## IsoPAQ-41P

# High-performance Isolation Transmitter for Unipolar mA/V Signals with Fixed Ranges

The Isolation Transmitter IsoPAQ-41P is used for high-precision isolation and conversion of 0-20 mA, 4-20 mA and 0-10 V unipolar signals.

For applications where normally only one signal combination is used, IsoPAQ-41P offers a cost-effective alternative.

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





## • Fixed ranges Ready to use without any settings

- 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-41P

Input			
Input signal	0-20 mA 4-20 mA	0-10 V	Factory set as ordered
Input resistance	Current input	22 Ω	
	Voltage input	1 ΜΩ	
Input capacitance	Approx. 1 nF		
Overload	Current input	≤ 200 mA	
	Voltage input	Voltage limitation via 30 V Z-Diode, max. continuous current 30 mA	
Output			
Output signal	0-20 mA 4-20 mA	0-10 V	Factory set as ordered
Load	Current output	≤ 600 Ω	
	Voltage output	≥1 kΩ	
Linear transmission range	-2 to +110 %		
Ripple	< 0.1 % of end value, ~150 kHz		
General data			
Transmission error	± 0.1 % of end value		
Temperature coefficient <sup>1)</sup>	± 0.005 %/K of end value		
Cut-off frequency (-3 dB)	> 1 kHz		
Test voltage	4 kV, 50 Hz	Input against output against power supply	
Working voltage <sup>2]</sup> (Basic insulation)	600 VAC/DC for overvoltage category II and pollution degree 2		
	acc. to EN 61010 part 1 between all circuits.		
Protection against electrical	Protective separation acc. to EN 61140 by reinforced insulation acc. to EN 61010 part 1		
shock <sup>2)</sup>	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	
Power supply	20 to 253 VAC/DC	AC 48 to 62 Hz, ap	prox. 2 VA
		DC approx. 1 W	
EMC <sup>3)</sup>	EN 61326-1		
Construction	12.5 mm (0.5") housing, protection class: IP20		
Connection	≤ 2.5 mm², AWG 14		
Weight	Approx. 100 g		

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

### **Block diagram/Connections**



### Ordering information:

Product	Input / Output	Part No.
IsoPAQ-41P	0-20 mA / 0-20 mA	70ISP41012
	4-20 mA / 0-20 mA	70ISP41032
	0-10 V / 0-20 mA	70ISP41052
	0-20 mA / 4-20 mA	70ISP41014
	4-20 mA / 4-20 mA	70ISP41012
	0-10 V / 4-20 mA	70ISP41054
	0-20 mA / 0-10 V	70ISP41016
	4-20 mA / 0-10 V	70ISP41036
	0-10 V / 0-10 V	70ISP41056