MEMBRAPOR

Specification Sheet

Hydrogen Sulfide Gas Sensor H2S/C-1000

H2S Gas Sensor in Compact Housing

Applications

• Discontinuous Measurement
• Safety and Process Control

Measurement

Operation Principle	3-Electrode Electrochemical
Nominal Range	0 - 1000 ppm
Maximum Overload	2000 ppm
Inboard Filter	-
Output Signal	100 ± 20 nA/ppm
Resolution (Electronics dependent)	< 0.5 ppm
T90 Response Time	< 35 s
Typical Baseline Range (pure air, 20°C)	-10 ppm to 10 ppm
Maximum Zero Shift (+20°C to +40°C)	see Graph
Repeatability	< 2 % of signal
Output Linearity	Linear
Gain (Only applies to 4-Electrode sensors)	-

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Electrical

Rec. Load Resistor	10 - 33 Ω
Bias (V_Sens-V_Ref)	not recommended
Conformity to RoHS directive	RoHS Compliance

Environmental

Relative Humidity Range	15 % to 90 % RH non-condensing
Temperature Range	-40 °C to 50 °C
Pressure Range	Atmospheric ± 10%
Pressure Coefficient	N.D.
Humidity Effect	None

Lifetime

Expected Operation Life	2 years in air
Expected Long Term Output Drift in air	< 2 % signal loss per month
Filter Life	
Storage Life	6 months in container
Rec. Storage Temperature	5°C - 20°C
Warranty Period	12 months from date of dispatch

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Compact-Size Outline Dimensions
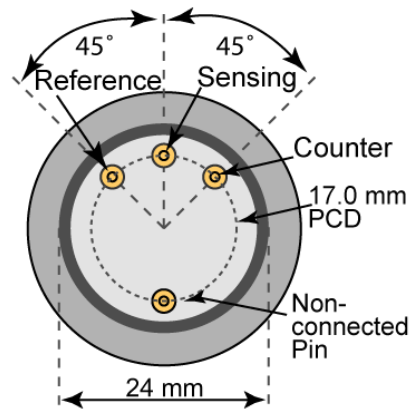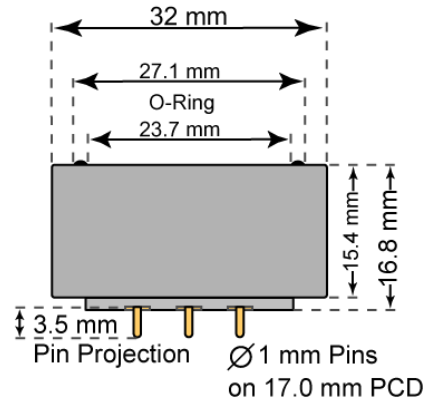
Mechanical

Weight	13 g
Orientation	Any
Housing material	Polycarbonate

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Cross Sensitivity Data

The table below does not claim to be complete. Interfering gases should not be used for calibration. Please contact Membrapor AG for further support regarding cross sensitivities.

| Interfering Gas	Concentration [ppm]	Reading [ppm]
CO	500	< 10
Methanol (CH_3OH)	300	0
NO	350	< 20
NO_2	50	~ -10
SO_2	500	~ 100
Methyl Mercaptan (MM, CH_3SH)	100	~ 50
Tert-Butyl Mercaptan (TBM, $(CH_3)_3CSH$)	100	~ 35

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Temperature dependence

The output of an electrochemical sensor varies with temperature. The graphs below show the temperature-dependent variation of baseline and sensitivity, respectively. The results shown here are raw data (batch average) without any post-processing steps. The sensitivity and baseline are referenced to the signal at 20°C (reference point).

Please note: It is highly recommended to acquire the temperature dependence curves with the whole instrument. The sampling system, the humidity, the electronics and the interaction between the electronics and the sensor have a significant impact on the temperature dependence of the final measurement reading.
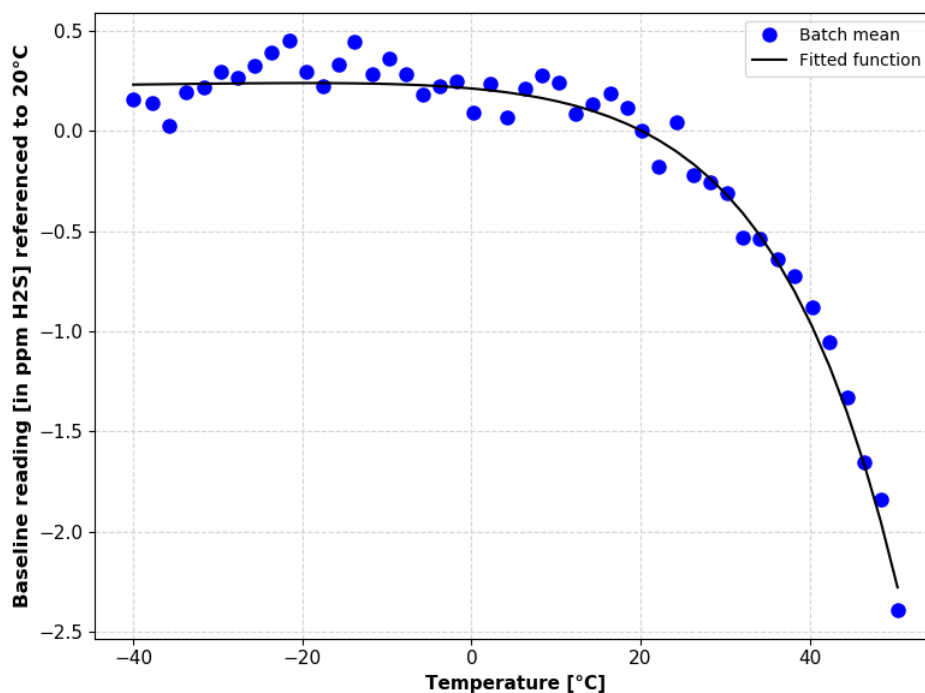
Baseline shifted with respect to reference point at 20°C.