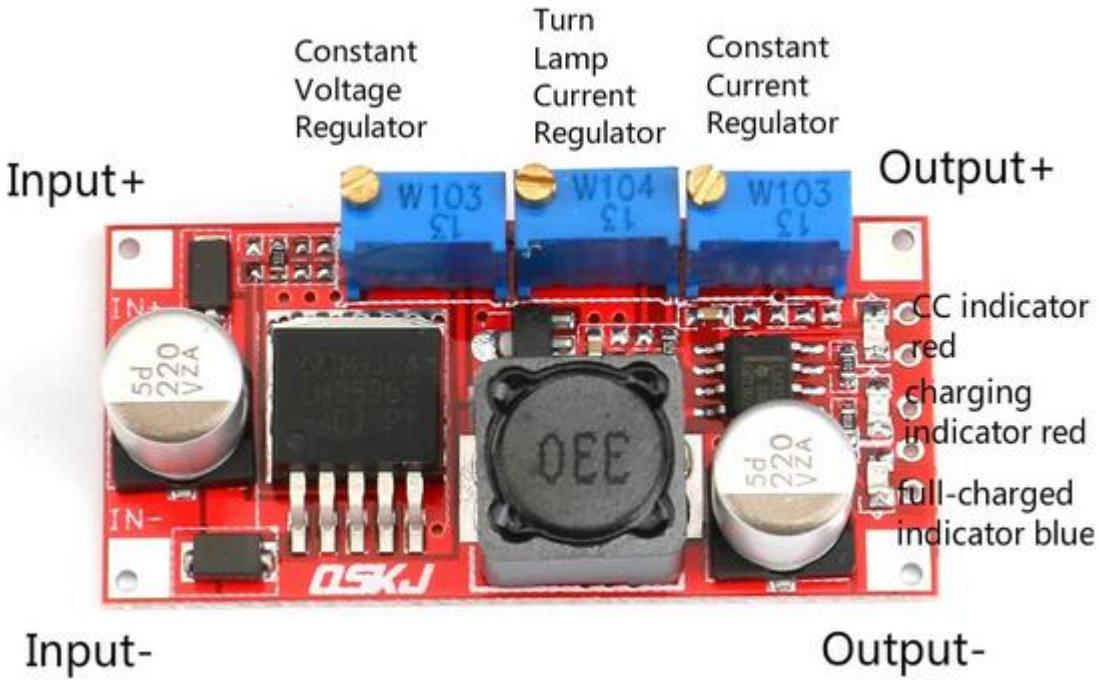
LM2596 DC-DC Step Down CC CV Power Supply Module

LED Driver, Battery Charger, Adjustable LM2596S Constant Current Voltage



Description

Input voltage: 7-35V
Output voltage: 1.25-30V adjustable
Dropout voltage: input voltage must be higher than output voltage of 2V
Output current: 0-3A, 3A maximum
Output power: 15W(If the temperature is high, please strengthen heat dissipation)
Conversion efficiency: 92% maximum (the higher the output voltage, the higher the efficiency)

Turn lamp current: constant current value * (1% -100%), turn lamp current and constant current value linkage, such as constant current value is 3A, turn the lamp current is set to 0.1 times that of the constant current (0.1 * 3 A = 0.1A), when the value of the constant current regulation into 2A, turn lamp current is 0.1 times that of the constant current (0.1 * 2A = 0.2A). The default shipment has to adjust to the 0.1 times

Indicator light:
constant current cc indicator light red,
charging indicator light red,
full-charged indicator light blue

The output ripple: 20M bandwidth (for reference only)
Input 12V output 5V 3A 60mV (MAX)
Working temperature: industrial grade (- 40 -- + 85 celsius degree) (when temperature is more than 40 degrees, please reduce power, or enhance heat dissipation)
Full load temperature rise: 45 celsius degree
No-load current: 10mA typical (12V to 4.2V)
Load regulation: ± 1%
Voltage regulation: ± 0.5%
Dynamic response speed: 5% 200uS
Output short circuit protection: yes, constant current (current setting constant current value)
Connection mode: can lead directly welding on the PCB

Battery charging methods

1. Determine the float voltage and charging current that you need to charge battery and module's input voltage.
2. Adjustable constant voltage potentiometer, the output voltage is regulated to about 5V.
3.Use multimeter 10A current block measurement output short circuit current, meanwhile adjusting the constant current potentiometer to make output current reaches predetermined current value.
4.The charging turn lamp current default is 0.1 times of charging current (current value).If you need, adjust turn lamp current potentiometer please (generally do not adjust).
5. Adjustable constant voltage potentiometer to make the output voltage to the floating charge voltage.
6.Connect battery, to try charging (1, 2, 3, 4, 5 steps is the module input power, output no-load not connected to the battery).

LED constant current driving use methods

1. Determine you need to drive LED operation current and maximum working voltage.
2. Adjustable constant voltage potentiometer, the output voltage is regulated to about 5V.
3.Use multimeter 10A current block measurement output short circuit current, meanwhile adjusting the constant current potentiometer to make output current reaches LED operating current.
4.Adjustable constant voltage potentiometer to make the output voltage to the LED maximum working voltage.
5.Connected to the LED, try test machine. (1, 2, 3, 4 steps is the module input power, output no-load not connected to the LED lamps).