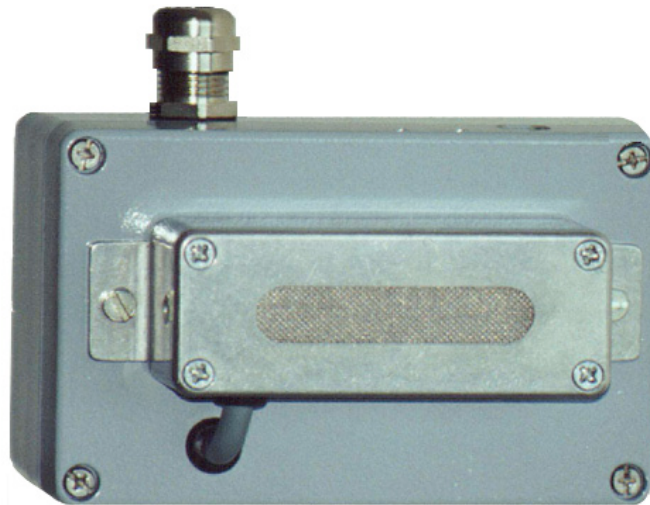




## Gas Analyzer GSI 1080 for detection of Carbon Dioxide CO<sub>2</sub>



### Mode of operation

The GSI 1080 gas analyser is used for the detection of carbon dioxide CO<sub>2</sub>.

The gas analyser works on an infrared-optical basis, and makes use of the light absorption of the CO<sub>2</sub> in a specific wavelength range. The concentration measurement takes place via the diffusion. There are no mechanically moving parts in the gas analyser.

The measured gas concentration is not linear to the electrical output signal of the gas analyser. The potentiometers and the 3.5 mm jack connection for the calibration are accessible from the outside, and permits a "one-man" calibration.

The **calibration gas** should be 75% of the measurement range, and must contain synthetic air as the carrier gas



**Electrical data infrared analyzer**

Sensitivity:	...
Gas concentration:	0...5000 ppm / not linear 0...2.5 vol.% / not linear
Standard calibration:	...
Response time t 90:	< 90 seconds
Operating temperature:	-30 °C ... +40 °C
Start up after reconditioning:	maximum 1 h
Pressure range:	atmospheric ± 10%
Air humidity:	5...95%
Location sensitivity:	none
Life-span at 20 °C:	depends on the application
Power connection:	3-core cable, shielded
Supply voltage:	maximum 35 volt
Current consumption:	maximum 300 mA
Output signal:	4...20 mA / maximum 40 mA

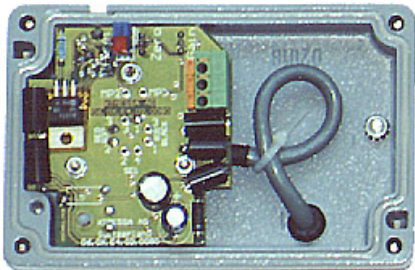
**Cross sensitivity to other gases**

<u>Test gas</u>	<u>concentration of the test gas</u>	<u>display on the CO<sub>2</sub>-Analyzer</u>
Ammonia NH <sub>3</sub>	100 ppm	...
Chlorine Cl <sub>2</sub>	... ppm	...
Ethylene C <sub>2</sub> H <sub>4</sub>	... ppm	...
Carbon Dioxide CO <sub>2</sub>	5000 ppm	5000 ppm
Carbon Monoxide CO	250 ppm	...
Propan C <sub>3</sub> H <sub>8</sub>	5000 ppm	...
Sulphur Dioxide SO <sub>2</sub>	100 ppm	...
Hydrogen Sulphide H <sub>2</sub> S	... ppm	...
Nitrogen Dioxide NO <sub>2</sub>	20 ppm	...
Nitric Oxide NO	48 ppm	...
Hydrogen H <sub>2</sub>	90 ppm	...

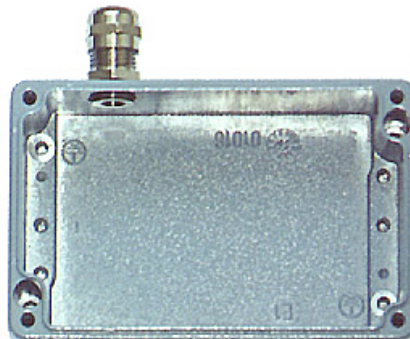
**Inspection (Maintenance)**

The sensor and the electronic require an inspection. Routine calibration is recommended once or twice a year..

**Electronics**



**Dimensions**



Height:	80 mm
Width:	125 mm
Depth:	90 mm