MEMBRAPOR SPECIFICATION SHEET

O3/C-5

Ozone Gas Sensor in Compact Housing

MEASUREMENT

Operation Principle	3-Electrode Electrochemical
Nominal Range	0 – 5 ppm
Maximum Overload	50 ppm
Inboard Filter	–
Output Signal	-1500 ± 500 nA/ppm
Resolution (Electronics dependent)	< 0.02 ppm
T90 Response Time	< 60 sec
Typical Baseline Range (pure air, 20°C)	< 0.1 ppm
Maximum Zero Shift (+20°C to +40°C)	0.1 ppm
Repeatability	< 5 % of signal
Output Linearity	Linear
Gain	–

ELECTRICAL

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

ENVIRONMENTAL

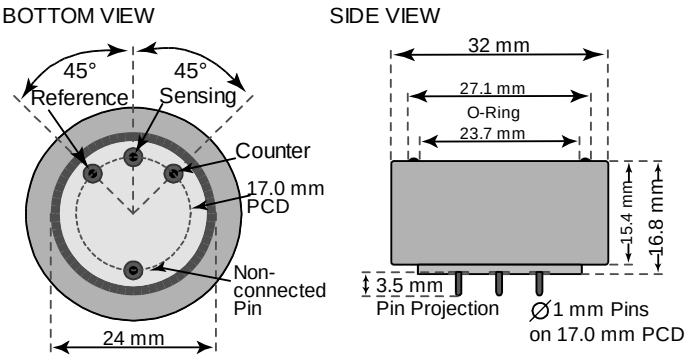
Relative Humidity Range	15 % to 90 % R.H. non-condensing
Temperature Range	-20 °C to 50 °C
Pressure Range	Atmospheric ± 10%
Pressure Coefficient	N.D.
Humidity Effect	none

LIFETIME

Expected Operation Life	2 years in air
Expected Long Term Output Drift in air	N.D.
Filter Life	–
Storage Life	6 months in container
Rec. Storage Temperature	5 °C – 20 °C
Warranty Period	12 months from date of dispatch

Performance data conditions: 20 °C, 50% RH, 1013 mbar

Compact-Size Outline Dimensions



± 0.10 mm

MECHANICAL

Weight	13 g
Position Sensitivity	None

APPLICATIONS

Continuous Air Quality Monitoring
Safety and Environmental Control

CROSS-SENSITIVITY DATA

The table below does not claim to be complete. Interfering gases should not be used for calibration.

Interfering Gas	Conc. ppm	Reading ppm
NO_2	5	5
SO_2	5	0
CO	100	0
H_2	100	0
C_2H_4	100	0
Cl_2	5	4
NO	50	0 [1]
CH_2O	7	0
HCl	20	0
NH_3	80	0
H_2S		

1) NO readily forms NO2 in the presence of O2

Phone: +41 43 311 72 00
Fax: +41 43 311 72 01
Email: info@membrapor.ch
www.membrapor.ch

MEMBRAPOR AG
Birkenweg 2
CH-8304 Wallisellen
Switzerland

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TEMPERATURE DEPENDENCE

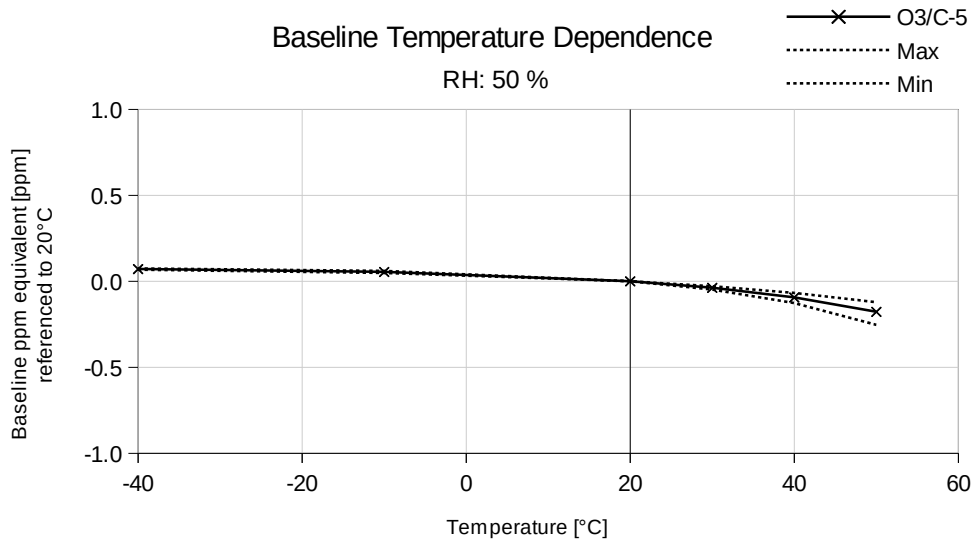

Figure 2: The shift in baseline shown in ppm referenced to 20 °C and a relative humidity of 50%.

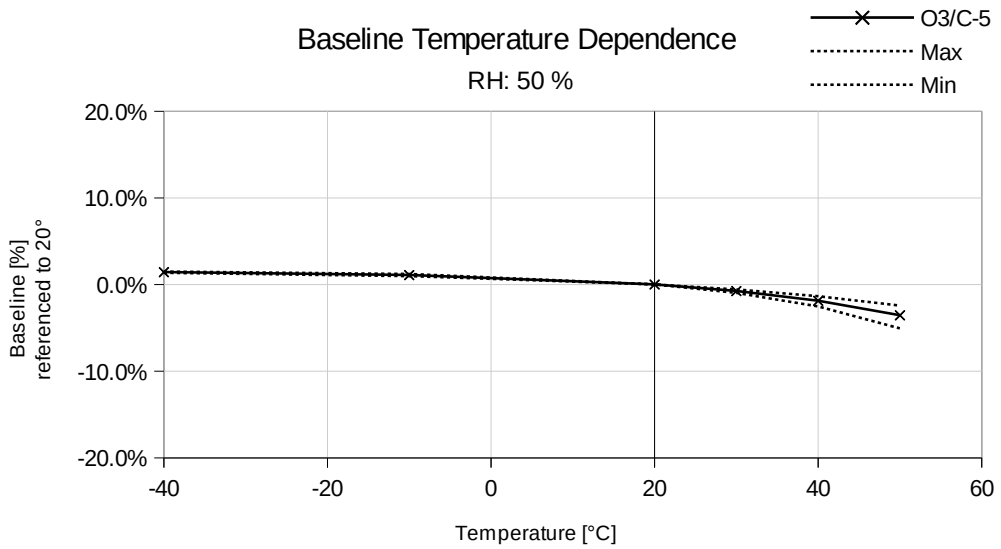

Figure 3: The shift in baseline expressed as percentage of the measurement range referenced to 20 °C and a R.H. of 50%.

Phone: +41 43 311 72 00
Fax: +41 43 311 72 01
Email: info@membrapor.ch
www.membrapor.ch

MEMBRAPOR AG
Birkenweg 2
CH-8304 Wallisellen
Switzerland