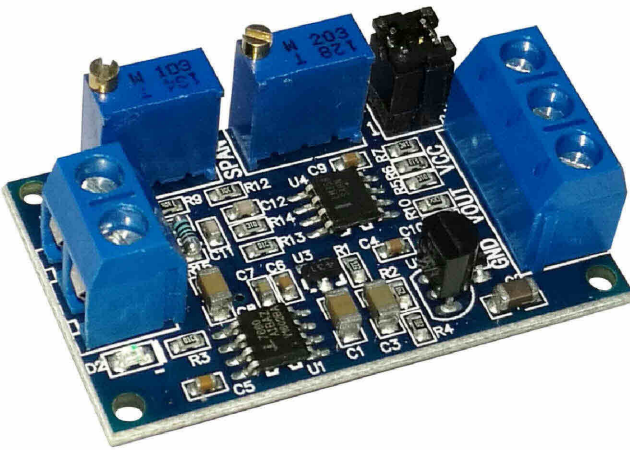


4-20mA TO 5V (C-YA-A-00247)



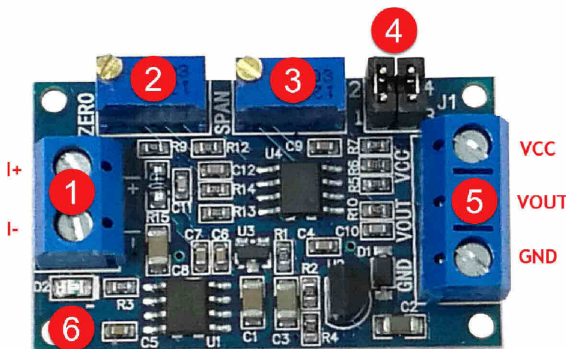
This completed board set is an imported product from abroad that can convert the Current 4-20mA into 0-5V; so, it can to connect to Circuit A TO D of Board Microcontrollers conveniently, for example, it connects from SENSOR devices that have OUTPUT in the format of 4-20mA.

SPECIFICATIONS

- Convert the Current in a range of 0-20mA, 4-20mA into the Voltage in the a range of 0-3.3V, 0-5V and 0-10V (NOTE: The initial value from ETT will be tested and setup as 4-20mA into 0-5V)
- Have TRIMPOT Resistor to setup ZERO and SPAN
- JUMPER is used together with TRIMPOT to setup Pin OUTPUT Voltage
- Use 7-36VDC Power Supply for Board
- Board Size: 42 x 25mm

(***** Board 4-20mA TO 5V is imported product, there is no any warranty for this model *****)

COMPONENTS OF BOARD



- No.1** Terminal provides Input Current (0-20mA, 4-20mA); in this case, I+ is Input Current and I- is Output Current.
- No.2** Adjustable Resistor (ZERO) can adjust value of VOUT to be equal to 0V or other values if the Input Current is minimum value such as 4mA.
- No.3** Adjustable Resistor (SPAN) can adjust value of VOUT to the maximum value as preferred if the Input Current is minimum value such as 20mA.
- No.4** Jumper (J1) chooses a range of adjustable VOUT by Adjust able Resistor (SPAN); and it can set Jumper as follows;

Positions of J1 in a range of Current 4-20mA

- | | | | |
|------|---------------------|-----------------------------------|-----------------------------------|
| VCC | - A range of 0-2.5V | J1 in a position 1,2:Connected | J1 in a position 3,4:Connected |
| VOUT | - A range of 0-3.3V | J1 in a position 1,2:Disconnected | J1 in a position 3,4:Disconnected |
| | - A range of 0-5V | J1 in a position 1,2: Connected | J1 in a position 3,4:Connected |
| GND | - A range of 0-10V | J1 in a position 1,2:Connected | J1 in a position 3,4:Disconnected |

Positions of J1 in a range of Current 0-20mA

- | | | | |
|--|---------------------|--------------------------------|-----------------------------------|
| | - A range of 0-3.3V | J1 in a position 1,2:Connected | J1 in a position 3,4:Connected |
| | - A range of 0-5V | J1 in a position 1,2:Connected | J1 in a position 3,4:Connected |
| | - A range of 0-10V | J1 in a position 1,2:Connected | J1 in a position 3,4:Disconnected |

- No.5** Terminal is used to provide Power Supply for Board and Voltage VOUT.
- VCC Connect to 7-36VDC for Board (if it requires VOUT 10V, it has to provide more than 12V Power Supply)
 - VOUT Voltage on Pin Output side is connected to Microcontroller or PLC
 - GND Pin Ground

- No.6** LED (D2) shows state of providing POWER SUPPLY for board.

Example of adjusting values for Board to convert Current 4-20mA into Voltage 0-5V

1. Set Jumper J1 in a position 1,2 and position 3,4 completely.
2. Provide 7-36VDC Power Supply for Board and LED (D2) is lit up.
3. Provide Current 4mA (it might use Current Loop Calibrator) through Terminal I+, I-. Next, the VOUT value is measured by Meter and then compared with Pin GND, and user has to adjust the Adjustable Resistor (ZERO) until the Voltage value is read as 0V.
4. Increase the Current to 20mA. The VOUT value is measured by Meter and compared with Pin GND, and user has to adjust the Adjustable Resistor (SPAN) until the Voltage value is read as 5V.