

# SPECIFICATION SHEET FOR CI<sub>2</sub> SENSOR TYPE CI<sub>2</sub>/S-50

### PERFORMANCE CHARACTERISTICS

Nominal Range	0 – 50 ppm	
Maximum Overload	400 ppm	
Expected Operation Life	2 years in air	
Output Signal	- 450 ± 150 nA/ppm	
Resolution	0,2 ppm	
Temperature Range	- 20 ℃ to 45 ℃	
Pressure Range	Atmospheric ± 10%	
Pressure Coefficient	No data	
T <sub>80</sub> Response Time	< 90 sec	
Relative Humidity Range	15 % to 90 % R.H.	
	non-condensing	
Typical Baseline Range (pure	< 0,2 ppm	
air, 20℃)		
Maximum Zero Shift (+20℃	- 0,4 ppm	
to +40℃)		
Long Term Output Drift	< 2% signal loss/month	
Recommended Load Resistor	10 – 33 Ohm	
Bias Voltage	Not required	
Repeatability	< 2 % of signal	
Output Linearity	Linear	

#### **CROSS-SENSITIVITY DATA**

Interfering Gas	Concentration	Reading
СО	300 ppm	0 ppm
SO <sub>2</sub>	5 ppm	0 ppm
NO	35 ppm	0 ppm
H <sub>2</sub>	300 ppm	0 ppm
NO <sub>2</sub>	20 ppm	~ 20 ppm
H <sub>2</sub> S		ND

Performance data conditions: 20 ℃, 50% RH and 1013 mbar

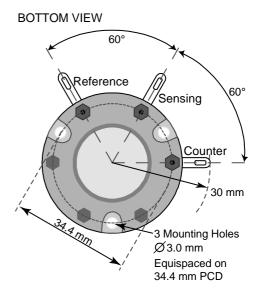
#### **APPLICATIONS**

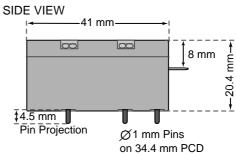
Continuous Air Quality Monitoring Safety and Environmental Control

#### PHYSICAL CHARACTERISTICS

Weight	~ 32 g
Position Sensitivity	None
Storage Life	Six months in
	container
Recommended Storage	5 ℃ – 20 ℃
Temperature	
Warranty Period	12 months from date
	of dispatch

#### **Standard-Size Outline Dimensions**





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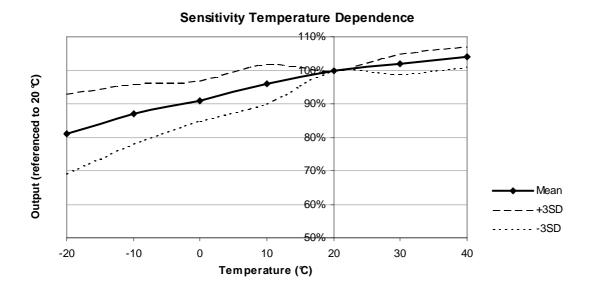
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#### **TEMPERATURE DEPENDENCE**

The output of an electrochemical sensor varies with temperature. The graphs below show the variation in output with temperature for this type of sensor. The results are shown in the graphs as a mean for a batch of sensors, along with confidence intervals corresponding to  $\pm 3$  times the standard deviation. The sensitivity dependence is expressed as a percentage of the signal at 20  $^{\circ}$ C.



The baseline is virtually not affected by changes in temperature.

The data contained in this document is for guidance only. Membrapor AG accepts no liability for any consequential losses, injury or damage resulting from the use of this document or the information contained within it. The data is given for guidance only. Customers should test under their own conditions, to ensure that the sensors are suitable for their own requirements.

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