



High
Functionality

Loop-Powered Isolator DH 1000

Separation Of
0(4) ... 20 mA Standard Signals

With the Loop-Powered Isolator DH 1000 DRAGO is extending its offer on high-accuracy and high-reliable components of the interface technique.

The loop-powered isolator DH 1000 provides galvanic separation for 0(4) ... 20mA standard signals, while transferring the measurement signal to the output with a high degree of accuracy. In this way, the unit avoids interference voltage carry-over, effectively suppressing interference. The very low drop voltage of 2.0 V, a high level of accuracy and a compact design all work together to make the DH 1000 the first choice in system design.

The slim housing with 12.5 mm width for one or two channels saves space in your switch cabinet and facilitates by the practical plug-in screw terminal blocks the assembly. The DH 10X2 requires only 6.3 mm DIN-rail space per channel.

Intelligent design and their consequential avoidance of highly integrated components result in extremely long service lives and reliability without any falsification of the measurement signal.

To protect both maintenance personnel as well as downstream equipment against impermissibly high voltages, the DH 102X offers Protective Separation with a test voltage of 4 kV AC.

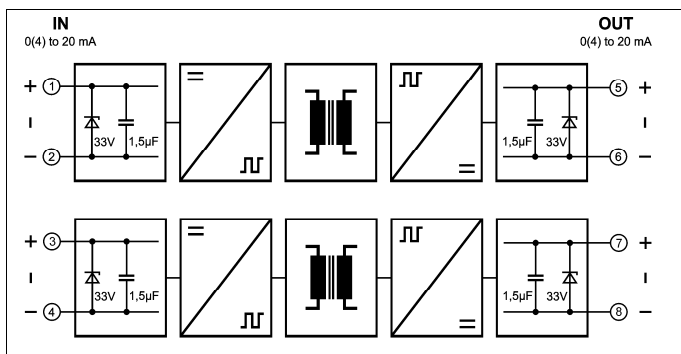
The DH 1000 requires no additional power supply since the auxiliary power is obtained from the input signal without distorting it. This not only saves costs during installation, but also increases reliability.

5 Years Warranty
Defects occurring within 5 years from delivery are remedied free of charge at our plant (carriage and insurance paid by sender).

- **Galvanic isolation across input and output**
Protection against erroneous measurements due to parasitic voltages or ground loops
- **No power supply required**
Saving costs since wiring is reduced and line influences are omitted
- **Extremely compact design, 1- and 2-channel versions**
Only 6.3 mm DIN-rail per channel
- **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**



Block diagram



Technical Data

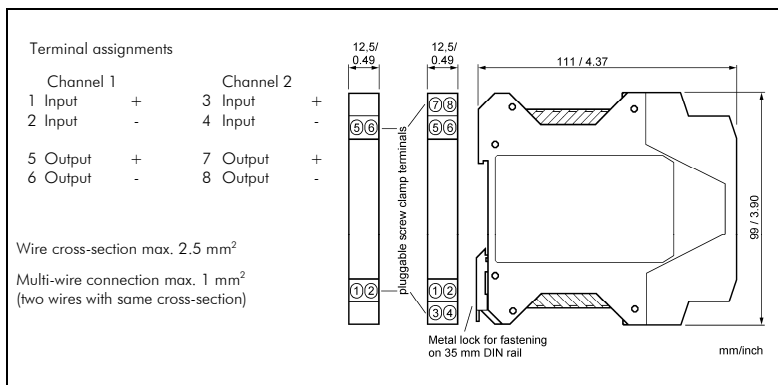
Input		
Input signal	0(4) ... 20 mA / max. 30 V	
Operating current	< 20 μ A	
Voltage drop	< 2.0 V	
Overload	100 mA, 30 V	
Output		
Output signal	0(4) ... 20 mA / max. 28 V	
Response time	Approx. 5 ms at 500 Ω load	
Ripple	< 10 mV _{rms}	
General Data		
Transmission error	0.1 % of final value	
Load error	0.03 % of measured value / 100 Ω load	
Temperature coefficient ¹⁾	15 ppm/K of measured value / 100 Ω load	
DH 101X	Test voltage	1.5 kV, 50 Hz
DH 102X	Test voltage	4 kV, 50 Hz
	Working voltage ²⁾ (Basic Insulation)	Up to 600 V AC/DC for overvoltage category II and pollution degree 2 acc. to EN 61010-1 between all circuits.
	Protection against electrical shock ²⁾	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)
EMC ³⁾	EN 61326 -1	
Construction	12.5 mm housing, protection class: IP 20	
Weight	Approx. 100 g	

1) Average TC in specified operating temperature range

2) As far as relevant the standards and rules mentioned above are considered by development and production of our devices. In addition relevant assembly rules are to be considered by installation of our devices in other equipments. For applications with high working voltages, take measures to prevent accidental contact and make sure that there is sufficient distance or insulation between adjacent situated devices.

3) Minor deviations possible during interference

Dimensions



Product line

Devices		Order No.
Loop-Powered Isolator	1-channel	DH 1011 AG
Loop-Powered Isolator	2-channel	DH 1012 AG
Loop-Powered Isolator	1-channel	Protective Separation, test voltage 4 kV~
Loop-Powered Isolator	2-channel	Protective Separation, test voltage 4 kV~
		DH 1021 AG
		DH 1022 AG

Subject to change!