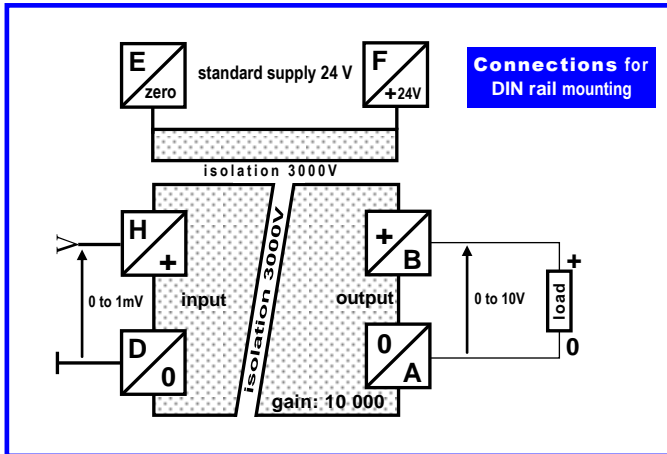


Analog converter, fast and precise, of gain 10 000, for very low level signals



This analog converter was initially intended for the monitoring, on very low resistance shunts (of a few $\mu\Omega$), of DC currents with rapid fluctuations.

This high performance mini-module transmits, at scale 10,000 and within 200 microseconds, "0 to 1mV" applied on its input.

When mounted as **DC current transducer**, inputs can be connected (with screw or clamp) directly on the **lead portion** that drops up to 1mV when supplied with current up to 250A.

Input 0 to 1mV ; impedance: 10 k Ω

Output 0 to 10V, on load $\geq 2\text{ k}\Omega$

Accuracy better than 0.3%

Regulation $< 5 \cdot 10^{-4}$, with load varying from 2 k Ω up to 100 k Ω

Ripple $< 100\text{ mV}$

Response time $\approx 200\ \mu\text{s}$ (can be increased upon request)

Isolation Triple $\left\{ \begin{array}{l} \text{entrée / sortie} \\ \text{entrée / alim} \\ \text{sortie / alim} \end{array} \right\} 3\text{ kV}$

Power supply voltage standard, 24V DC $\pm 10\%$ / $< 40\text{ mA}$ / load 2 k Ω

Possible load $\geq 2\text{ k}\Omega$

Protections

- against inverted connections on input and power supply
- against accidental overvoltage on input: 1V
- against overloads and short-circuits
- isolations 3000V
- against vibrations, and tropicalisation: with moulding
- sealing IP67, except connections
- elimination of the faulty-contact risk (no DIL switch)
- negligible temperature rise (high performance conversion)

Standards CE ; RoHS ; EN 60905-1

Temperatures

- coefficient: $< 2 \cdot 10^{-4} / ^\circ\text{C}$
- operation: -20°C to $+60^\circ\text{C}$
- storage: -40°C to $+90^\circ\text{C}$

Three modules

- DIN rail mounting (RD)
- wall mounting with external connector and 2 M3 screws (P)
- mounting on printed circuit, connecting pins $\varnothing 1\text{mm}$ (CI)

Optional: all-aluminum case

\varnothing for terminals: 2.2 mm

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Isolated analog signal CONVERTER triple isolation

Response time: $< 0.2\text{ms}$
Precision: 0.3%
Regulation: 0.05%
Load: $\geq 2\text{ k}\Omega$

P/N : 0 - 1mV / 0 - 10 RD
IPN :

Case for RAIL DIN : 66 x 53 x 22.5 mm
SKU: 0-1mV / 0-10 RD

Case for WALL mounting:
70 (+11) x 50 x 22 mm
SKU: 0-1mV / 0-10 P

Case for PRINTED CIRCUIT:
70 x 50 x 22 mm with pins
SKU: 0-1mV / 0-10 CI

Standard SKU	Dimensions of the cases (mm) - Weight (grams)				
	Mounting on DIN rail (RD) Dimensions / Weight	Mounting on wall (P) Dimensions / Weight	Center distance between 2 M3	Mounting on printed circuit (CI) Dimensions / Pins center distance / Weight	Pre-tax price
0-1mV / 0-10 RD	66 (+11) x 53 x 22.5 mm / 145g				
0-1mV / 0-10 P		70 (+11) x 50 x 22 mm / 155g			
0-1mV / 0-10 CI				70 x 50 x 22 mm / 150g	