

Converter 4-20mA to 0-10V VIN 7-36V

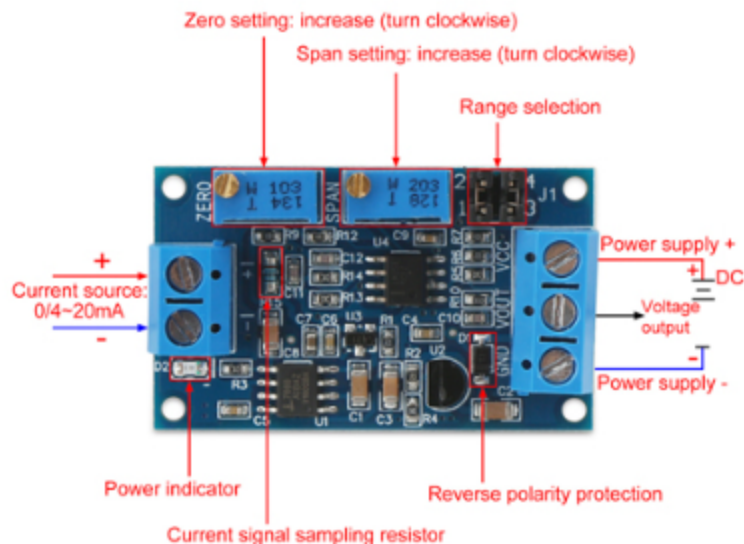
In the process of circuit signal transmission, the voltage signal will increase with the transmission distance becomes weak, the use of current transmission can avoid the signal weakening. This module is used for the end of the current signal transmission, the signal into a voltage signal for single-chip detection. Current input supports 4-20mA, 0-20mA, voltage output supports 0-3.3V 0-5V 0-10V. The board is configured for the desired output voltage range by jumpers.

Quick Spec

- Power Supply: DC 7~36V (if the output needs to be 10V, the input must be over 12V)
- Reverse Polarity Protection
- When the current input is at minimum (0mA or 4mA), adjust the Zero potentiometer to make the voltage output to be the minimum value (0.0V or others)
- When the current input is at maximum (20mA), adjust the Span potentiometer to make the voltage output to be the maximum value (3.3V or 5V or 10V; the output can be as low as 2.5V when the current input is within 4-20mA)

Please Note: After power on, the D2 indicator should be on. Otherwise, please check the wiring

Board Layout



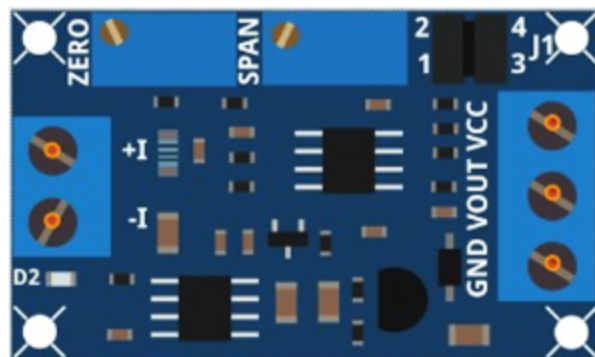
Jumper Configuration

ON: jumper cap buckles on the two jumper pins - jumper shorted

OFF: two jumper pins without the jumper cap - jumper removed

Range, Volt	J1, Jumper 1-2	J1, Jumper 3-4
0 - 2.5	ON	ON
0 - 3.3	Off	Off
0 - 5.0	ON	ON
0 - 10.0	ON	Off

To fine-tune the 4..20 mA current to voltage converter, you need to select the values of two potentiometers: ZERO and SPAN, corresponding to the zero and maximum current values at the input. Claim potentiometers with a wide step.



- At the minimum input current (0 mA or 4 mA), turn the ZERO potentiometer to set the desired output voltage corresponding to the set zero current. Clockwise rotation increases output voltage.
- It is not recommend setting 0 Volts with a minimum current of 4 mA, because in this case the microcontroller will not be able to determine if the cable to the sensor is broken or it really shows the minimum values.
- At a maximum current of 20 mA, by rotating the variable resistance SPAN, the maximum value in the range determined by jumpers is selected. Clockwise rotation increases output voltage.