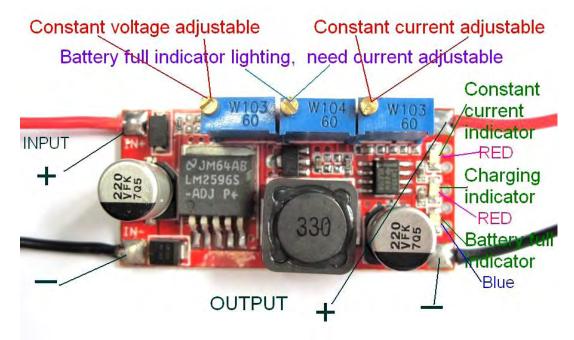
## LED Power Driver Constant Voltage / Current Adjustable CC CV



#### Application:

High-power LED constant current driver Lithium battery charging (Including ferroelectric) 4V, 6V, 12V, 14V, 24V battery charging Ni-Cd Ni-MH batteries (battery) charging Solar panels, wind turbines DIY DC Power Supply

### **Charge the battery, Use Mothod:**

- \* Make sure of the voltage and current of the battery you need to charge
- \* Adjust the constant voltage potentiometer to make the output voltage same to the charge voltage
- \* Potentiometer Adjustment Direction: Clockwise (increase), counterclockwise (decrease)
- \* 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 charging current value
- \* The charge current of transfer lamp is default 0.1 times of the charging current (constant current value)
- \* Connected to the battery and try to charging (for previous 5 steps, module input terminal is connected to power source, output load is NOT connected to batteries).

### LED constant current driver, Use Mothod:

- \* Make sure operating current and Max operating Voltage of the LED you need to drive.
- \* Adjust the constant voltage potentiometer to make sure the output Voltage is up to LED Max operating Voltage.
- \*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.
- \* Join LED, test (For the above 3 steps, module input terminal is connected to power source, output load is NOT connected to LED).

The scope of application: Charging for lithium ion batteries: when the lithium ion battery voltage is low. If use the constant voltage charging directly. Due to pressure is too large, leading to the battery damage. So from the beginning to use the constant current charging.

When charging to a certain, automatic switch back to the constant voltage charging.

Charging curve as shown below: red is current, blue is voltage.

# Specification:

Module Properties:

Non-isolated step-down constant current, constant voltage module (CC CV) charging module.

Input Voltage: DC 7~35 V

Output Voltage: DC 1.25~30 V (adjustable, O/p Voltage < I/p Voltage by 2V)

Output Current: rated 3A, the largest 4A (more than 15W, please install the heat sink)

Constant Current Range: 0~4A (adjustable)

The minimum voltage difference: 2V

Fully Charged Current: = Constant current Value \* ( 0.01 ~ 0.99 adjustable ).

eg, Constant Current value: 3A, adjustable potentiometer: 0.1,

Full charged current= 3A\*0.1 =0.3A,

When Charging current = 0.3A, Blue LED Lingting. Default: 0.1

Output Power: natural cooling 15W, 25W plus heat sink

Efficiency: 92% (up 92%, higher Voltage output, higher efficiency)

Output Ripple: 20M Bandwidth, Input 12V; Output 5V 3A 0.06mV (MAX)

Full Load temperature rise: 45.

Potentiometer adjustment direction: clockwise (increase), counterclockwise (decrease)

Indicator: Constant current RED LED, Charging RED LED, fully charged BLUE LED

No-load Current: Typical 10mA Load Regulation: ± 1%

Voltage Regulation rate: ± 0.5% Dynamic response speed: 5% 200uS

Output Short-circuit Protection: Yes, Constant Current

Input Reverse Protection: None

Operating temperature: Industrial grade (-40. to +85.) (ambient temperature exceeds 40 degrees,

lower power use, or to enhance heat dissipation)

Size: 49 x 23.5 x 13.3 mm (L\*W\*H)

#### Nota:

Este tipo de producto lo traemos para experimentación.

La información indicada es la que proporciona el fabricante chino de estos productos.

No somos responsables de la veracidad de dicha información.