



Aideepen 1200W 20A DC Converter Boost Car Step-up Power

Supply Module 8-60V to 12-83V

Specifications:

Module type: 1200W Boost Constant Current Module(Non-isolated)

Input voltage range: DC10-60V (direct input 10-60V without jumper cap selection voltage)

Input current: 20A (MAX) **exceeds 15A, please add fan cooling (add fan input current can reach 25A when the fan input voltage is 12-24V)**

Static working current: 15mA (12V liter 20V, the output voltage, the higher the current will increase too quiet)

Output voltage: 12-83V continuously adjustable (default output is adjusted to 19V shipment, please adjust to other voltage values.) 12-83V fixed output (for bulk customers)

Output current: 18A MAX More than 10A, please strengthen the heat dissipation (related to the input and output voltage difference, the larger the differential pressure, the smaller the output current)

Constant current range: 0.5-18A (+/-0.3A)

Low battery protection: yes (9-50V adjustable)

Working temperature: -40~+85 degrees (enhance heat dissipation when the ambient temperature is too high)

Working frequency: 150KHz

Conversion efficiency: 92%-97% (efficiency and input and output voltage, current, pressure related)

Module size (about) : 140mm*60mm*50mm

Smart Protection:

Input overcurrent protection: Yes (input over 25A, automatic protection, power does not boost)

Short circuit protection: Yes (input 30A fuse) Double short circuit protection, safer to use.

Input reverse connection protection: Yes (150A power MOS tube anti-reverse. Can be reversed for a long time)

Wiring method: 4 3mm copper columns, terminal block (please use high current pure copper wire)

Output power: = input voltage * 20A, such as: input 12V * 20A = 240W The maximum power when inputting 12V is 240W

Input voltage *20A

For example: input 24V * 20A = 480W, that is: the maximum power is 480W when inputting 24V

Guide:

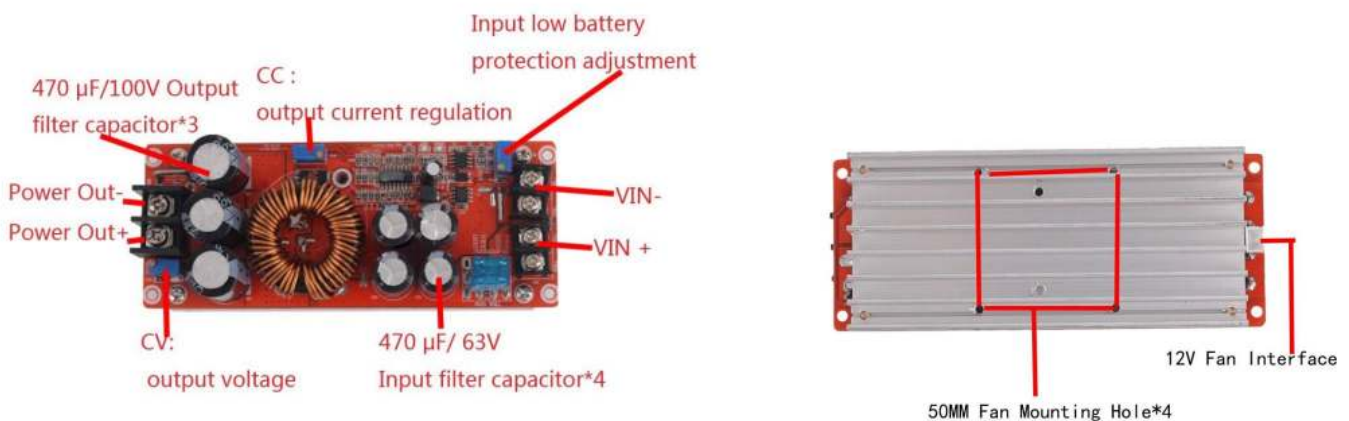
Entering low battery protection: mainly preventing battery excess discharge cells from being very low, battery voltage can damage power modules and batteries.

For example, set 12V battery power low battery protection. On the input of the power module, input 10V voltage, and use a screwdriver (clockwise protection voltage value, counterclockwise protection voltage low) to adjust RV1 until the UVLO lamp is lighting. At this time, when the battery voltage drops to 10V, the battery voltage low battery protection voltage is 10V, and the power module does not rise (the input voltage is equal to the output voltage).

Note:

- 1> Don't use short-circuit output mode, the circuit structure of the boost module cannot be adjusted in a short circuit.
- 2> The voltage of the input power supply must be over 10V.
- 3> When you do an input power supply with a switching power supply, the input power supply is first connected to the no-load and adjust the voltage. Then go to the load. (It must be ensured that the switching power supply has always been working) or the voltage is adjusted first, and then disconnect the power supply and then connect the load.
Turn on the switching power supply and the power module in the case where the switching power is turned on. (Because the switching power supply has a climb time when the power is turned on. When the voltage is below 10V, the chip has not been worked. It is easy to break the MOS tube.)
- 4> When the constant current mode is used to ensure that the fixed voltage must be higher than the input voltage. (For example, the input voltage of the power is 12V no-load output voltage is 15V to pick a 3.2V LED light. This situation is not allowed. At least 4 series LED lights)

Module nstruction:



Question	Solution
Enter short circuit	It may be the short circuit of the switch tube. need replace the switch tube
The current cannot be adjusted.	It may be that the load is wrong. Must be connected to a constant current load, such as LED lights and batteries
The voltage and current cannot be adjusted.	Check whether it is low -battery protection. When UVLO lamp extinguished the power will be work
Unstable output	Check whether the current is adjusted to the minimum or low -voltage protection.
It is not a stable output voltage, and the input voltage changes greatly. Not available.	This is a boost power supply, which can only rise and regulate. The output voltage can only be higher than the input voltage.
The project runs well for the first time when the load is connected to the output. But the second melting input fuse.	There may be two problems with fuse melting: 1. Output short circuit; 2. The load is too large. You need to change the fuse.
Once I connect the fan to the connector, the device stop working. There is no higher voltage at the output end. The fan is just heating up and not rotating.	First check whether the fan power is too large or the quality of the fan itself is problematic. The external fan current cannot exceed 0.1A, the voltage is 12V.
Use it to drive a 150W 36V LED. At first, the 4S lithium battery worked well, but about 5 minutes later, the LED was extinguished, the two fuses were burned. After the fuse was replaced, it burned immediately. No Output.	You need to replace the switch tube.
Regardless of whether the voltage is 5 volts or 32 volts, each fuse in it will pop up.	Check if the switch is broken



We greatly appreciate your POSITIVE feedback.

Please do NOT leave negative feedback without asking for help. Your satisfaction is our unremitting pursuit.

Any questions can contact us if you need help.

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