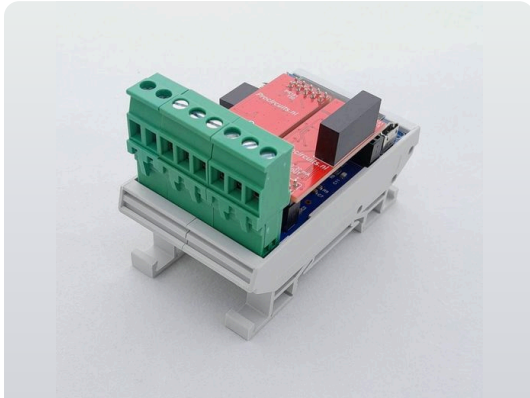


Low-side PWM to 0-10 V signal conditioner, isolated, with display

Article number PR181-X074



The PR181-X074 converts a low-side switched PWM signal into a 0-10 V voltage, at a PWM frequency of 100 Hz to 5 kHz. The output is galvanically isolated from the input and the supply to prevent ground loops. Lower and upper limits of input and output are set independently on the display, as is the rise and fall rate of the output. As delivered, 0 % duty cycle gives 0 V and 100 % duty cycle gives 10 V.

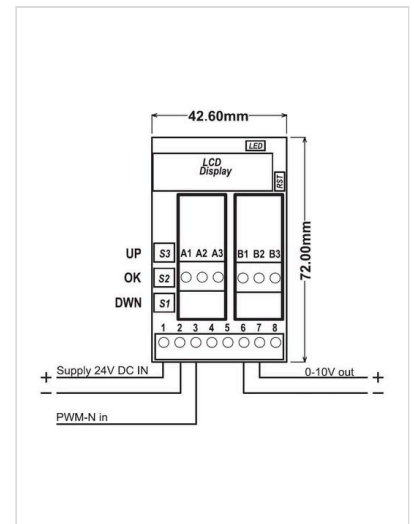
Price on request. Lead time on request. Not in stock? We will make it.

Specifications

Supply	9 to 30 V DC
Input	PWM, low-side switched, on terminal 3
Output	0-10 V; lower and upper limit adjustable
Isolation	Output galvanically isolated from input and supply
Setup	Display with UP, OK and DOWN buttons
Input frequency	100 Hz to 5 kHz
Rise and fall rate	Adjustable on the display
Ambient temperature	-25 to 55 °C, non-condensing
Dimensions	45 x 83 mm with DIN rail enclosure, 42.6 x 72 mm without
Factory setting	0 % duty cycle = 0 V, 100 % duty cycle = 10 V

Connections

Terminal 1	Supply plus
Terminal 2	Supply minus
Terminal 3	PWM input, low-side switched
Terminal 4	Not used
Terminal 5	Not used
Terminal 6	Isolated output common
Terminal 7	Isolated 0-10 V output (plus)
Terminal 8	Not used



Setup

1. Connect the module according to the terminal table and switch on the supply.
2. Set the input to its lowest level, for example 0 % duty cycle. In the menu, select IN1 – Set minimum, press OK, select YES and press OK again.
3. Set the input to its highest level, for example 100 % duty cycle. Select IN1 – Set maximum, press OK, select YES and press OK again.
4. Set the lower limit of the output with OUT1 minimum adj: change the value with UP and DOWN and confirm with OK.
5. Set the upper limit of the output in the same way with OUT1 maximum adj.
6. If required, set the rise and fall rate of the output with IN1 Ramp-Up and IN1 Ramp-Down.
7. Fine adjustment: IN1 minimum adj and IN1 maximum adj fine-tune the input limits. Setting OUT1 invert to 1 reverses the output: the lowest input level then gives the highest output level.
8. Go to the SAVE menu to store the new settings.

More information, price and lead time: www.procircuits.nl/en/products/pr181-x074

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