

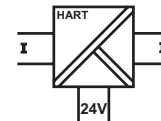
Transmitter repeater for powering and isolation of 2-,3- and 4-wire transmitters

The Repeater Power Supply IsoPAQ-610 is used to supply and separate 2- and 3-wire SMART Transmitters and active sensor signals with HART communication.

It supplies the transmitter with power and transmits the measuring signal with high accuracy galvanic isolated to the output. Alternative the measuring input accepts active 0/4 ... 20 mA signals from 4-wire transmitters.

In addition to the analog signal, the IsoPAQ-610 also transmits data protocols for HART communication. It allows bidirectional communication with the field device from every point of the cabling.

The auxiliary power can be supplied via the connection terminals or via the optional In-Rail-Bus connector. A green LED on the front of the unit has been provided to monitor the power supply.



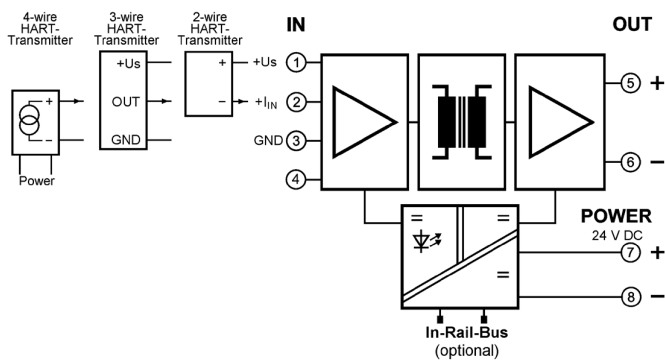
- **Universal operation of SMART Transmitters**
Energization and separation of field located 2-, 3- and 4-wire transmitters
- **Bidirectional HART transmission**
HART data transfer for repeater and isolator operation
- **3-Port isolation**
Protection against erroneous measurements due to parasitic voltages or ground loops
- **Extremely slim design**
6.2 mm slim housing for a simple and space saving installation
- **Optional In-Rail-Bus mounting rail connector**
allows for fast and economical installation
- **Protective Separation acc. to EN61140**
Protects service personnel and downstream devices against impermissibly high voltage

Specifications:

Input		
Input signal	0/4... 20 mA	(4... 20 mA with HART signal)
Input resistance	≤50 Ω	
Over load	50 mA / 30 V	
Transmitter supply (Tx)	16 V (open circuit voltage/short circuit current < 22 V/35 mA)	
Communication signal	Bidirectional HART transmission, internal AC impedance 250 Ω	
Output		
Output signal	0/4... 20 mA	(4... 20 mA with HART signal)
Load	0... 600 Ω (at 20 mA)	(230... 600 Ω with HART signal)
Linear transmission range	-1... +110 %	
Residual ripple	< 10 mV _{rms}	
General Data		
Transmission error	< 0.1 % full scale	
Temperature coefficient ¹⁾	< 100 ppm/K	
Cut-off frequency -3 dB	100 Hz	> 2,5 kHz HART signal
Response time T ₉₉	7 ms	
Test voltage	3 kV AC, 50 Hz, 1 min.	Input against output against power supply
Working voltage ²⁾ (Basic Insulation)	600 V AC/DC for overvoltage category II and pollution degree 2 acc. to EN 61010-	
Protection against electrical shock ²⁾	Protective separation according to EN 61140 by reinforced insulation in accordance with EN 61010 -1 up to 300 V AC/DC for overvoltage category II and pollution degree 2	
Ambient temperature	Operation	-25°C to +70°C (-13 to +158°F)
	Transport and storage	-40°C to +85°C (-40 to +185°F)
Power supply	24 V DC voltage range 16.8 V ... 31.2 V DC, approx. 1.3 W	
EMC ³⁾	EN 61326-1	
Construction	6.2 mm (0.244") housing, protection class IP 20, mounting on 35 mm DIN rail acc. to EN 60715	
Weight	Approx. 70 g	

1) Average TC related to full scale value in specified operating temperature range, reference temperature 23 °C
 2) For applications with high working voltages, ensure there is sufficient spacing or isolation from neighboring devices and protection against electric shocks.
 3) Minor deviations possible during interference

Block diagram/Connections



Dimensions

