

Features

- 1-channel signal conditioner
- 24 V DC supply
- Input 2-wire and 3-wire SMART transmitters and current sources
- Output 0/4 mA ... 20 mA
- Accuracy 0.1 %

Function

This signal conditioner provides the galvanic isolation between field circuits and control circuits.

The device supplies 2-wire and 3-wire SMART transmitters, and can also be used with current sources.

At the output the signal is available as active 0/4 mA ... 20 mA signal.

The device has no internal resistor for HART communication.

Digital signals may be superimposed on the input signal and are transferred bi-directionally.

The device can be powered via terminals or Power Bus.

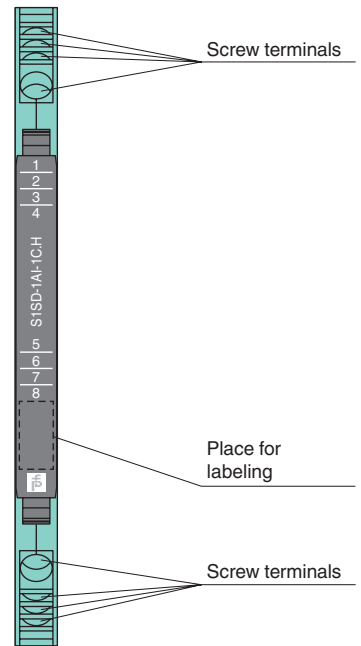
Application

The device supports the following SMART protocols:

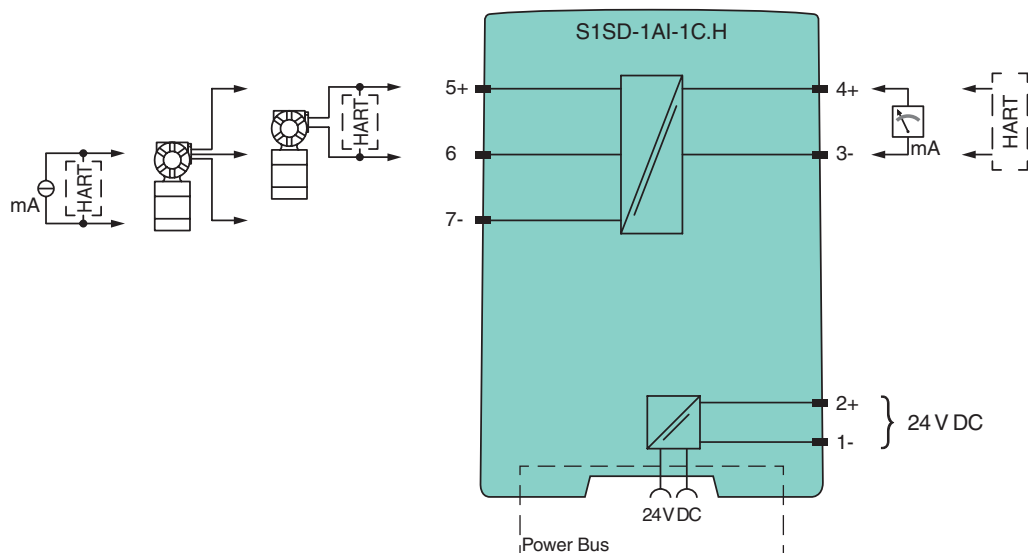
- HART

Assembly

Front view



Connection



Release date 2015-04-30 16:57 Date of issue 2015-04-30 276395_eng.xml

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0002
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
pa-info@sg.pepperl-fuchs.com

General specifications	
Signal type	Analog input
Supply	
Connection	Power Bus or terminals 1-, 2+
Rated voltage U_n	16.8 ... 31.2 V DC
Power loss	0.8 W
Power consumption	1.2 W
Input	
Connection	terminals 5+, 6, 7-
Input signal	0/4 ... 20 mA
Open circuit voltage/short-circuit current	$\leq 22 \text{ V} / 30 \text{ mA}$
Input resistance	$\leq 50 \Omega$
Transmission range	linearity range: -1 ... 110 %
Available voltage	16 V at 20 mA
Output	
Connection	terminals 3-, 4+
Analog current output	0/4 ... 20 mA, load $\leq 600 \Omega$
Ripple	$\leq 10 \text{ mV}_{\text{eff}}$
Transfer characteristics	
Deviation	$\leq 0.1 \%$ of full-scale value
Influence of ambient temperature	$< 100 \text{ ppm/K}$ of full-scale value
Rise time/fall time	$\leq 3.5 \text{ ms}$
Electrical isolation	
Output/power supply	safe electrical isolation by reinforced insulation according to IEC/EN 61010-1, rated insulation voltage $300 \text{ V}_{\text{eff}}$ test voltage 3 kV, 50 Hz
Input/Other circuits	safe electrical isolation by reinforced insulation according to IEC/EN 61010-1, rated insulation voltage $300 \text{ V}_{\text{eff}}$ test voltage 3 kV, 50 Hz
Directive conformity	
Electromagnetic compatibility	
Directive 2004/108/EC	EN 61326-1:2006
Conformity	
Degree of protection	IEC 60529:2001
Protection against electrical shock	EN 61010-1:2010
Ambient conditions	
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications	
Connection type	screw terminals
Core cross-section	$\leq 2.5 \text{ mm}^2$, 14 AWG
Degree of protection	IP20
Mass	approx. 70 g
Dimensions	6.2 x 97 x 107 mm (0.24 x 3.82 x 4.21 in), housing type S1
Mounting	on 35 mm DIN mounting rail acc. to EN 60715:2001
General information	
Supplementary information	Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .
Accessories	
Designation	optional accessories: - Power Bus POWERBUS-SETL5.250 - Power Bus POWERBUS-SETH5.250 - cover for DIN mounting rail POWERBUS-COV-250 - end cap POWERBUS-CAP

Release date 2015-04-30 16:57 Date of issue 2015-04-30 276395_eng.xml