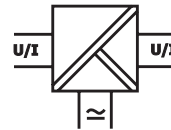


Isolation Transmitter for Bipolar and Unipolar mA/V Signals with Fixed Ranges

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.



COMPACT LINE

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.

- **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
- **Protective Separation acc. to EN 61140**
The design and high isolation level (2.5 kV) provides protection for service personnel and downstream devices against impermissibly high voltage
- **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.
- **Excellent reliability**
Low self heating thanks to high-efficiency power supply provides long-term reliability and stability



Specifications: IsoPAQ-161P

Input

| | | | | |
|----------------------------|---|---|-------|------------------------|
| Input signal ¹⁾ | $\pm 20 \text{ mA}$ $\pm 10 \text{ V}$ | $\pm 10 \text{ mA}$ $\pm 5 \text{ V}$ | 0-5 V | Factory set as ordered |
| Input resistance | Current input Voltage input | 5 Ω 1 M Ω | | |
| Overload | Current input Voltage input | $\leq 200 \text{ mA}$ $\leq 250 \text{ V}$ | | |

Output

| | | | |
|-----------------------------|----------------------------------|---|------------------------|
| Output signal ¹⁾ | 0-20 mA 0-10 V | 4-20 mA 0-5 V | Factory set as ordered |
| Load | Current output Voltage output | $\leq 500 \Omega$ $\geq 2 \text{ k}\Omega$ | |
| Ripple | < 0.1 % of end value, ~ 100 kHz | | |

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 pollution degree 2 acc. to EN 61010 part 1 between all circuits. | |
| Protection against electrical shock 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 pollution degree 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 class: IP20 | |
| Connection | ≤ 2.5 mm², AWG 14 | |
| Weight | Approx. 50 g | |

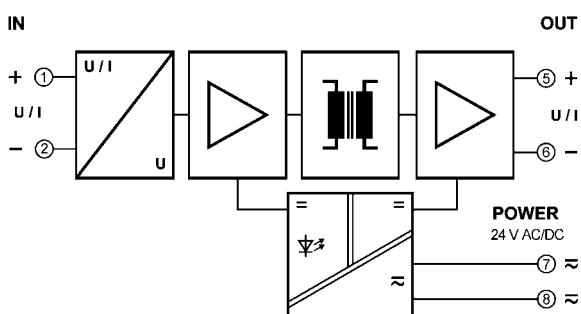
1) Other signals on request

2) Average TC in specified operating temperature range

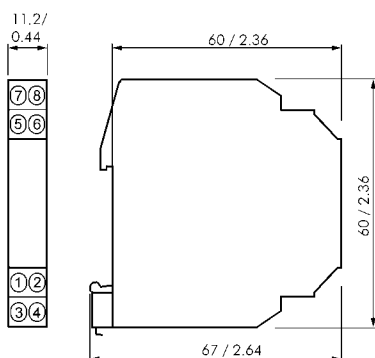
3) As far as relevant the standards and rules mentioned above are considered by development and production of our devices. In addition relevant assembly rules are to be considered by installation of our devices in other equipments. For applications with high working voltages, take measures to prevent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

4) Minor deviations possible during interference

Block diagram/Connections



Dimensions



mm/inch

Ordering information

| Product | Part No. | |
|--|---------------------|------------|
| IsoPAQ161P | 70ISC161XX | |
| Input | $\pm 10 \text{ V}$ | 1 |
| | $\pm 5 \text{ V}$ | 2 |
| | 0-5 V | 3 |
| | $\pm 20 \text{ mA}$ | 4 |
| | $\pm 10 \text{ mA}$ | 5 |
| 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 |