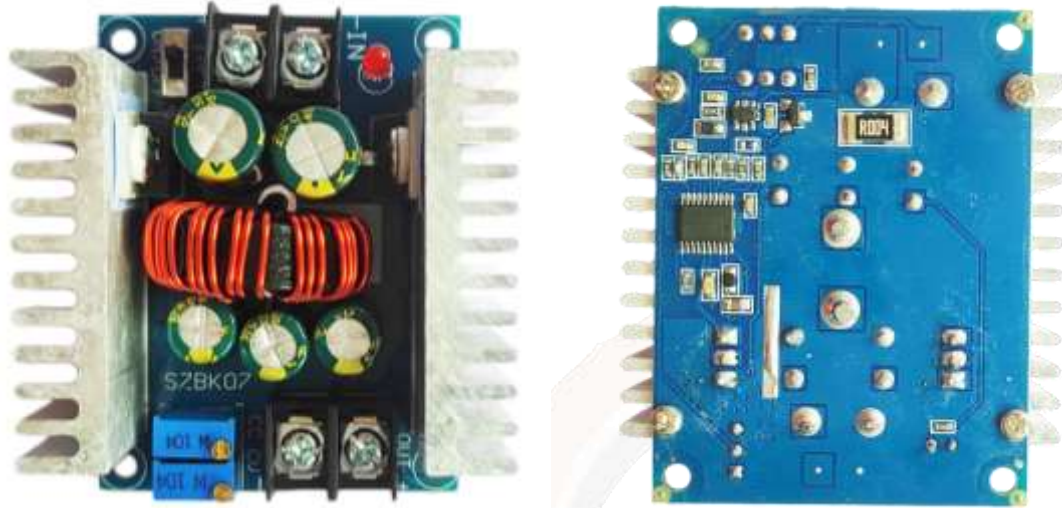




300W 20A DC-DC Buck Converter Module

300W 20A DC-DC Buck Converter Step-down Module Constant Current LED Driver Module



Description:

The 300W 20A DC-DC Step-down Adjustable Constant Current Module can be used to get adjustable output voltage ranges from 1.2V to 36V. The module provides a wide range of current output up to 20 A. With the heat sink mounted it can easily manage to run high power applications continuously (provided that for continuous high power output you need to use a cooling fan on the heat sink).

The Module is made from a dedicated benchmark IC and high-precision current sensing resistor, proving a more stable constant current, (when 20C to 100C constant current 1A, temperature drift less than 1%); and therefore it is particularly most suitable for LED driver applications. The output current of the module can be raised up to 20A (for continuous use it is recommended up to 15A with an additional cooling fan).

To enhance the stabilization in output voltage has six high-frequency capacitances which give the lower output ripple. Double heat sink design provides easy and fast heat dissipation. MOS Schottky diode independent heat sink, which heat dissipation is good, and won't affect each other. Also using large size Sendust Core and double pure copper wiring, improve working efficiency, reduce fever.

The module has onboard 3296 multiturn potentiometers for high accuracy voltage and current regulation to provide good stability. As voltage and current are adjustable, it gives very easy to use at multiple Application such as battery charging, LED Driver power supply, Vehicle Power Supply, etc which makes the module Multipurpose and hence this module is always in demand from our maker because of its wide range of application and low cost.

Features:

- Scope: High-power LED constant current driver, rechargeable lithium batteries 4V, 6V, 12V, 14V, 24V battery charging; nickel-cadmium nickel-metal hydride batteries (battery) charging, solar panels, wind generators.
- Output voltage: continuously adjustable (1.25-36V) (applied to the input voltage is higher than the output voltage applications can boost).
- Turn lights Current: current value * (0.1), turn the lamp current, and constant value linkage, such as the constant value of 3A.
- Turn the lamp current is set to a constant current of 0.1 times ($0.1 \times 3A = 0.3A$), when the constant 2A, when adjusted to the current value, then turn the lamp current constant current of 0.1 times ($0.1 \times 2A = 0.2A$).
- This version is a fixed 0.1 times (actually turn the lamp current value is probably not very accurate) is full of instructions for charging.
- Minimum pressure: 1V.
- Output Ripple: about the ripple 50mV (without noise) 20M bandwidth (for reference) Input 24V Output 12V 5A measured.
- Operating temperature: -10 to + 75 (please note the actual use of the power tube temperature, the temperature is too high, please enhance heat dissipation).

Specifications:

1. Input Voltage (V) : 6-40 VDC
2. Output Voltage(V) : 1.25 to 36
3. Max. Output Current (A) : 20
4. Conversion Efficiency : 97%
5. Switching Frequency : 180 KHz
6. PCB Size (L x W) mm : 60 x 45

How to do the Module adjustment:

1. When the module output voltage cannot be adjusted (the output voltage is always equal to the input voltage) Please adjust the potentiometer counterclockwise 20 laps (20 turns) or more till it works.?
2. Turn trimmers CLOCKWISE to INCREASE, ANTICLOCKWISE to DECREASE.
3. When adjusting the blue potentiometer, please use a multimeter to monitor the voltage
4. The trimmer nearest the voltage output adjusts the output CURRENT (CC)

The trimmer nearest the voltage input adjusts the output VOLTAGE (CV).

Applications:

1. High-power LED driver.
2. Lithium battery (or lead accumulator) charge.
3. Vehicle-mounted power supply.
4. Low voltage system power supply.
5. 6V, 12V, 14V, 24V battery charge.
6. On-board laptop power supply.
7. Regulated power supply.
8. Low voltage power supply system.

Note: If the module temperature exceeds 65C, please add a cooling fan, (It be used at room temperature without a fan)

Package Includes:

1 x 300W 20A DC-DC Buck Converter Step-down Module Constant Current LED Driver Module