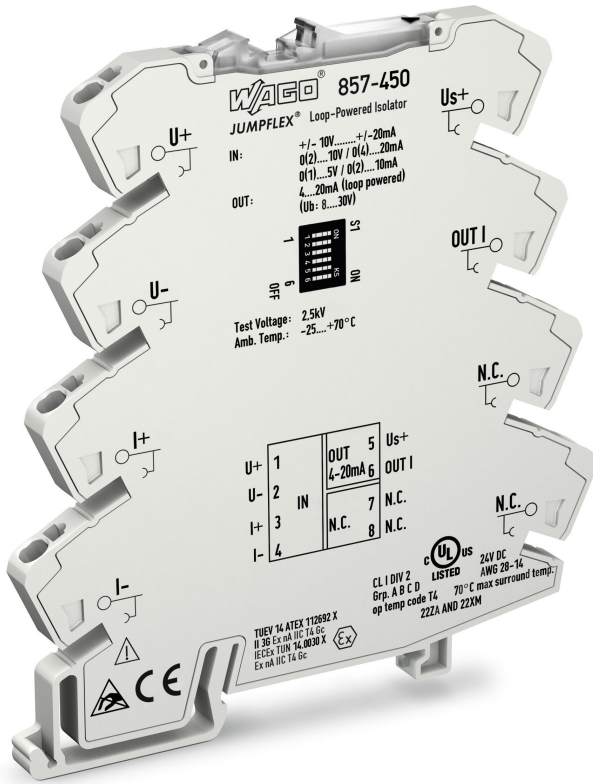


Loop-powered isolation amplifier; Bipolar current and voltage input signal; Current output signal; Configuration via DIP switch; Power via input; 6 mm module width

[www.wago.com/857-450](http://www.wago.com/857-450)



U+	1	IN U, I	OUT 5	Us+
U-	2		4-20mA	OUT 1
I+	3		7	N.C.
I-	4		8	N.C.

### Item description

**Short description:** The Loop-Powered Isolation Amplifier converts analog, unipolar and bipolar, standard signals. It is also designed to amplify, filter and electrically isolate standard analog signals.

**Characteristics:**

- No additional supply voltage required
- Zero/span adjustment
- Analog, unipolar and bipolar, standard signals at input
- Calibrated scale switching
- Switchable max. operating frequency
- Safe 2-way isolation with 2.5 kV test voltage acc. to EN 61140

### Data

#### Technical Data

### Configuration

Configuration options

DIP switches

## Input

Input signal type	Voltage Current
Input signal voltage	$\pm 1\text{ V}$ ; $0 \dots 1\text{ V}$ ; $\pm 2\text{ V}$ ; $0 \dots 2\text{ V}$ ; $\pm 5\text{ V}$ ; $0 \dots 5\text{ V}$ ; $1 \dots 5\text{ V}$ ; $\pm 10\text{ V}$ ; $0 \dots 10\text{ V}$ ; $2 \dots 10\text{ V}$ ; $\pm 20\text{ V}$
Input signal, current	$\pm 5\text{ mA}$ ; $0 \dots 5\text{ mA}$ ; $\pm 10\text{ mA}$ ; $0 \dots 10\text{ mA}$ ; $2 \dots 10\text{ mA}$ ; $\pm 20\text{ mA}$ ; $0 \dots 20\text{ mA}$ ; $4 \dots 20\text{ mA}$
Input resistance (input/current)	$\leq 50\ \Omega$
Input resistance (input/voltage)	$\geq 1\text{ M}\Omega$
Max. input current	50 mA
Max. input voltage	30 V
Zero/span adjustment	$\pm 5\%$ of the full scale value

## Output

Output signal type	Current
Output signal current	4 ... 20 mA
Load impedance (output/current)	$\leq 600\ \Omega$

## Signal processing

Max. operating frequency	100 Hz/ 30 Hz (configurable via DIP switch)
Step response	3.5 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	loop-powered (via output)
Supply voltage	8 ... 30 VDC (power is derived from the output circuit)

## Safety and protection:

Test voltage (input/output/supply)	2.5 kV AC; 50 Hz; 1 min
Degree of protection	IP20



## Connection data

Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm <sup>2</sup> / 22 ... 14 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 Inch

## Geometrical Data

Width	6 mm / 0.236 Inch
Height from upper-edge of DIN-35 rail	97.8 mm / 3.85 Inch
Depth	94 mm / 3.701 Inch

## Mechanical data

Type of mounting	DIN-35 rail
Degree of protection	IP20

## Material Data

Color	lichtgrau
Fire load	0.405 MJ
Weight	37.904 g

## Environmental Requirements

Surrounding air (operating) temperature	-25 ... 70 °C
Surrounding air (storage) temperature	-40 ... 85 °C

## Standards and specifications

Conformity marking	CE
EMC immunity to interference	EN 61000-6-2
EMC emission of interference	EN 61000-6-3

## Commercial data

Country of origin	DE
GTIN	4045454828479
Customs Tariff No.	85437090300
Product Group	6 (Interface Electronics)



### Ex-Approvals

Logo	Approval	Certificate name
	<b>UL</b> UL International Germany GmbH (HAZARDOUS LOCATIONS)	E198726 Sec.4

### UL-Approvals

Logo	Approval	Certificate name
	<b>UL</b> UL International Netherlands B.V. (ORDINARY LOCATIONS)	E175199 Sec.4

### Product family

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

Subject to changes.