

1- & 2-channel Loop Powered Isolators for 0(4)-20 mA Signals

IsoPAQ-110L is a loop powered isolator, available in 1- and 2-channel versions. It is used for electrical isolation of 0(4)-20 mA signals to avoid measurement errors due to different voltage potentials or ground loops in an instrument installation.

The 2-channel version, IsoPAQ-110L offers a very cost effective alternative combined with a high-density mounting.

The isolator need no power supply, which contributes to reduced installation costs compared to Isolation Transmitters.

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



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.



- Input to output galvanic isolation**
Protection against erroneous measurements due to parasitic voltages or ground loops
- 1- and 2-channel versions**
Allows for optimal cost efficiency
- No power supply required**
Reduced wiring saves installation costs
- Fixed ranges**
Ready to use without any settings
- Protective Separation acc. to EN 61140**
The design and high isolation level (2.5 kV) provides protection for service personnel and downstream devices against impossibly 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

Specifications: IsoPAQ-110L

Input

Input signal	0[4]-20 mA
Operating current	< 100 μ A
Voltage drop	< 3 V
Overload	\leq 50 mA, \leq 15 V

Output

Output signal	0[4]-20 mA
Load	< 600 Ω
Response time (10 to 90 % of end value)	5 ms @ 500 Ω load
Ripple	< 0.1 % of end value, \sim 100 kHz

General data

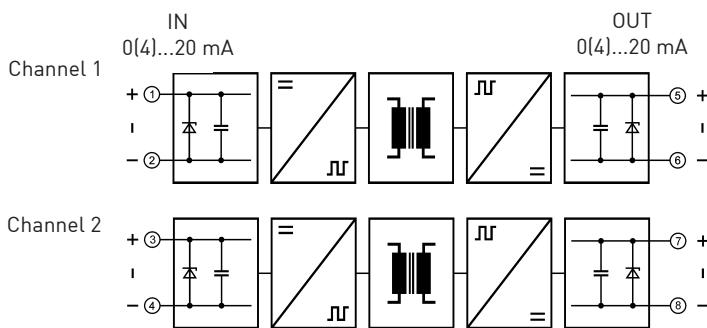
Transmission error	\pm 0.1 % of end value
Load error	\pm 0.05 % of measured value/100 Ω load
Temperature coefficient ¹⁾	\pm 0.004 %/K of measured value/100 Ω load
Test voltage	2.5 kV, 50 Hz
Working voltage ²⁾ [Basic Insulation]	600 VAC/DC for overvoltage category II and pollution degree 2 acc. to EN 61010 part 1 between all circuits.
Protection against electrical shock ²⁾	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 $^{\circ}$ C (32 to +131 $^{\circ}$ F) Transport and storage -25 to +80 $^{\circ}$ C (-13 to +176 $^{\circ}$ F)
EMC ³⁾	EN 61326-1
Construction	11.2 mm (0.44") housing, protection class: IP20
Connection	\leq 2.5 mm ² , AWG 14
Weight	Approx. 50 g

1) Average TC in specified operating temperature range

2) 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

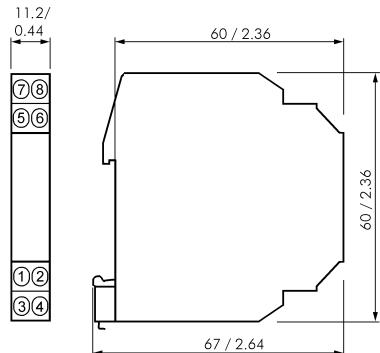
Block diagram/Connections



Ordering information

Product	Input / Output	Part No.
IsoPAQ-110L	1-channel, 0[4]-20 mA	70ISC11001
IsoPAQ-110L	2-channel, 0[4]-20 mA	70ISC11002

Dimensions



mm/inch