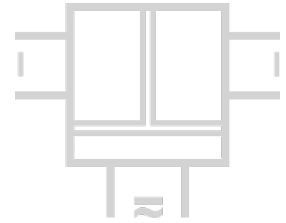


# Isolation Amplifier DN 2300

Isolation of Standard Signals  
with ZERO/SPAN Adjustment

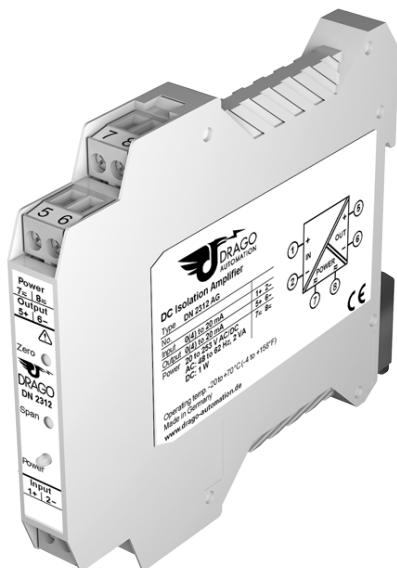


The Isolation Amplifier DN 2300 is used for electrical separation of 0(4) to 20 mA signals.

The Zero/Span adjustment on the front panel, the new universal power pack, and the compact design all contribute to its application flexibility. High reliability and Protective Separation are further characteristics that contribute to fault-free equipment operation.

The slim housing with 12.5 mm width saves space in the switch cabinet and facilitates by the practical plug-in screw terminal blocks the assembly.

The new universal power pack for 20 ... 253 V AC/DC means the DN 2300 can be used anywhere in the world, with all mains power supplies. The unit's high efficiency contributes significantly to reducing the unit's own heat generation. This is reflected in extremely high reliability and long-term stability. A green LED on the front of the unit has been provided to monitor the power supply.



- **Zero/Span Adjustment**

Measurement range compensation on the front panel

- **Universal Power Pack for 20 ... 253 V AC/DC**

Applicable world-wide for all common supply voltages

- **3-port isolation**

Protection against erroneous measurements due to parasitic voltages or ground loops

- **Ultra-small-sized housing**

12.5 mm housing with plug-in screw terminal blocks

- **High accuracy**

No falsification of measured signal

- **Protective Separation**

Protects service personnel and downstream devices against impermissibly high voltage

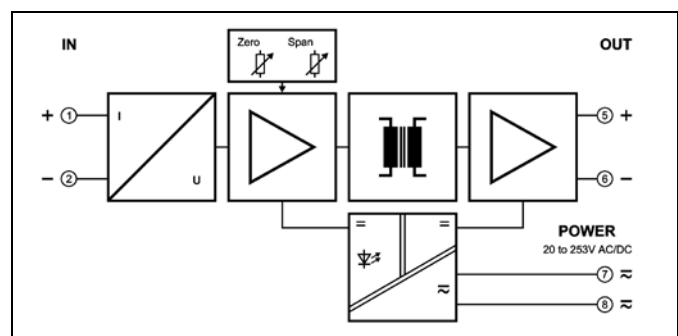
- **Maximum reliability**

No maintenance costs

- **5 Years Warranty**

Defects occurring within 5 years from delivery date shall be remedied free of charge at our plant (carriage and insurance paid by sender)

**Block diagram**



## Technical Data

Input	
Input signal <sup>1)</sup>	0(4) ... 20 mA
Input resistance	Approx. 25 Ω
Overload	≤ 200 mA
Output	
Output signal <sup>1)</sup>	0(4) ... 20 mA
Load	≤ 12 V (600 Ω at 20 mA)
Linear transmission range	- 2 ... + 110 %
Residual ripple	< 10 mV <sub>rms</sub>
General Data	
Transmission error	< 0.1 % full scale
Temperature coefficient <sup>2)</sup>	< 100 ppm/K
Zero/Span compensation	± 5 %
Cut-off frequency -3 dB	1 kHz
Response time T <sub>99</sub>	0.7 ms
Test voltage	4 kV AC, 50 Hz, 1 min.      input against output against power supply
Working voltage <sup>3)</sup> (Basic Insulation)	600 V AC/DC for overvoltage category II and pollution degree 2 acc. to EN 61010-1
Protection against electrical shock <sup>3)</sup>	Protective separation according to EN 61140 by reinforced insulation in accordance with EN 61010-1 up to 300 V AC/DC for overvoltage category II and pollution degree 2 between all circuits
Ambient temperature	Operation                      - 20 to + 70 °C      (- 4 to + 158 °F) Transport and storage      - 35 to + 85 °C      (- 31 to + 185 °F)
Power supply	20 ... 253 V AC/DC      AC 48 ... 62 Hz, approx. 2 VA DC approx. 1.0 W
EMC <sup>4)</sup>	EN 61326-1
Construction	12.5 mm (0.49") housing, protection class IP 20, mounting on 35 mm DIN rail acc. to EN 60715
Weight	Approx. 100 g

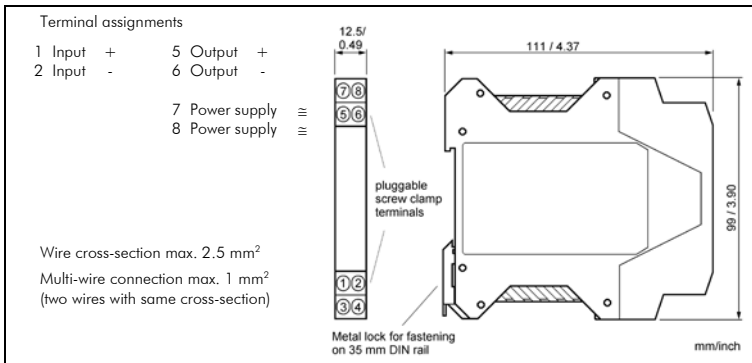
1) Other signals on request.

2) Average TC related to full scale value in specified operating temperature range, reference temperature 23 °C

3) For applications with high working voltages, ensure there is sufficient spacing or isolation from neighboring devices and protection against electric shocks.

4) Minor deviations possible during interference

## Dimensions



Subject to change!

## Product line

Device	Input	Output	Order No.
Isolation Amplifier with Zero/Span-compensation	0(4) ... 20 mA	0(4) ... 20 mA	DN 2312 AG