

MEMBRAPOR SPECIFICATION SHEET

ETO/C-20

Ethylene Oxide Gas Sensor in Compact Housing



MEASUREMENT

Operation Principle	3-Electrode Electrochemical
Nominal Range	0 – 20 ppm
Maximum Overload	100 ppm
Inboard Filter	–
Output Signal	2500 ± 600 nA/ppm
Resolution (Electronics dependent)	< 0.1 ppm
T90 Response Time	< 140 sec
Typical Baseline Range (pure air, 20°C)	0 ppm to 1 ppm
Maximum Zero Shift (+20°C to +40°C)	N.D.
Repeatability	< 2 % of signal
Output Linearity	Linear
Gain	–

ELECTRICAL

Rec. Load Resistor	10 Ohm
Bias (V_Sens-V_Ref)	+300 mV
Conformity to RoHS directive	RoHS Compliance

ENVIRONMENTAL

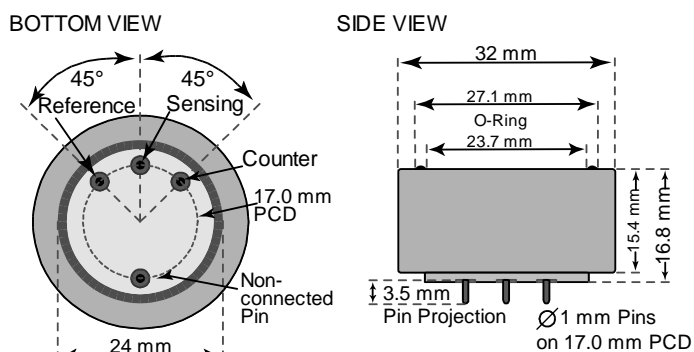
Relative Humidity Range	15 % to 90 % R.H. non-condensing
Temperature Range	-20 °C to 50 °C
Pressure Range	Atmospheric ± 10%
Pressure Coefficient	N.D.
Humidity Effect	none

LIFETIME

Expected Operation Life	2 years in air
Expected Long Term Output Drift in air	< 2 % 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

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

Compact-Size Outline Dimensions



± 0.10 mm

MECHANICAL

Weight	13 g
Position Sensitivity	None

APPLICATIONS

Sterilization Processes
Fruit Ripening

CROSS-SENSITIVITY DATA

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

Interfering Gas	Cross-Sens. %
CO	~ 40 %
Toluene	~ 20 %
Alc	~ 55 %

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TEMPERATURE DEPENDENCE

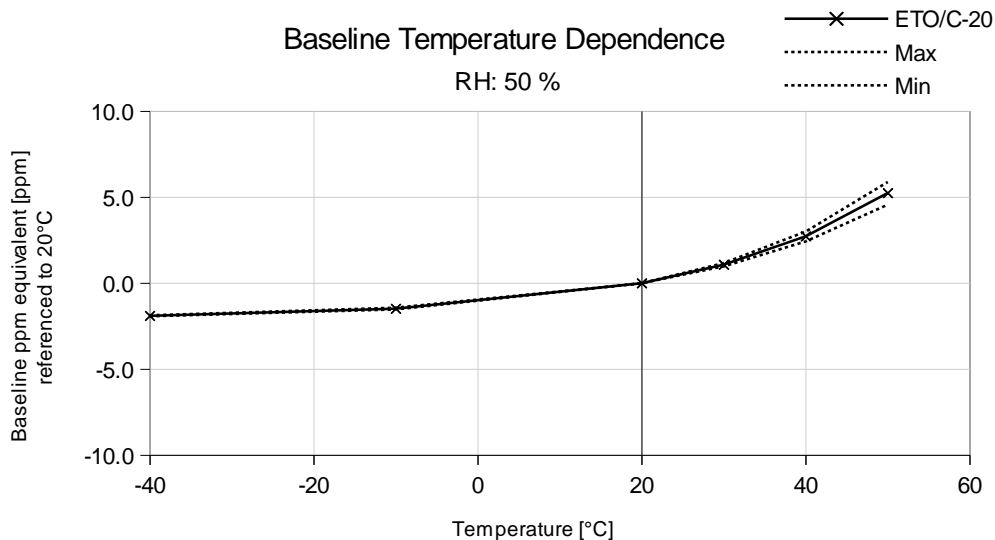


Figure 2: The shift in baseline shown in ppm referenced to 20 °C and a relative humidity of 50%.

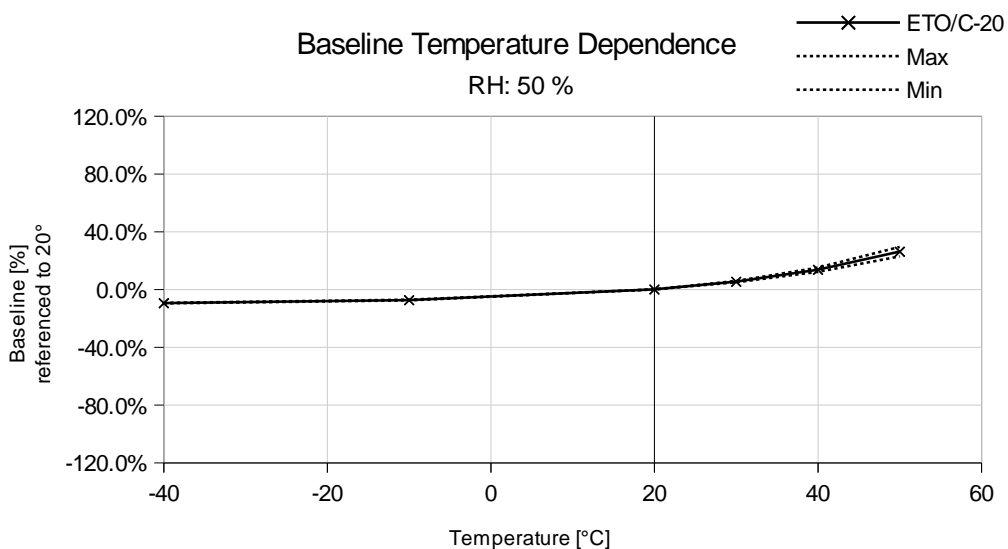


Figure 3: The shift in baseline expressed as percentage of the measurement range referenced to 20 °C and a R.H. of 50%.

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