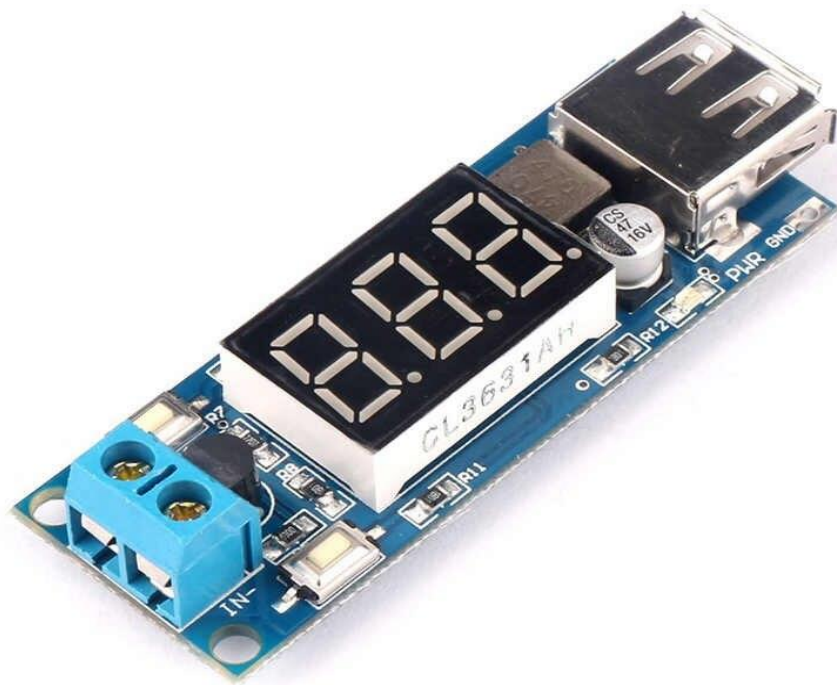


## 5-40V to 5V DC Step Down Module with Monitor and USB Charger



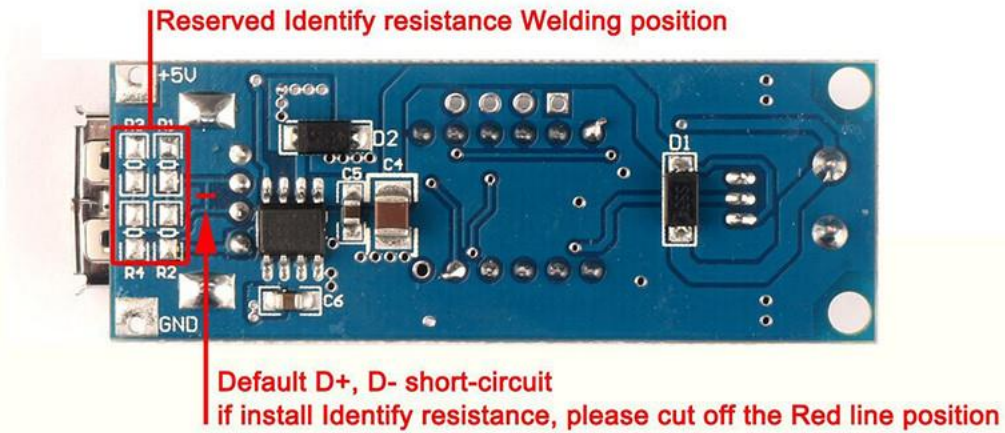
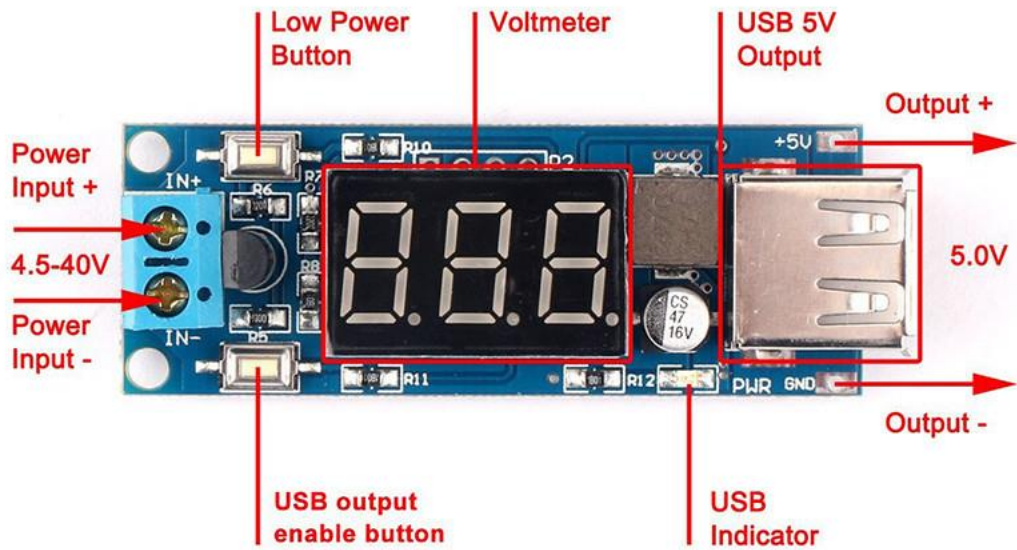
This DC –DC step down module accept DC voltage up to 40V and output stabilized 5V and 2A current. It has a digital display so you can monitor the input voltage. The 5v output can be either connected by wire or USB port. The DC-DC step down converter has a LED indicator and two buttons one for the monitor and the other for the output power delivery. The voltage display monitor can be calibrated for better measurements accuracy.

## Features

- The on-board voltmeter can be calibrated.
- It has reverse connection protection.
- It has over-current and over-temperature protection.
- It has a USB power indicator.
- It has wiring terminals for easy access to the line.
- It has the characteristics of high efficiency and low ripple.
- It has a 5.0V,2A output current capability, which is enough to meet various USB devices, and the voltage is very stable.

## Specifications

- Input Voltage: DC 5V-40V
- Output Voltage: DC 5V
- Output Current:2A
- Working Temperature: -25°C to 85°C
- Size: 58\*21\*10mm



## Instructions for Use

- 1- As soon as the module is powered on, the voltage can be detected in real time. When you need to charge mobile phones and other digital products, just touch the "output enable" button. At this time, the USB power indicator lights up and the USB outputs 5.0V.

- 2- When you need to turn off the digital tube, tap the "low power consumption" button, and the module enters the ultra-low power standby mode, and the USB output is also disconnected accordingly.

## Self-calibration method of two-wire battery voltmeter

- 1- When the on-board voltmeter is working normally, press and hold the "output enable" button for 2 seconds and then release it. The voltmeter flashes and enters the voltage adjustment mode.
- 2- Tap the "Output Enable" button to increase the voltage by one unit, and tap the "Low Power Consumption" button to decrease the voltage by one unit. Since the voltage value of a unit is less than 0.1V, you need to press 1-5 times to see that the voltmeter has changed by 0.1V. The specific number of consecutive presses depends on the voltage value currently displayed. The higher the voltage currently displayed, the fewer the number of moves.
- 3- After the voltage adjustment is completed, press and hold the "Output Enable" button for 2 seconds and then release it. At this time, you can exit the voltage calibration mode, and all parameter settings will be automatically saved after power-off.

## Test Reference:

this listing do not include the Oscilloscope

**38V to 5V 2A, output Efficiency is 86%**  
**(  $5.059 \times 1.94 \div 38 \div 0.3$  )**

