

Universal analogue isolating amplifier, trimmer adjustment

Article number PR171s01



The PR171s01 galvanically isolates analogue signals by means of an optocoupler, filters and amplifies them, and converts them to another industrial signal. Possible inputs are a 4-20 mA or 0-20 mA current loop, a potentiometer of 1 k Ω to 500 k Ω , 0-10 V, 0-5 V or -10 to +10 V; possible outputs are 4-20 mA, 0-20 mA, 0-10 V, -10 to +10 V or 0-200 mV. PWM and digital signals (2.5, 3.3 or 5 V) are also passed on with isolation, and the input and output levels may differ. The module is factory set to the range you specify; adjustments are made with trimmers P1, P2 and P3.

Price on request. Lead time on request. Not in stock? We will make it.

Specifications

Supply	9 to 28 V DC
Input	4-20 mA, 0-20 mA, potentiometer 1 k Ω to 500 k Ω , 0-10 V, 0-5 V, -10 to +10 V, PWM or digital (2.5, 3.3 or 5 V)
Output	4-20 mA, 0-20 mA, 0-10 V, -10 to +10 V, 0-200 mV, PWM or digital (2.5, 3.3 or 5 V)
Isolation	Galvanic isolation between input and output by means of an optocoupler
Setup	Trimmers P1 (upper limit), P2 (lower limit) and P3 (negative offset)
Factory setting	Set to the range you specify when ordering

Setup

1. As delivered, the module is set to the range you specified. Adjustments are made with three trimmers.
2. Set the upper limit of the output with P1: turning clockwise lowers the upper limit.
3. Set the lower limit of the output with P2: turning clockwise raises the lower limit.
4. If required, give the output a negative offset with P3: turning clockwise gives a negative offset.
5. To start again from scratch: disconnect the supply and turn P1, P2 and P3 anticlockwise to the end stop (20 turns max.).
6. Connect the input signal and connect a multimeter to the output.
7. Apply 12 or 24 V to the supply. The output now follows the input; then set P1, P2 and P3 as described above.

More information, price and lead time: www.procircuits.nl/en/products/pr171s01

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