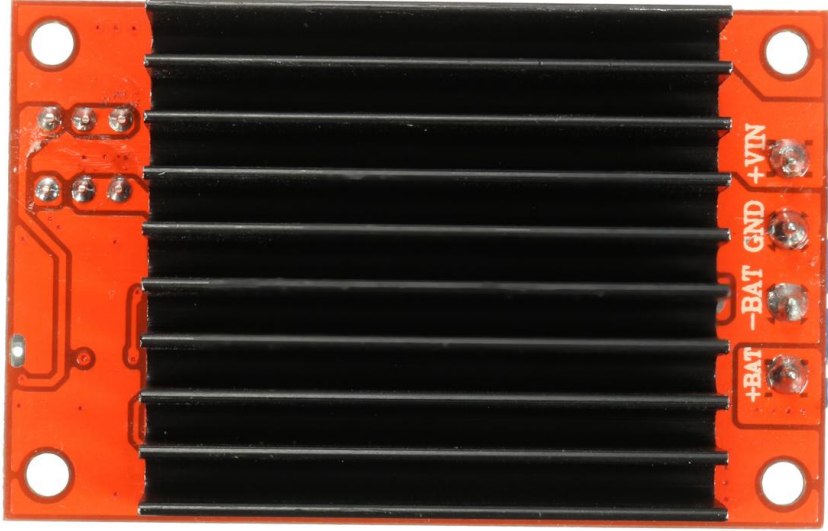
Step2: Counterclockwise transfer of small output voltage until the red and blue lights flashing, then coarse output voltage to a full cut-off voltage.

Step3: Access dead battery, and at the output string ammeter to monitor the charging current, MPPT trimming potentiometer until the charging current maximum.

Step4: Access is just full of batteries if the blue light is clockwise turn up the output voltage until the red light. Then transfer a small output voltage slowly counterclockwise until just blue lights, and then use a multimeter to measure to determine the cut-off voltage is correct to avoid overcharge. If know MPPT voltage of

solar panels.

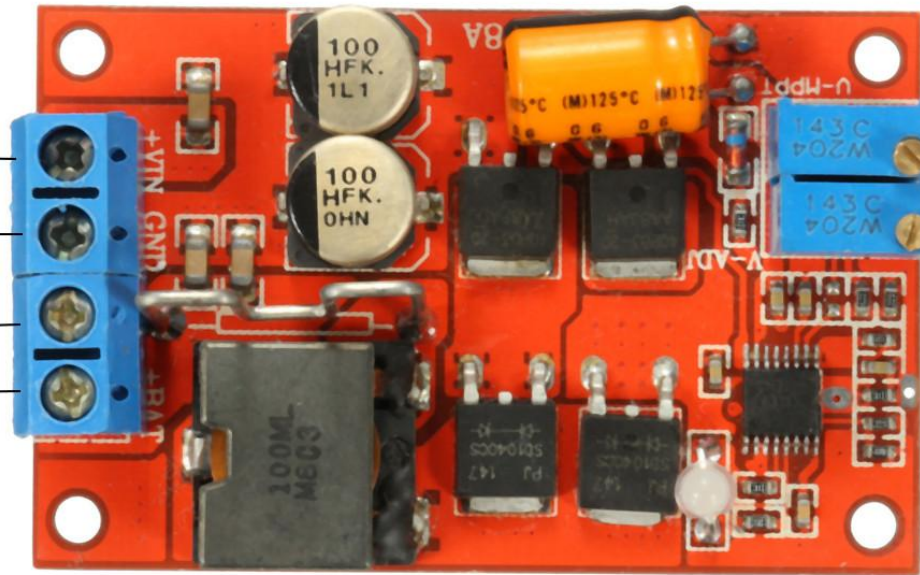




solar panel+

solar panel-

MPPT adjust



battery+

battery-

charge
adjust