



## KEY FEATURES

### PPM LEVEL

The specific and unique electrochemical sensors guarantee a precise and stable measurement of O<sub>2</sub> values in the PPM range, from 0 up to 1000ppm.

### TWO DIFFERENT SENSORS

You can combine the board with two different sensors: one with an optimal range of 0 to 10ppm and another covering 0 to 500ppm. Both sensors ensure overload up to 1000ppm.

### WIDE OUTPUT RANGE

The board can be supplied with various outputs, both digital and analogue including ModBus TCP-IP, RS485 and 4-20mA.

### COMPETITIVE PRICE

Our solution provides a cost-performance ratio that offers a significant advantage over other market alternatives.

## PRODUCT APPLICATIONS

- ☐ Nitrogen generator
- ☐ Fruit Storage
- ☐ Laser welding and cutting
- ☐ Semiconductor fab
- ☐ Pharmaceutical applications
- ☐ Aerospace
- ☐ 3D Metal printing

## DESCRIPTION

The O<sub>2</sub> PPM BOARD ensures precise and stable O<sub>2</sub> measurements in the PPM range, up to 1000ppm, thanks to unique electrochemical sensors. The board supports two sensor options: one for 0-10ppm and another for 0-500ppm, both with overload up to 1000ppm. It offers a wide range of output options, including ModBus TCP-IP, RS485, and 4-20mA analog connection, ensuring seamless integration. With its excellent cost-performance ratio, our solution stands out as a highly competitive alternative in the market.

## TECHNICAL SPECIFICATIONS

<b>Measurement range:</b>	Depending on the installed sensor (see tables below) 24bit acquisition delta-sigma ADCs with PGA
<b>Product features:</b>	<ul style="list-style-type: none"> <li>• USB for Firmware updates</li> <li>• 32Mbit Internal flash memory</li> <li>• Temperature and RH sensor (Accuracy <math>\Delta RH = \pm 1.0 \%RH</math>, <math>\Delta T = \pm 0.1 ^\circ C</math>)</li> <li>• 4 DIP-Switch for custom personalization</li> <li>• Button and LEDs for user interface</li> </ul>
<b>Interface:</b>	ModBus TCP/IP, RS485
<b>Power consumption:</b>	200 mA in operational mode
<b>Power supply:</b>	24V dc $\pm 10\%$
<b>Output</b>	4-20 mA
<b>Operating temperature:</b>	-20°C to +50°C
<b>Dimensions:</b>	110 x 75 x 20 mm
<b>Weight:</b>	50 g
<b>Certifications:</b>	CE, FCC, RoHS

### O<sub>2</sub>PPM BOARD Standard Range

<b>Measurement Range</b>	0-500ppm O <sub>2</sub>
<b>Max Overload</b>	1000ppm
<b>Purge time to &lt;1000ppmO<sub>2</sub></b>	<5 mins
<b>Purge time to &lt;100ppmO<sub>2</sub></b>	<60 mins
<b>Temperature Range Continuous</b>	-20°C to +50°C
<b>Expected Operating Life @1000ppm</b>	Over 18 Months
<b>Accuracy</b>	1 $\pm$ 0.5 PPM

### O<sub>2</sub>PPM BOARD Ultra Low Range

<b>Measurement Range</b>	0-10ppm O <sub>2</sub>
<b>Max Overload</b>	1000ppm
<b>Purge time to &lt;1000ppmO<sub>2</sub></b>	<5 mins
<b>Purge time to &lt;100ppmO<sub>2</sub></b>	<2 hours
<b>Purge time to &lt;10ppmO<sub>2</sub></b>	<6 hours
<b>Temperature Range Continuous</b>	-20°C to +50°C
<b>Expected Operating Life @1000ppm</b>	Over 18 Months
<b>Accuracy</b>	0.2 $\pm$ 0.1 PPM