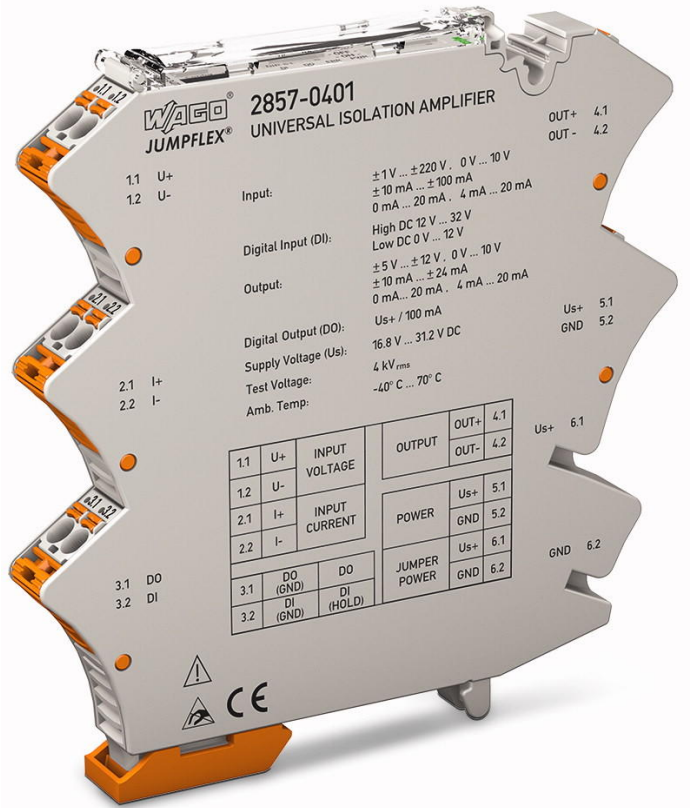


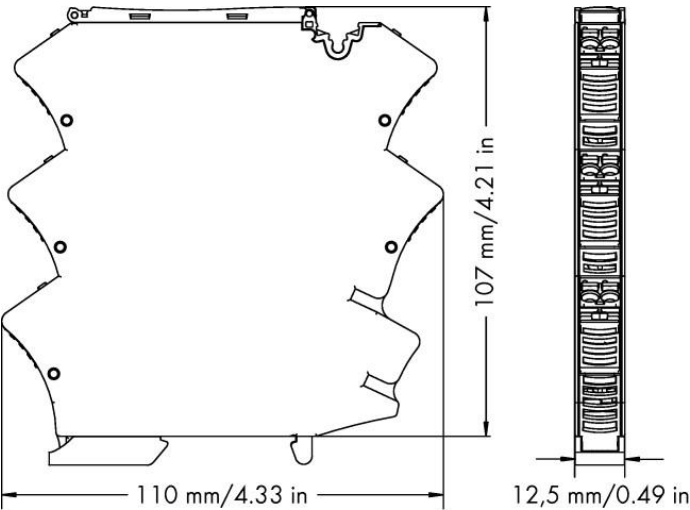


Isolation amplifier; Bipolar current and voltage input signal; Bipolar current and voltage output signal; Digital output; Supply voltage: 24 VDC; 12.5 mm module width

www.wago.com/2857-401



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



Item description

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

Note: (*Additional setting options via interface configuration software or interface configuration app)

Data

Technical Data

Configuration

Configuration options

DIP switches

Interface configuration software

Interface configuration app

Configuration display

Input

Input signal type	Voltage Current
Input signal voltage	$\pm 1\text{ V}$; $0 \dots 1\text{ V}$; $\pm 10\text{ V}$; $0 \dots 10\text{ V}$; $2 \dots 10\text{ V}$; $\pm 30\text{ V}$; $0 \dots 30\text{ V}$; $\pm 100\text{ V}$; $0 \dots 100\text{ V}$; $\pm 200\text{ V}$; $0 \dots 220\text{ V}$
Input signal, current	$\pm 1\text{ mA}$; $0 \dots 1\text{ mA}$; $\pm 10\text{ mA}$; $0 \dots 10\text{ mA}$; $2 \dots 10\text{ mA}$; $\pm 20\text{ mA}$; $0 \dots 20\text{ mA}$; $4 \dots 20\text{ mA}$; $\pm 100\text{ mA}$; $0 \dots 100\text{ mA}$
Input resistance (input/current)	$\leq 50\ \Omega$
Input resistance (input/voltage)	$\geq 1\text{ M}\Omega$
Max. input current	$\pm 120\text{ mA}$
Max. input voltage	$\pm 250\text{ V}$

Input – Digital

HOLD signal	$11.8\text{ V} \dots U_S$
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Output

Output signal type	Current Voltage
Output signal voltage	$\pm 5\text{ V}$; $0 \dots 5\text{ V}$; $1 \dots 5\text{ V}$; $\pm 10\text{ V}$; $0 \dots 10\text{ V}$; $2 \dots 10\text{ V}$
Output signal current	$\pm 10\text{ mA}$; $0 \dots 10\text{ mA}$; $2 \dots 10\text{ mA}$; $\pm 20\text{ mA}$; $0 \dots 20\text{ mA}$; $4 \dots 20\text{ mA}$
Software filter, adjustable	moving mean value (filtering level: 30)
Load impedance (output/voltage)	$\geq 1\text{ k}\Omega$
Load impedance (output/current)	$\leq 600\ \Omega$



Output – Digital

Max. switching voltage (DO)	Supply voltage applied: -0.3 V
Max. continuous current (DO)	100 mA (no internal restriction)
Number of switching thresholds (DO)	1 or 2 (adjustable)
Configurable rise/fall delay time (DO)	0 ... 60 s (via software)

Signal processing

Max. operating frequency	10 kHz/ 5 kHz/ 100 Hz/ 30 Hz (configurable via DIP switch or software)
Software filter, adjustable	moving mean value (filtering level: 30)
Step response	1 ms

Measurement error

Transmission error typ.	$\leq 0.1\%$ of upper range value
Temperature coefficient	$\leq 0.01\%/K$

Power supply

Type of power supply	24 VDC
Nominal supply voltage U_S	24 VDC
Supply voltage range	$\pm 30\%$
Current consumption at supply voltage	$\leq 70\text{ mA (+ } I_{DO})$

Safety and protection:

Test voltage (input/output/supply)	4 kV AC; 50 Hz; 1 min
Degree of protection	IP20

Connection data

Connection technology	Push-in CAGE CLAMP®
WAGO terminal	picoMAX® 5.0
Solid conductor	0.2 ... 2.5 mm² / 24 ... 12 AWG
Fine-stranded conductor	0.2 ... 2.5 mm² / 24 ... 12 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 Inch

Geometrical Data

Width	12.5 mm / 0.492 Inch
Height from upper-edge of DIN-35 rail	107 mm / 4.213 Inch
Depth	110 mm / 4.331 Inch



Mechanical data

Type of mounting	DIN-35 rail
Degree of protection	IP20

Material Data

Fire load	1.664 MJ
Weight	85.859 g

Environmental Requirements

Surrounding air (operating) temperature	-40 ... 70 °C
Surrounding air (storage) temperature	-40 ... 85 °C

Standards and specifications

Conformity marking	CE
EMC immunity to interference	EN 61000-6-2; EN 61326-2-3; EN 50121-3-2
EMC emission of interference	EN 61000-6-4; EN 61326-2-3; EN 50121-3-2
Standards/specifications	EN 60664-1

Commercial data

Country of origin	DE
GTIN	4050821676966
Customs Tariff No.	85437090300
Product Group	6 (Interface Electronics)

Product family

JUMPFLEX Isolation Amplifiers
[Show all products from the family.](#)

Subject to changes.