Isolation Transmitter for Unipolar mA/V Signals with Fixed Ranges

The Isolation Transmitter IsoPAQ-131P is used for isolation and conversion of 0-20 mA, 4-20 mA and 0-10 V unipolar signals.

For applications where normally one signal combination only is used, IsoPAQ-131P offers a cost-effective alternative.

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







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

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

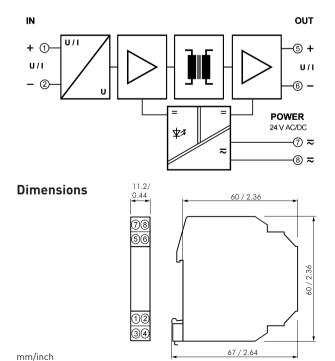


Specifications: IsoPAQ-131P

Input					
Input signal	0-20 mA	4-20 mA	0-10 V	Factory set as ordered	
Input resistance	Current input	5 Ω			
	Voltage input	$1~{ m M}\Omega$			
Overload	Current input	≤ 200 mA			
	Voltage input	≤ 250 V			
Output					
Output signal	0-20 mA	4-20 mA	0-10 V	Factory set as ordered	
Load	Current output	≤ 500 Ω			
	Voltage output	$\geq 2k\Omega$			
Ripple	< 0.2 % of end value, ~ 100 kHz				
General data					
Transmission error	± 0.2 % of end value				
Temperature coefficient ^{1]}	± 0.02 %/K of end value				
Response time	< 5 ms				
Test voltage	2.5 kV, 50 Hz Between all circuits				
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	Protective separation acc. to EN 61140 by reinforced insulation acc. to EN 61010 part 1				
shock ²⁾	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 store	age	-25 to +80 °	C (-13 to +176 °F)	
Power supply	24 VAC/DC, ± 15 %	AC 48 to 62	Hz, approx. 2 \	/A	
		DC approx.	0.7 W		
EMC ³	EN 61326-1				
Construction	11.2 mm (0.44 ") housing, protection class: IP20				
Connection	≤ 2.5 mm², AWG 14				
Weight	Approx. 50 g				

¹⁾ Average TC in specified operating temperature range

Block diagram/Connections



Ordering information

Product	Input / Output	Part No.
IsoPAQ131P	0-20 mA / 0-20 mA	70ISC13112
	4-20 mA / 0-20 mA	70ISC13132
	0-10 V / 0-20 mA	70ISC13152
	0-20 mA / 4-20 mA	70ISC13114
	4-20 mA / 4-20 mA	70ISC13112
	0-10 V / 4-20 mA	70ISC13154
	0-20 mA / 0-10 V	70ISC13116
	4-20 mA / 0-10 V	70ISC13136
	0-10 V / 0-10 V	70ISC13156
Power conne	s 70ADA00030	

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