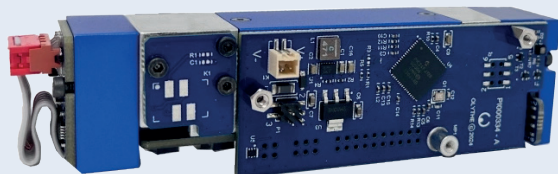


# CO000043 - OCISense Breath EtOH & N2O

Designed to meet the most stringent requirements for exhaled air analysis, the OCISense Breath sensor offers a versatile solution for accurate and reliable measurement of **Ethanol and Nitrous oxide levels in breath**.



## ADVANTAGES

- Thermally stabilized tank for sampling in wet gases
- Fast and consistent measures at all concentrations
- High selectivity with minimal interferences
- Direct flow measurement capability
- Long-term precision and reliability
- Low power consumption
- Compact design for embedded systems
- Ethanol specifications based on OIML R126 standard

## TECHNICAL SPECIFICATIONS

### GAS DETECTION : Ethanol (EtOH) & Nitrous oxide (N2O)

	EtOH	N2O
<b>Principle</b>	Non-Dispersive Infrared NDIR	Non-Dispersive Infrared NDIR
<b>Units of measurement</b>	ppm (or µg/L*)	ppm
<b>Measuring ranges</b>	0 - 1000 ppm (1827 µg/L)	0 - 1000 ppm
<b>Linearity error</b>	<1.5% FS	<1.5% FS
<b>Detection limit (3σ)</b>	<1% FS	<0.2% FS
<b>Cross sensitivity</b>	<25ppm @CO2 5% vol.	<280ppm @CO2 5% vol.
<b>Response time (T90)</b>	2.5s at a flow rate of 0.5 L/min	1.5s at a flow rate of 0.5 L/min

\* Conversion to µg/L performed at 34°C and 101325Pa

### SAMPLING CHARACTERISTICS

<b>Sampling period</b>	125 ms
<b>Flow rate</b>	0.1 to 1L/min
<b>Pressure range</b>	800 – 1200 hPa (mbar)

### ELECTRICAL CHARACTERISTICS

<b>Supply voltage</b>	3.4 to 5.5 V
<b>Input current</b>	1.5A max
<b>Communication interface</b>	RS232 (Standard or MODBUS)

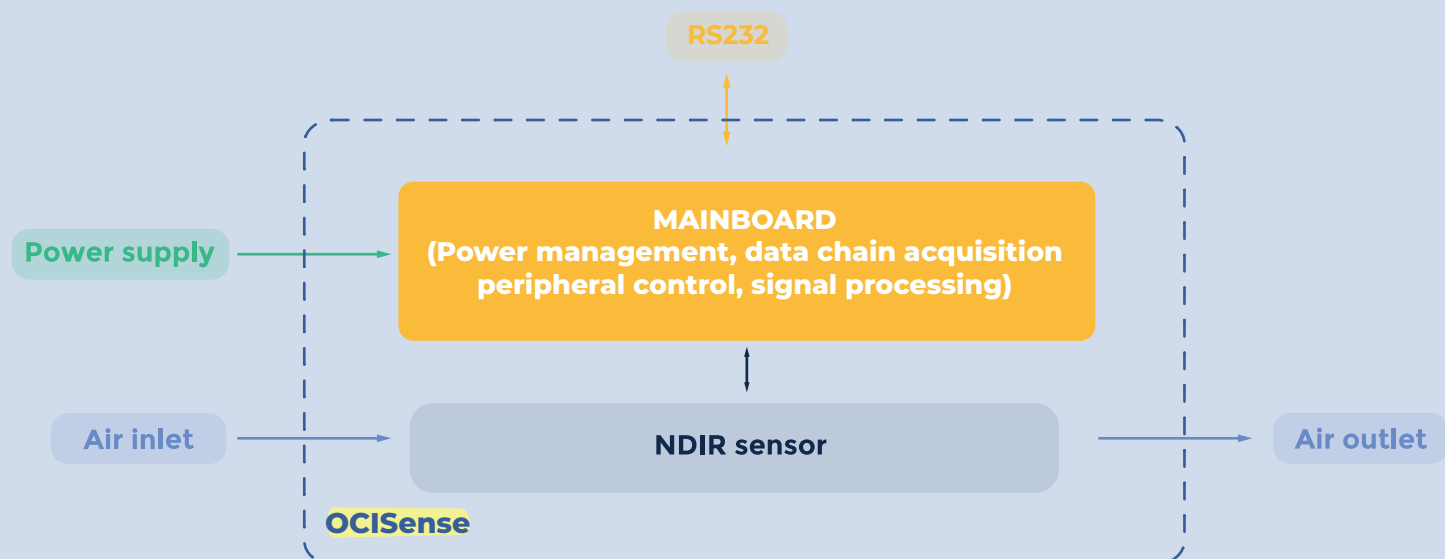
### ENVIRONMENTAL CONDITIONS

<b>Operating temperature</b>	0°C to 50°C
<b>Storage temperature</b>	-20°C to +60°C
<b>Starting time</b>	1min (5min at full specifications)
<b>Relative humidity</b>	0-95% RH (non-condensing)

### MECHANICAL CHARACTERISTICS

<b>Dimension</b>	Refer to drawing
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# SENSOR ARCHITECTURE



# MECHANICAL DRAWING

