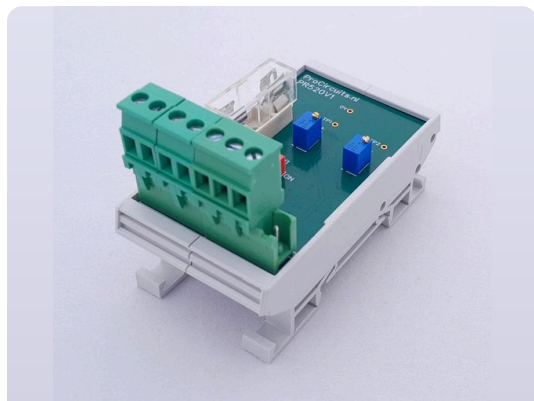


Potentiometer amplifier with adjustable upper and lower limit

Article number PR520-X001



Potentiometers in control levers and joysticks are often connected between 0 and 5 V. The PR520-X001 adjusts that range when the device reading the potentiometer has no setting for it. The module supplies the potentiometer with an upper and lower limit, each set with a trimmer from 0 to 7 V, for example 1-5 V or 0.5-3 V, and passes the amplified potentiometer signal to the output. Supply, input and output are not galvanically isolated.

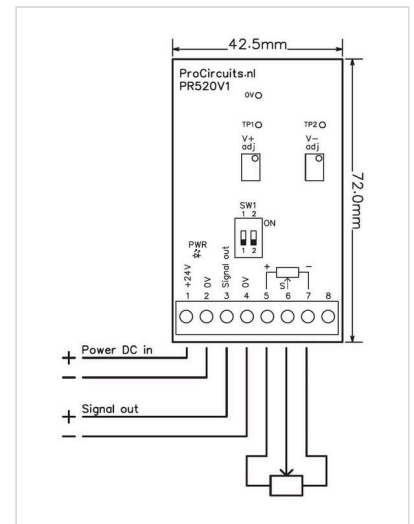
Price on request. Lead time on request. Not in stock? We will make it.

Specifications

Supply	14 to 32 V DC
Input	Potentiometer, 1 k Ω to 100 k Ω , on terminals 5, 6 and 7
Output	Amplified potentiometer signal on terminal 3; load 1 k Ω min., 200 pF max.
Isolation	Not isolated: supply, input and output are not galvanically isolated; terminal 4 is internally connected to terminal 2
Setup	Trimmers V+ adj (upper limit) and V- adj (lower limit)
Potentiometer supply	Upper and lower limit each adjustable from 0 to 7 V; the lower limit can never exceed the upper limit
Dimensions	45 x 83 mm with DIN rail enclosure, 42.5 x 72 mm without

Connections

Terminal 1	Supply plus, +24 V
Terminal 2	Supply 0 V
Terminal 3	Signal output (plus)
Terminal 4	Signal output 0 V, internally connected to terminal 2
Terminal 5	Potentiometer plus (upper limit)
Terminal 6	Potentiometer signal (wiper)
Terminal 7	Potentiometer minus (lower limit)
Terminal 8	Not used



Setup

1. Connect the potentiometer to terminals 5, 6 and 7, and the signal output to terminals 3 and 4.
2. Connect the supply to terminal 1 (plus) and terminal 2 (0 V).
3. Set the upper limit with the V+ adj trimmer: turning it clockwise raises the upper limit. Measure the voltage on terminal 5, with terminal 2 as 0 V.
4. Set the lower limit with the V- adj trimmer: turning it clockwise raises the lower limit. Measure the voltage on terminal 7, with terminal 2 as 0 V. The lower limit can never exceed the upper limit.

More information, price and lead time: www.procircuits.nl/en/products/pr520-x001

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