



DC-DC Converter 24V to 12V Step Down Power Supply Module QS-2405CCBD-12A

SKU: 1941682

Brand: QSKJ

Model: QS-2405CCBD-12A

Features:

- High output current, the max output current can reach 8A.
- Four high frequency capacitance, can lower output ripple, enhance the work stabilization.
- Double heat sink design. MOS schottky diode independent heat sink, which heat dissipation is good, and won't affect each other.
- Using large size Sendust Core and double pure copper wiring, improve working efficiency, reduce fever.
- 3296 multiturn potentiometer, high accuracy voltage and current regulation, good stability.
- Double color lamp, working condition be clear at a glance
- Voltage and current are adjustable, which effect is good. Fixed turn lamp current is 0.1 times the current value (Used to identify whether the battery is fully charged When charging).
- Made from a dedicated benchmark IC and high-precision current sensing resistor, proving a more stable constant current, (when 20°C to 100°C constant current 1A, temperature drift less than 1%). Particularly suitable for LED driver.

Parameters:

- Constant current range: 0.2-8A (adjustable)
- Lowest pressure: 1V
- Output Power: Maximum power is about 200W
- Conversion efficiency: Up to about 95%
- Operating frequency: 300KHZ
- Output ripple: 20M bandwidth
- Input 24V output 12V 5A ripple around 50mV (Excluding noise)
- Output short circuit protection : Yes, constant current
- Input reverse polarity protection: None
- Output prevent backflow: None
- Wiring: Terminal
- No-load current: Typical 20mA (24V switch 12V)
- Load regulation: $\pm 1\%$ (constant)
- Voltage regulation: $\pm 1\%$
- Dynamic response speed: 5% 200uS
- Size(approx): 65 x 47 x 22mm (L x W x H)
- Output short circuit protection: Yes, Constant current (the current setting constant current value)
- Input reverse connect protection: NO
- Output prevent reverse flow: NO
- Wiring Method: amphenol connector
- Input voltage: DC 7-32V
- Module properties: Non-isolated step-down constant current, constant voltage module (CC CV) charging module
- Output voltage: (1) DC 0.8-28V continuously adjustable. (2) Fixed output: Choose between 0.8v-28v
- Output Current: 8A (when power tube's temperature exceeds 65 degrees, please add cooling fan)
- Indicator: dual color indicator, charging indicator light is red, the green light means fully charged (No load is green)

- Operating temperature: Industrial grade (-40 °C to +85 °C) (please note the actual use of the power tube temperature , high temperature heat strengthened)
- Potentiometer adjustment direction: clockwise (increase) , counterclockwise (decrease), the potentiometer(CV) closed to the input voltage is used to regulate voltage, the potentiometer(CC) closed to output voltage is used to regulate current (CC)
- Precision of constant current and temperature: On the actual test, the module temperature from 25 degrees to 60 degrees, the constant current value change is less than 5% (5A constant current value)
- Turn lamp current: Constant current value * (0.1) , turn the lamp current and constant value linkage, such as constant current value is 3A, turn the lamp current is set to a constant current is 0.1 times (0.1 * 3A = 0.3A).

Applications:

- High-power LED driver.
- Lithium battery(or lead accumulator) charge.
- Vehicle-mounted power supply.
- Low voltage system power supply.
- 6V, 12V, 14V, 24V battery charge.
- On-board laptop power supply.
- regulated power supply.
- Low voltage power supply system.

Battery charge:

- Make sure of the battery float voltage and charging current that you need, as well as the input voltage of the module.
- Adjust the constant voltage potentiometer and adjust the output voltage to about 5V.
- Use the multimeter in 10A current scale to measure output short-circuit current, and adjust the current potentiometer to make the output current to the expected charging current value.
- Adjust the constant voltage potentiometer to make the output voltage reaches the float voltage.
- Connected to the battery, try to charge.
- (1,2,3,4 steps to connect the power module input,output no-load does not connect battery.)

LED constant current drive:

- Make sure the operating current and Max operating Voltage of the LED you need to drive.
- Adjust the constant voltage potentiometer, adjust the output voltage to about 5V.
- Use the multimeter in 10A current scale to measure output short-circuit current, and adjust the current potentiometer to make sure the output current to the expected LED operating current.
- Adjust the constant voltage potentiometer to make the output voltage reach the maximum LED operating voltage.
- Connect LED, test. (1,2,3,4 steps to connect the power module input, output No-load does not connect LED.)