#### Features:

- Indicator light current is 0.1 times of the current which is used to identify whether it is fully charged.
- Made from special IC and high precision sampling resistors which ensures a more stable constant current, specially fit LED driver.
- Four high frequency capacitors can reduce output ripple and good for stability.
- Two independent heat sink design are better for heat dissipation.
- The inductor of large sendust core and double copper wiring would improve efficiency and decrease heat.
- Widely used for high power LED drive, lithium or lead-acid battery, low voltage system power supply, 6V, 12V, 14V, 24V battery charging and regulated power supply.
- When power tube temperature is over 65°C, please add cooling fan to enhance heat dissipation.

Туре	Non-isolated step-down module (DC-DC)
Input Voltage	DC 7V to 40V
Output Voltage	DC 0.8V to 28V (continuously adjustable)
Output Current	0.2A to 12A(adjustable, <6A when 24V to 12V), 10A is suggested
Min. Voltage Difference	1V
Max. Output Power	300W
Max. Conversion Efficiency	95,00%
Frequency	300KHZ
Output Ripple	20M bandwidth
Output Short Circuit Protection	Yes (constant current)
Reverse Electrode Protection	No
Output Backflow Protection	No
Wiring Method	Terminals
No-load Current	20mA (24V switch, 12v)
Load Regulation	$\pm 1\%$ (constant)
Voltage Regulation	±1%
Dynamic Response Speed	5%200uS
Potentiometer Adjustment	Clockwise to increase and counterclockwise to reduce
Operating Temperature	-40°C to +85°C
Indicator Light	Red color charging; green color charging finished or no load
Constant Current and Constant Temperature Accuracy	<5%, 5A from 25°C to 60°C
Output Short Circuit Protection	Yes (constant current)
Reverse Input Protection	No

## Instruction:

## Battery Charge:

1. Make sure of the battery float voltage and charging current that you need, as well as the input voltage of the module.

2. Adjust the constant voltage potentiometer and adjust the output voltage to about 5V. 3. 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. 4. Adjust the constant voltage potentiometer to make the output voltage reaches the float voltage.

5. 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.)

#### 1.

# LED Constant Current Drive:

1. Make sure the operating current and Max operating Voltage of the LED you need to drive.

2. Adjust the constant voltage potentiometer, adjust the output voltage to about 5V.

3. 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. 4. Adjust the constant voltage potentiometer to make the output voltage reach the maximum LED operating voltage.

5. Connect LED, test.

(1,2,3,4 steps to connect the power module input, output No-load does not connect LED.)