

The loop-powered isolator GH 11000 provides galvanic separation for 0(4) ... 20 mA standard signals, while transferring the measurement signal to the output with a high degree of accuracy.

The unit avoids interference voltage carry-over and effectively suppressing parasitic noise. The very low drop voltage of 2.3 V and the high level of accuracy work together to make the GH 11000 the first choice in system design.

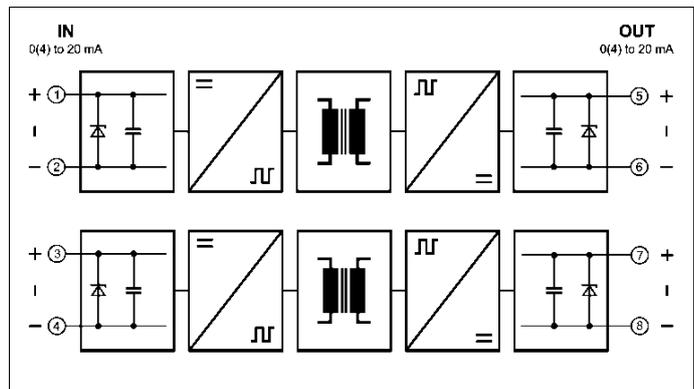
Intelligent design and their consequential avoidance of highly integrated components result in extremely long service lives and reliability - without any falsification of the measurement signal.

The GH 11000 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.

- 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 slim design, 1- and 2-channel versions**
 Only 3.1 mm DIN-rail per channel
- Protective Separation acc. to EN 61140**
 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

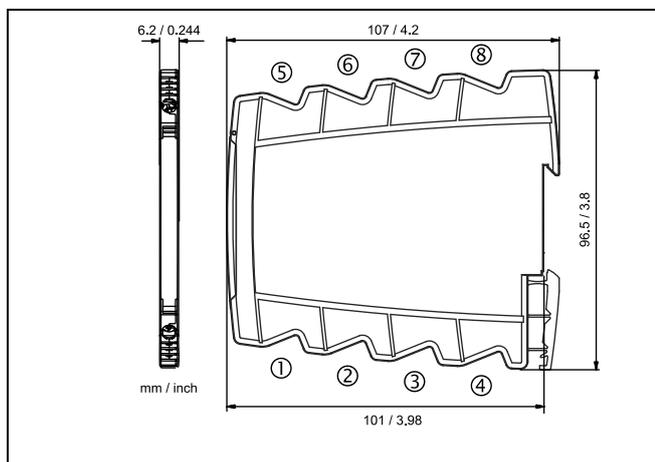
Input	
Input signal	0(4) ... 20 mA
Operating current	< 200 μ A
Voltage drop	Approx. 2.3 V at 20 mA
Overload	\leq 50 mA, 30 V
Output	
Output signal	0(4) ... 20 mA
Load	600 Ω
Cut-off frequency -3 dB	100 Hz
Response time T_{99}	7 ms
Residual ripple	< 10 mV _{rms}
General Data	
Transmission error	< 0.1 % full scale
Load error	< 0.05 % of measured value / 100 Ω load
Temperature coefficient ¹⁾	< 100 ppm/K
Test voltage	3 kV AC, 50 Hz, 1 min. between all circuits
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 -25 to +70 °C (-13 to +158 °F) Transport and Storage -40 to +85 °C (-40 to +185 °F)
EMC ³⁾	EN 61326-1
Construction	6.2 mm housing, protection class IP 20, mounting on 35 mm DIN rail acc. to EN 60715
Weight	Approx. 70 g

1) Average TC based on the final value 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 equipment. 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



Subject to change!

Terminal assignments

1	+ Input I
2	- Input I
3	+ Input II
4	- Input II
5	+ Output I
6	- Output I
7	+ Output II
8	- Output II

Connection

Captive plus-minus clamp screws
Wire cross-section max. 2.5 mm² / AWG 14
Stripped length 6 ... 8 mm / 0.28 in
Screw terminal torque 0.8 Nm / 7 lbf in

Product line

Device	Order No.
Loop-Powered Isolator, 1-channel	GH 11010 S
Loop-Powered Isolator, 2-channel	GH 11020 S