Basic Isolation Transmitter for Unipolar Shunt Voltages with Calibrated Range Selection

The Isolation Transmitter IsoPAQ-70S is used for isolation and conversion of unipolar shunt voltages into standard mA/V signal.

Due to the calibrated range selection and the universal power supply, IsoPAQ-70S provides excellent flexibility and low storage and installation costs.

The high reliability ensures a safe system operation and low maintenance costs.





Calibrated range selection

Input ranges in mV and output ranges in mA or V can be set by using DIP switches without any further adjustments

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 voltage or ground loops

• High-density DIN-rail mounting

12.5 (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-70S

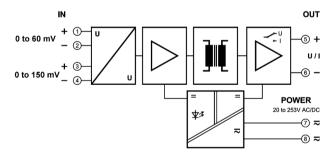
Input			
Input signal	0-60 mV 0-150 mV Terminal selectable		
Input resistance	> 25 kΩ		
Input capacitance	Approx. 1 nF		
Overload	Voltage limitation via 30 V Z-Diode, max. continuous current 30 mA		
Output			
Output signal	0-10 V ¹⁾ 0-20 mA 4-20 mA Switch selectable		
Load	Current output ≤ 500 Ω		
	Voltage output $\geq 1 \text{ k}\Omega$		
Offset	20 μA / 10 mV		
Ripple	< 0.2 % of end value, ~150 kHz		
General data			
Transmission error	± 0.3 % of measured value		
Temperature coefficient ^{2]}	± 0.015 %/K of end value		
Cut-off frequency (-3 dB)	Approx. 1 kHz		
Test voltage	2.5 kV, 50 Hz Input against output against power supply		
Working voltage ^{3]} (Basic Insulation)	600 VAC/DC for overvoltage category II and pollution degree 2		
	acc. to EN 61010 part 1 between all circuits.		
Ambient temperature	Operation -10 to +60 °C (+14 to +140 °F)		
	Transport and storage -20 to +80 °C (-4 to +176 °F)		
Power supply	20 to 253 VAC/DC AC 48 to 62 Hz, approx. 3 VA		
	DC approx. 1.5 W		
EMC ^{4]}	EN 61326-1		
Construction	12.5 mm (0.5") housing, protection class: IP20		
Connection	≤ 2.5 mm², AWG 14		
Weight	Approx. 100 g		

1) Factory setting

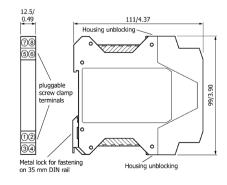
- 2) Average TC in specified operating temperature range
 3) As far as relevant the standards and rules mentioned above are considered by development and production of our devices. In addition relevant assembly rules are to be considered by installation of our devices in other equipments. For applications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

 4) Minor deviations possible during interference

Block diagram/Connections



Dimensions



Ordering information:

Product	Input / Output	Part No.
IsoPAQ-70S	Calibrated range selection	70ISS70001



mm/inch