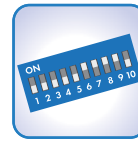




Configuration via:



DIP switch



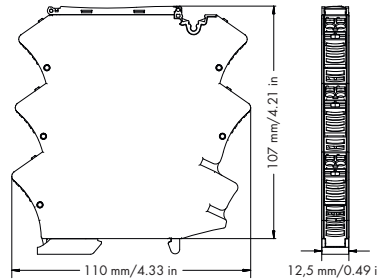
Interface configuration software



Interface configuration app



Configuration display



1.1	U+	INPUT VOLTAGE	OUTPUT	OUT+ 4.1
1.2	U-		OUTPUT	OUT- 4.2
2.1	I+	INPUT CURRENT	POWER	Us+ 5.1
2.2	I-		POWER	GND 5.2
3.1	DO (GND)	DO	JUMPER POWER	Us+ 6.1
3.2	DI (GND)	DI (HOLD)		GND 6.2

Short description:

The Universal Isolation Amplifier converts, amplifies, filters and electrically isolates analog signals.

Features:

- Analog unipolar/bipolar signals at input/output
- A digital signal output reacts to configured measuring range limits (switching ON/OFF delay and threshold value switch function configurable with up to two threshold values).
- A digital HOLD input freezes the output signal.
- Clipping capability provides analog signal limitation to output end values.
- Adjustable software/hardware filter
- Input/Output response simulation via configuration display
- Safe 3-way isolation with 4 kV test voltage acc. to EN 61140

Technical Data

Configuration:

Configuration: DIP switch, interface configuration software, interface configuration app, configuration display

Input:

Input signal: **Current:** ± 1 mA; 0 ... 1 mA; ± 10 mA; 0 ... 10 mA; 2 ... 10 mA; ± 20 mA; 0 ... 20 mA; 4 ... 20 mA; ± 100 mA; 0 ... 100 mA

Voltage: ± 1 V; 0 ... 1 V; ± 10 V; 0 ... 10 V; 2 ... 10 V; ± 30 V; 0 ... 30 V; ± 100 V; 0 ... 100 V; ± 200 V; 0 ... 220 V

Input resistance: ≥ 1 MΩ (U input); ≤ 50 Ω (I input)
 Max. operating frequency: 10 kHz / 5 kHz / 100 Hz / 30 Hz (configurable via DIP switch)

Input – Digital:

HOLD signal: 11.8 V ... U_S

Output:

Output signal: **Current:** ± 10 mA; 0 ... 10 mA; 2 ... 10 mA; ± 20 mA; 0 ... 20 mA; 4 ... 20 mA

Voltage: ± 5 V; 0 ... 5 V; 1 ... 5 V; ± 10 V; 0 ... 10 V; 2 ... 10 V

Load impedance: **Current:** ≤ 600 Ω; **Voltage:** ≥ 1 kΩ

Overload capacity: -250 V; +250 V / -120 mA; +120 mA

Output – Digital:

Max. switching voltage: Supply voltage applied -0.3 V
 Max. continuous current I_{DO}: 100 mA (no internal restriction)

Description

Description	Item No.	Pack. Unit
JUMPFLEX® Transducer, for DIN 35 rail	2857-401	1
Universal Isolation Amplifier		

Technical Data

General specifications:

Supply voltage U _S	24 VDC
Supply voltage range	16.8 V ... 31.2 V (-30 % ... +30 %)
Current consumption at 24 VDC	≤ 70 mA (+ IDO)
Response time (T _{10,90})	< 1 ms
Transmission error	≤ 0.1 % of the full scale value
Temperature coefficient	≤ 0.01 %/K

Environmental requirements:

Ambient operating temperature	-40 °C ... +70 °C
Storage temperature	-40 °C ... +85 °C

Safety and protection:

Test voltage (input/output/supply)	4 kV AC, 50 Hz, 1 min.
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Connection and type of mounting:

Wire connection	CAGE CLAMP® S (picoMAX® 5.0)
Cross sections	solid/fine-stranded: 0.2 ... 2.5 mm ² / AWG 24 ... 12
Strip length	9 ... 10 mm / 0.35 ... 0.39 in

Dimensions and weight:

Dimensions (mm) W x H x L	12.5 x 107 x 110
Weight	86 g

Standards and approvals:

Conformity marking	CE
Standards/Specifications	DIN EN 61010-1:2010; DIN EN 60664-1:2008; Safe isolation acc. to DIN EN 61140:2002; IEC 61000-6-2; IEC 61000-6-4

Accessories:

For accessories, see Full Line Catalog
 INTERFACE ELECTRONIC 2012/2013

DIP Switch Adjustability

● = ON

2857-401

DIP Switch S1

Input													
1	Signal	2	Polarity	3	4	5	Range / mA	Range / V	6	Inverted Characteristic	7	8	Limit Frequency
	Current		Unipolar				0 ... 20	0 ... 10		Not inverted			10 kHz
●	Voltage	●	Bipolar *	●			0 ... 1	0 ... 1	●	Inverted	●		5 kHz
					●		0 ... 5	0 ... 5				●	100 Hz
				●	●		0 ... 10	1 ... 5				●	30 Hz
						●	2 ... 10	2 ... 10					
				●		●	4 ... 20	0 ... 30					
					●	●	0 ... 50	0 ... 100					
				●	●	●	0 ... 100	0 ... 220					

DIP Switch S1

DIP Switch S2

Output				Output			
9	Signal	10	Polarity	1	2	Range / mA	Range / V
	Current		Unipolar			0 ... 20	0 ... 10
●	Voltage	●	Bipolar *	●		4 ... 20	2 ... 10
					●	0 ... 10	0 ... 5
				●	●	2 ... 10	1 ... 5

DIP Switch S1

Output				Digital Output (DO)			
3	4	Measuring Range Underflow		Measuring Range Overflow		5	6
		Lower limit of output range -5% **		Upper limit of output range +2.5% **			
●		Lower limit of output range		Upper limit of output range +2.5%		●	
	●	Lower limit of output range		Upper limit of output range			●
●	●	Lower limit of output range -5%		Upper limit of output range +5%		●	●

* Bipolar only applies to ranges starting with 0.

** acc. to NAMUR NE 43