

Summary

- > Single output: power 2000W
- > Input voltage: DC12V–60V



General specification

Specification	Model	2000W 100A
Input voltage		DC12V–60V
Input current		100A (maximum)
Input power		2000W (maximum)
No-load power consumption		Less than 2W
Output voltage		DC15V–80V
Output current		50A (maximum)
Output power		1850W (maximum)
Conversion efficiency		92–96% (efficiency is related to input and output voltage and current)
Working temperature		–20°C ~ 50°C

Instructions for use

1. Input + is the positive pole of the power input, and input – is the negative pole of the power input.
2. Output + is the positive output of the power supply, and output – is the negative output of the power supply.
3. When the output of this module requires constant current and current limiting, the ground wires of the input and output must be connected separately and cannot share one wire.
4. Undervoltage adjustable range: DC10.5V–50V (clockwise to decrease, counterclockwise to increase), first adjust the undervoltage adjustable to the minimum, then adjust the input voltage to the required undervoltage protection value, and then counterclockwise Slowly increase the adjustable value, and when the undervoltage indicator light is on, adjust it back one to two circles, and then turn on the power again.
*The undervoltage protection function is mainly used for:
 - (1) Input battery power supply, mainly to protect the battery from being damaged by over-discharge.
 - (2) Power supply with unstable input voltage, such as solar panels, wind turbines, car generators, etc., to ensure that the power supply and equipment will not be damaged due to low input voltage.
 - (3) This function also has a certain MPPT function when used on solar panels and wind turbines, which can track the maximum power point when the input power is low to achieve high-efficiency input.
5. Constant voltage adjustable range: DC15–80V (clockwise to decrease, counterclockwise to increase), please adjust the voltage to the required voltage when the output is no-load, and then connect the load (when constant voltage power supply, the constant current should be to the maximum.).
6. Adjustable range of constant current: 5A–50A (clockwise to decrease, anti-clockwise to increase), first no-load to adjust the output voltage to the voltage required by the load (the no-load voltage should be 2–3V higher than the load voltage during constant current), adjust the current to the minimum, and then slowly bring the current to the current required by the load.
7. The power supply is equipped with an intelligent temperature-controlled fan. When the power supply temperature reaches about 55–60 degrees, the fan will automatically turn on, and when the power supply temperature drops to about 50 degrees, the fan will automatically turn off.
8. The input voltage cannot be lower than 12V or more than 60V, (please reduce the load appropriately when the input voltage is lower than 12V).
9. The maximum input current cannot exceed 100A, and the power cannot exceed 2000W.
10. When using, it must be ensured that the input voltage is more than 2V lower than the output voltage.
11. When using switching power supply or other secondary power supply, please ensure that the power of the power supply should be more than double the power of the module.
12. When the power supply is over-current or under-voltage protection, the output still has a voltage close to the input value, and the protection is only that the power supply does not boost.
13. The output blue indicator light will only light up when the power supply is boosted.
14. Important note: Please try not to use the input below 12V, and output more than 60V with full load. When the input and output voltage difference is large, the output power should be appropriately reduced. The larger the voltage difference, the lower the power supply efficiency and the greater the heat generation.
15. Description of output load: when the input is 12V (input current is 100A, the output is below 60V, the output can carry a maximum load of about 1100W), when the input is above 24V (the input current is up to 85A, and the output can carry a maximum load below 1850W), test load For resistive loads, other loads depend on the situation.
16. Description of input current and power: In any case, the input current cannot exceed 100A. When the input working current exceeds 75A or the input power exceeds 1000W, heat dissipation should be strengthened (the lower part of the power supply should be attached to the metal surface for heat dissipation). Calculation of input current: $\text{input current} = \frac{\text{output voltage} \times \text{output current}}{\text{conversion efficiency about } 0.93}$ /input voltage, Note, the no-load voltage should be selected for calculation when the constant current is output.