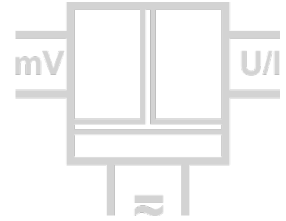


Shunt/mV Isolation Amplifier DS 7400

Isolation and Conversion of
mV-Signals in Standard Applications



The Isolation Amplifier DS 7400 is used for separation and conversion mV-signals such as those frequently used for current measuring with shunt-resistors or other applications.

Its high level of reliability and cost optimized design make the DS 7400 the first choice in its class!

The desired input and output range can be easily set by using DIP switch and due to the calibrated range selection no further adjustment is necessary.

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

For range selection a simple housing unblocking is installed which makes it possible to reach easily all control elements also on the DIN-rail.

In case of the new universal power pack for 20...253 V AC/DC the Isolation Amplifier DS 7400 is applicable world-wide for all common supply voltages. To control the power supply a green LED is installed on the front panel.

- **Calibrated signal setting**

Input and output range can be set by using DIP switch
- without any further adjustment

- **Universal power supply 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**

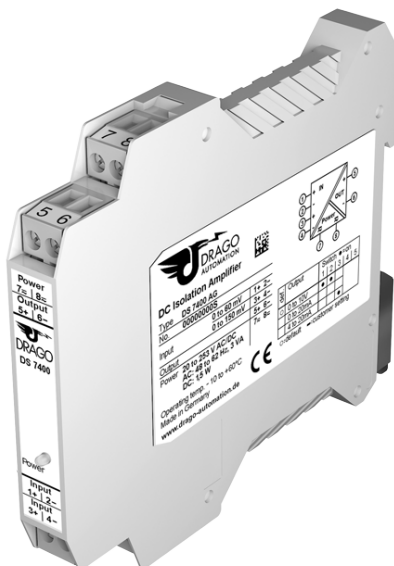
12.5 mm housing with plug-in screw terminal blocks

- **Maximum reliability**

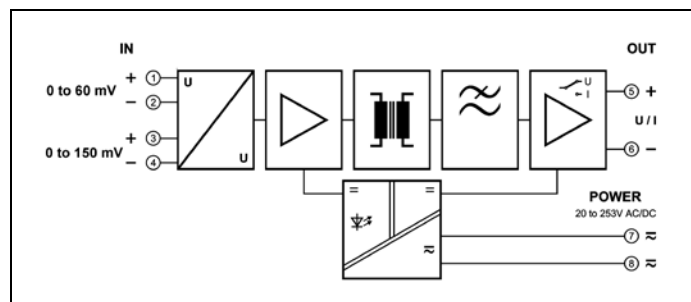
No maintenance costs

- **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 signals	0 ... 60 mV	0 ... 150 mV	calibrated terminal selectable	
Input resistance	> 25 kΩ			
Input capacitance	Approx. 1 nF			
Overload	≤ 30 V			
Output				
Output signals	0 ... 10 V	0 ... 20 mA	4 ... 20 mA	calibrated switchable
Load	Current output	≤ 10 V		(500 Ω at 20 mA)
	Voltage output	≤ 10 mA		(1 kΩ at 10 V)
Residual ripple	< 20 mV _{rms}			
General data				
Transmission error	< 0.3 % full scale			
Temperature coefficient ²⁾	< 150 ppm/K of final value			
Cut-off frequency -3 dB	1 kHz			
Response time T ₉₉	0,7 ms			
Test voltage	2.5 kV AC, 50 Hz, 1 min.		Input against output against power supply	
Working voltage ³⁾ (Basic Insulation)	600 V AC/DC for overvoltage category II and pollution degree 2 acc. to EN 61010-1			
Ambient temperature	Operation	- 10 to + 60 °C (+ 14 to + 140 °F)		
	Transport and storage	- 20 to + 80 °C (- 4 to + 176 °F)		
Power supply	20 ... 253 V AC/DC		AC 48 ... 62 Hz, approx. 3 VA	
			DC approx. 1.5 W	
EMC ⁴⁾	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			

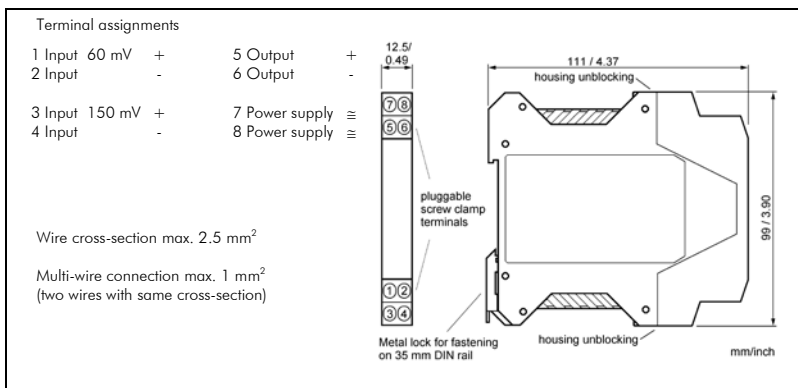
1) Average TC related to full scale value in specified operating temperature range, reference temperature 23 °C

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

3) Minor deviations possible during interference

Factory setting: Input: 0 ... 60 mV, Output: 0 ... 10 V

Dimensions



Subject to change!

Product line

Device	Order No.
Isolation Amplifier	DS 7400 AG