High-performance Isolation Transmitter for Unipolar mA Signals with Fixed Range and Zero/Span Adjustment

The Isolation Transmitter IsoPAQ-51P is used for high-precision isolation of 0(4)-20 mA unipolar signals.

For applications where normally only one signal combination is used, IsoPAQ-51P offers a cost-effective alternative.

The zero and span adjustments allow for a fine-tuning of the measurement loop.

The high reliability and the Protective Separation are additional features that ensure a safe system operation.



Fixed ranges

Ready to use without any settings

Zero/Span Adjustment

Allow for additional fine-tuning of the measurement loop

Protective Separation acc. to EN 61140

The design and high isolation level (4 kV) provides protection for service personnel and downstream devices against impermissibly high voltage

High accuracy

Negligible additional measurement errors in the loop

Universal power supply for 20 to 253 VAC/DC

Applicable world-wide for all common supply voltages

3-port isolation

Protection against erroneous measurements due to parasitic voltages or ground loops

High-density DIN-rail mounting

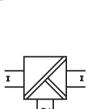
12.5 mm (0.5") housing combined with very low self heating allows for high density mounting

Plug-in screw terminals

Simplifies installation and maintenance

Excellent reliability

Low self heating thanks to patented high-efficiency power supply provides long-term reliability and stability



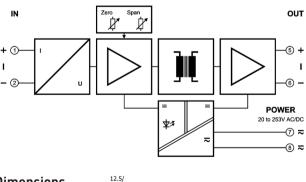




Specifications: IsoPAQ-51P

Input		
Input signal	0(4)-20 mA	
Input resistance	Approx. 25 Ω	
Overload	≤ 200 mA	
Output		
Output signal	0(4)-20 mA	
Load	≤ 600 Ω	
Linear transmission range	-2 to +110 %	
Ripple	< 0.1 % of end value, ~150 kH	z
General data		
Transmission error	± 0.1 % of end value	
Temperature coefficient ^{1]}	± 0.01 %/K of end value	
Zero/Span Adjustment	± 5 % of end value	
Cut-off frequency (-3 dB)	> 1 kHz	
Test voltage	4 kV, 50 Hz	Input against output against power supply
Working voltage ^{2]} (Basic Insulation)	600 VAC/DC for overvoltage category II and pollution degree 2	
	acc. to EN 61010 part 1 between	
Protection against electrical	Protective separation acc. to EN 61140 by reinforced insulation acc. to EN 61010 part 1	
shock ^{2]}	up to 300 VAC/DC for overvoltage category II and pollution degree 2 between all circuits.	
Ambient temperature	Operation	-20 to +70 °C (-4 to +158 °F)
	Transport and storage	-35 to +85 °C (-31 to +185 °F)
Power supply	20 to 253 VAC/DC	AC 48 to 62 Hz, approx. 2 VA
		DC approx. 1 W
EMC ^{3]}	EN 61326-1	
Construction	12.5 mm (0.5") housing, protection class: IP20	
Connection	≤ 2.5 mm ² , AWG 14	
Weight	Approx. 100 g	

Block diagram/Connections



Dimensions Housing unblocking 78 56 pluggable screw clamp terminals 99/3.90 Metal lock for fastening on 35 mm DIN rail mm/inch Housing unblocking

Ordering information:

Product	Input / Output	Part No.
IsoPAQ-51P	0(4)-20 mA / 0(4)-20 mA	70ISP51012

Average TC in specified operating temperature range
 As far as relevant the standards and rules mentioned above are considered by development and production of our devices. In addition relevant assembly rules are to be considered by installation of our devices in other equipments. For applications with high working voltages, take measures to prevent accidental contact and make sure that there is sufficient distance or insulation between adjacent situated devices.
3) Minor deviations possible during interference