

# Pre-calibrated AG-4 module

----Alphasense A series Oxygen Sensors Module

## Features

- ✓ High performance
- ✓ Leak FREE
- ✓ Digital outputs: UART / TTL / RS232
- ✓ pre-calibrated before leaving the factory



## Product Description

The AG-4 module uses Alphasense A-series electrochemical oxygen sensors for reliable, pre-calibrated oxygen concentration measurements. With a compact 20mm diameter, it fits well in portable gas detectors. Its high accuracy is essential for monitoring oxygen levels in safety, healthcare, air quality assessment, and industrial processes.

## Technical Specification

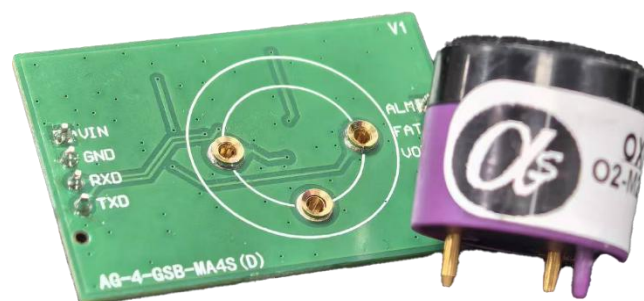
Item	Specification
Model Number	AG-4-GSB-MA4S(D)
Target Gases	Oxygen
Sensing Principle	Electrochemical
Detection Range	See corresponding sensor spec
Resolution	See corresponding sensor spec
Measurement Error	< ±5% FS
Operating Voltage	3.2 – 5.5V DC
Operating Current	≤ 500uA@5V
Output Signal	UART (+3.0V TTL)
Temperature Range	-20 - 55°C
Humidity Range	0% -90%RH
Pressure Range	1 ± 0.1 atm
Storage Temperature	10 - 20°C
Size	L*W*H=41mm*27mm*26mm
Expected Life	See corresponding sensor spec

## Corresponding Sensor

Alphasense next-generation oxygen sensors — the leak-proof O<sub>2</sub>-A2/A3, industrial safety-focused LFO<sub>2</sub>-A1 (0-30% O<sub>2</sub>), and ultra-precise LFO<sub>2</sub>-AH (0-2% O<sub>2</sub> with ppm-level detection)

Oxygen Sensor		
Sensor part number	Measuring range	Sensor spec
AG-4-O2-MO2A2(D)	0 ~25% vol O <sub>2</sub>	2-year life span <sup>1</sup> t90: < 13(s) <sup>2</sup>
AG-4-O2-MO2A3(D)	0 ~25% vol O <sub>2</sub>	3-year life span t90: < 13(s)
AG-4-O2-MLFA4(D)	0 ~30% vol O <sub>2</sub>	Lead-Free Operating life > 5 years Linearity < 0.1% deviation <sup>3</sup>
AG-4-O2-MLFA1(D)	0 ~30% vol O <sub>2</sub>	Lead-Free Operating life > 5 years <sup>4</sup> t90: < 10(s)
AG-4-O2-MLFAH(D)	0 ~2% vol O <sub>2</sub>	
AG-4-O2-MLFAL(D)	0 ~95% vol O <sub>2</sub>	

Alphasense oxygen sensors sensor delivers RoHS-compliant, lead-free durability, combining universal reliability with specialized performance for safety, process control, and critical low-concentration applications.



<sup>1</sup> Years until 80% original output of 20.9% O<sub>2</sub>

<sup>2</sup> Seconds from 20.9% to 0% O<sub>2</sub>

<sup>3</sup> At 10% O<sub>2</sub>

<sup>4</sup> Years until 85% original output of 20.9% O<sub>2</sub>