

### **HART** transparent repeater

## 5106A

- 3- / 5-port 3.75 kVAC galvanic isolation
- Low response time
- -2-wire supply > 17 V
- 1- or 2-channel version
- Universal supply by AC or DC









#### Application

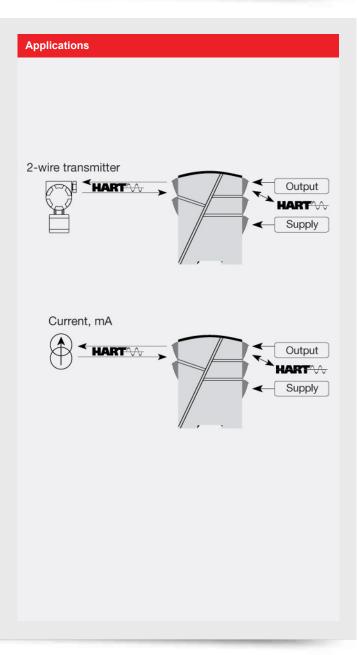
- Power supply and signal isolator with 2-way HART communication for 2-wire transmitters installed in the hazardous area.
- · Signal isolator with 2-way HART communication for supplied current transmitters installed in the hazardous area.
- Signal isolator with low response time on analog current signals.

#### **Technical characteristics**

- PR5106A primarily processes current signals of 4...20 mA.
- PR5106A is based on microprocessor technology for gain and offset. The analog signal is transmitted at a response time of less
- Inputs, outputs, and supply are floating and galvanically separated.
- · The output can be connected either as an active current transmitter or as a 2-wire transmitter.

#### Mounting / installation

• Mounted vertically or horizontally on a DIN rail. As the devices can be mounted without distance between neighboring units, up to 84 channels can be mounted per meter.



#### Order:

Туре	Input		Output		Channels	
5106A	420 mA	: B	420 mA	: 2	Single	: A
			204 mA	: 9	Double	: B

Environmental Conditions Operating temperature Calibration temperature Relative humidity Protection degree  Mechanical specifications	2028°C < 95% RH (non-cond.) IP20
Dimensions (HxWxD)	
Weight approx	_
Weight approx  DIN rail type	
Wire size	0.132.08 mm <sup>2</sup> AWG 2614 stranded wire
Screw terminal torque	0.5 Nm
Common specifications Supply	
Supply voltage, universal	19.2300 VDC
Fuse	
Max. required power	,
Internal power dissipation	≤ 2 W (2 channels)
Isolation voltage Isolation voltage, test / working	
Response time (090%, 10010%)	< 25 ms
Auxiliary supplies 2-wire supply (pin 4442 and 5452)	25 17 VDC / 0 20 mA
Signal / noise ratio	
Accuracy	
Effect of supply voltage change	< ±10 μA
EMC immunity influence	< ±0.5% of span
Extended EMC immunity: NAMUR NE21, A criterion, burst	< ±1% of span
Input specifications	
Current input	
Measurement range  Min. measurement range (span)	
Input resistance: Supplied unit	
Input resistance: Non-supplied	
unit	Rshunt = ∞, Vdrop < 4 V

# Output specifications

Current output	
Signal range	420 mA
Min. signal range	16 mA
Load (@ current output)	≤ 600 Ω
Load stability	≤ 0.01% of span / 100 Ω
Current limit	≤ 28 mA
Passive 2-wire mA output	
Signal range	420 mA
Effect of external 2-wire	
supply voltage variation	< 0.005% of span / V
Max. external 2-wire supply	29 VDC
Output ripple	< 3 mVRMS on HART
	communication
of span	= of the presently selected
	range

# Observed authority requirements

Observed authority requirements							
EMC	2014/30/EU						
LVD	2014/35/EU						
EAC	TR-CU 020/2011						
EAC LVD	TR-CU 004/2011						
Approvals							
c UL us, UL 508	E231911						