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)
## Technical Data

### Input
- **Input signal**: 0(4) ... 20 mA
- **Operating current**: < 200 μA
- **Voltage drop**: Approx. 2.3 V at 20 mA
- **Overload**: ≤ 50 mA, 30 V

### Output
- **Output signal**: 0(4) ... 20 mA
- **Load**: 600 Ω
- **Cut-off frequency -3 dB**: 100 Hz
- **Response time T99**: 7 ms
- **Residual ripple**: < 10 mVrms

### General Data
- **Transmission error**: < 0.1 % full scale
- **Load error**: < 0.05 % of measured value / 100 Ω load
- **Temperature coefficient**<sup>11</sup>: < 100 ppm/K
- **Test voltage**: 3 kV AC, 50 Hz, 1 min. between all circuits
- **Working voltage**<sup>2</sup> (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**<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**: –25 to +70 °C (–13 to +158 °F)
- **Transport and Storage**: –40 to +85 °C (–40 to +185 °F)

### EMC
- **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

<sup>1) Average TC based on the final value in specified operating temperature range</sup>  
<sup>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.</sup>  
<sup>3) Minor deviations possible during interference</sup>

### Dimensions

![Diagram](image)

### Terminal assignments

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>+ Input I</td>
</tr>
<tr>
<td>2</td>
<td>- Input I</td>
</tr>
<tr>
<td>3</td>
<td>+ Input II</td>
</tr>
<tr>
<td>4</td>
<td>- Input II</td>
</tr>
<tr>
<td>5</td>
<td>+ Output I</td>
</tr>
<tr>
<td>6</td>
<td>- Output I</td>
</tr>
<tr>
<td>7</td>
<td>+ Output II</td>
</tr>
<tr>
<td>8</td>
<td>- Output II</td>
</tr>
</tbody>
</table>

### 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

Subject to change!

### Product line

<table>
<thead>
<tr>
<th>Device</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loop-Powered Isolator, 1-channel</td>
<td>GH 11010 S</td>
</tr>
<tr>
<td>Loop-Powered Isolator, 2-channel</td>
<td>GH 11020 S</td>
</tr>
</tbody>
</table>