

ISO PAQ-161P

Isolation Transmitter for Bipolar and Unipolar mA/V Signals with Fixed Ranges

COMPACT LINE is a line of very compact and cost-optimized Isolators, Transmitter Repeaters and Isolating Transmitters within the IsoPAQ family.

The small dimensions - only 60 mm deep and 11.2 mm wide – and the favorable pricing allow for space saving and economic installations.



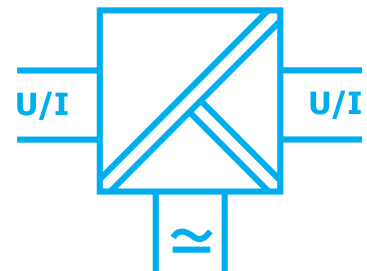
COMPACT LINE



The Isolation Transmitter IsoPAQ-161P is mainly used for isolation of bipolar signals, such as ±20 mA, ±10 mA, ±10 V, ±5 V, and conversion into unipolar output signals.

For applications where normally one signal combination only is used, IsoPAQ-161P offers a cost-effective alternative.

The high reliability and the Protective Separation are further features, which ensure a safe system operation.



- **3-port isolation**
Protection against erroneous measurements due to parasitic voltages or ground loops
- **Bipolar input signals**
Bipolar input signals, e.g. -10..0..+10 V, as well as special ranges available
- **Fixed ranges**
Ready to use without any settings
- **Universal power supply for 24 VAC/DC**
Increased flexibility in industrial applications

- **Compact DIN-rail mounting**
11.2 mm (0.44") housing combined with very low self heating allows for high density mounting. With a depth of only 60 mm, compact standard boxes can be used.
- **Protective Separation**
The design and high isolation level (2.5 kV) provides protection for service personnel and downstream devices against impermissibly high voltage
- **Excellent reliability**
Low self heating thanks to high-efficiency power supply provides long-term reliability and stability

Specifications: IsoPAQ-161P

Input

Input signal ¹⁾	± 20 mA ± 10 V	± 10 mA ± 5 V	0-5 V	Factory set as ordered
Input resistance	Current input	5 Ω		
	Voltage input	1 M Ω		
Overload	Current input	≤ 200 mA		
	Voltage input	≤ 250 V		

Output

Output signal ¹⁾	0-20 mA 0-10 V	4-20 mA 0-5 V		Factory set as ordered
Load	Current input	≤ 500 Ω		
	Voltage input	≥ 2 k Ω		
Ripple	< 10 mV _{rms}			

General data

Transmission error	± 0.2 % of measuring span		
Temperature coefficient ²⁾	± 0.02 %/K of measuring span		
Response time	< 5 ms		
Test voltage	2.5 kV, 50 Hz	Between all circuits	
Working voltage ³⁾ (Basic Insulation)	600 VAC/DC for overvoltage category II and contamination class 2 acc. to EN 61010 part 1		
Protection against dangerous body currents ³⁾	Protective separation acc. to EN 61140 by reinforced insulation acc. to EN 61010 part 1 up to 300 VAC/DC for overvoltage category II and contamination class 2 between all circuits.		
Ambient temperature	Operation	0 to +55 °C (32 to +131 °F)	
	Transport and storage	-25 to +80 °C (-13 to +176 °F)	
Power supply	24 VAC/DC, ± 15 %	AC 48 to 62 Hz, approx. 2 VA	DC approx. 0.7 W
EMC ⁴⁾	EN 61326-1		
Construction	11.2 mm (0.44 ") housing, protection type: IP 20		
Connection	≤ 2.5 mm ² , AWG 14		
Weight	Approx. 50 g		

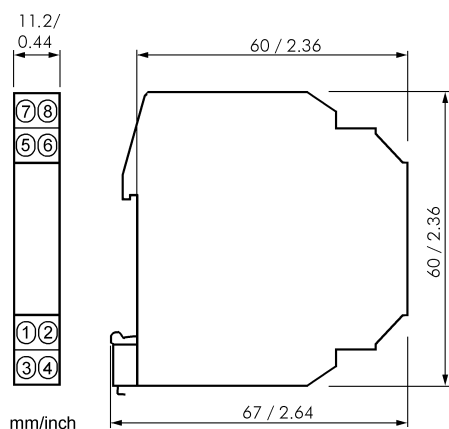
1) Other signals on request

2) Average TC in specified operating temperature range

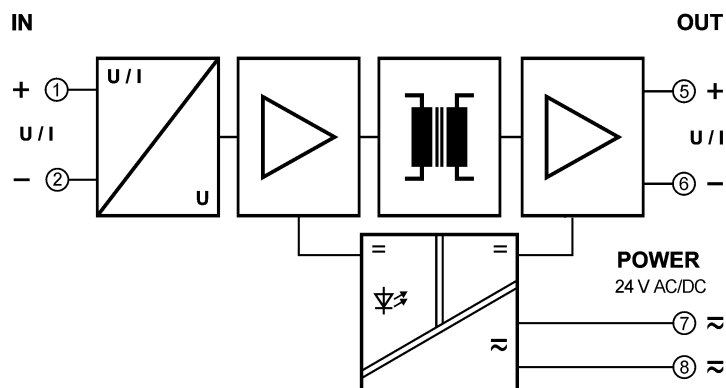
3) As far as relevant the standards and rules mentioned above are considered by development and production of our devices. In addition relevant assembly rules are to be considered by installation of our devices in other equipments. For applications with high working voltages, take measures to prevent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

4) Minor deviations possible during interference

Dimensions



Block diagram/Connections



Ordering information

Product	Part No.
IsoPAQ161P	70ISC161XX
Input	
± 10 V	1
± 5 V	2
0-5 V	3
± 20 mA	4
± 10 mA	5

Product	Part No.
IsoPAQ161P	70ISC161XX
Output	
0-20 mA	2
4-20 mA	4
0-5 V	5
0-10 V	6
Power connector set for up to 10 units	70ADA00030