1-channel Loop Powered Isolator for separation of 0(4)-20 mA Signals

The input loop-powered isolator IsoPAQ-611 provides galvanic separation for 0(4) ... 20 mA standard signals, while transferring the measurement signal to the output with a high degree of accuracy.

The unit avoids interference voltage carry-over and effectively suppressing parasitic noise. The very low drop voltage of 2.3 V and the high level of accuracy work together to make the IsoPAQ-611 the first choice in system design.

Intelligent design and their consequential avoidance of highly integrated components result in extremely long service lives and reliability - without any falsification of the measurement signal.

The IsoPAQ-611 requires no additional power supply since the auxiliary power is obtained from the input signal without distorting it. This not only saves costs during installation, but also increases reliability.



Galvanic isolation across input and output

Protection against erroneous measurements due to parasitic voltages or ground loops

No power supply required

Saving costs since wiring is reduced and line influences are omitted

Extremely slim design

Only 3.1 mm DIN-rail per channel

Protective Separation acc. to EN 61140

Protects service personnel and downstream devices against impermissibly high voltage

Maximum reliability

No maintenance costs







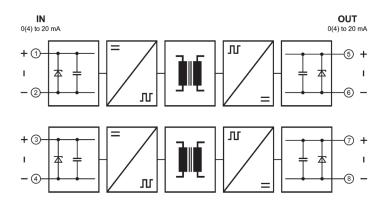


Specifications:

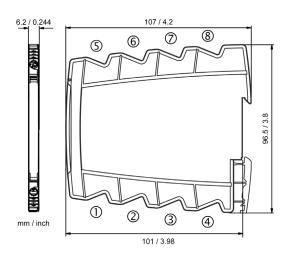
Input			
Input signal	0(4) 20 mA		
Start-up current	< 200 μA		
Voltage drop	Approx. 2.3 V at 20 mA		
Overload	≤ 50 mA, 30 V		
Output			
Output signal	0(4) 20 mA		
Load	600 Ω		
Cut-off frequency -3 dB	100 Hz		
Response time T99	5 ms		
Residual ripple	< 10 mV _{rms}		
General Data			
Transmission error	< 0.1 % full scale		
Load error	< 0.05 % of measured value / 100 Ω load		
Temperature coefficient ^{1]}	< 100 ppm/K		
Test voltage	3 kV AC, 50 Hz, 1 min. all circuits against one another		
Working voltage ^{2]} (Basic insulation)	600 V AC/DC for overvoltage category II and pollution degree 2 acc. to EN 61010-1		
Protection against	Protective separation according to EN 61140 by reinforced insulation in accordance with		
electrical shock ²⁾	EN 61010-1 up to 300 V AC/DC for overvoltage category II and pollution degree 2 between		
	all circuits		
Ambient temperature	Operation	-25 to +70 °C	(-13 to +158 °F)
	Transport and Storage	-40 to +85 °C	(-40 to +185 °F)
EMC ^{3]}	EN 61326-1		
Construction 6.2 mm (0.244") housing, protection class IP 20, mou			nting on 35 mm
	DIN rail acc. to EN 60715		
Weight	Approx. 70 g		

- Average TC related to full scale value in specified operating temperature range, reference temperature 23 °C
 For applications with high working voltages, ensure there is sufficient spacing or isolation from neighboring devices and protection against electric shocks.
 Minor deviations possible during interference

Block diagram/Connections



Dimensions



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