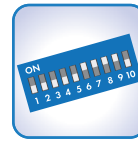


Configuration via:



DIP switch



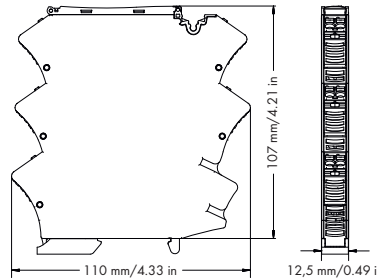
Interface configuration software



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)	JUMPER POWER	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**

<b>Configuration:</b>	
Configuration	DIP switch, interface configuration software, interface configuration app, configuration display
<b>Input:</b>	
Input signal	<b>Current:</b> ± 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 <b>Voltage:</b> ± 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)
Overload capacity	-250 V; +250 V / -120 mA; +120 mA
<b>Input – Digital:</b>	
HOLD signal	11.8 V ... U <sub>s</sub>
<b>Output:</b>	
Output signal	<b>Current:</b> ± 10 mA; 0 ... 10 mA; 2 ... 10 mA; ± 20 mA; 0 ... 20 mA; 4 ... 20 mA <b>Voltage:</b> ± 5 V; 0 ... 5 V; 1 ... 5 V; ± 10 V; 0 ... 10 V; 2 ... 10 V
Load impedance	<b>Current:</b> ≤ 600 Ω; <b>Voltage:</b> ≥ 1 kΩ
<b>Output – Digital:</b>	
Max. switching voltage	Supply voltage applied -0.3 V
Max. continuous current I <sub>BO</sub>	100 mA (no internal restriction)

**Description**

Description	Item No.	Pack. Unit
<b>JUMPFLEX® Signal Conditioner, for DIN 35 rail</b>	<b>2857-401</b>	<b>1</b>
Universal Isolation Amplifier		

**Technical Data**

<b>General specifications:</b>	
Nominal supply voltage V <sub>s</sub>	24 VDC
Supply voltage range	16.8 V ... 31.2 V (-30 % ... +30 %)
Current consumption at 24 VDC	≤ 70 mA (+ IDO)
Response time (T <sub>10/90</sub> )	< 1 ms
Transmission error	≤ 0.1 % of the full scale value
Temperature coefficient	≤ 0.01 %/K
<b>Environmental requirements:</b>	
Ambient operating temperature	-40 °C ... +70 °C
Storage temperature	-40 °C ... +85 °C
<b>Safety and protection:</b>	
Test voltage (input/output/supply)	4 kV AC, 50 Hz, 1 min.
<b>Connection and type of mounting:</b>	
Wire connection	CAGE CLAMP® S (picoMAX® 5.0)
Cross sections	solid/fine-stranded: 0.2 ... 2.5 mm <sup>2</sup> / AWG 24 ... 12
Strip length	9 ... 10 mm / 0.35 ... 0.39 in
<b>Dimensions and weight:</b>	
Dimensions (mm) W x H x L	12.5 x 107 x 110
Weight	Height from upper-edge of DIN 35 rail 86 g
<b>Standards and approvals:</b>	
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
<b>Accessories:</b>	see pages 226 ... 236

## 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 S2

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