

# MIDAS S2 OXYGEN (O<sub>2</sub>)

## Sensor Cartridge Specifications

Selectable gases	Oxygen (O <sub>2</sub> )
Cartridge Part Number	MIDAS S2-L-O2S 3-year extended warranty
Sensor Technology	Electrochemical sensor
Measuring Range	O <sub>2</sub> 0 – 25%vol
Default Alarm 1	O <sub>2</sub> 23.5%vol
Default Alarm 2	O <sub>2</sub> 19.5%vol
LDL	O <sub>2</sub> 0.2%vol of 20.9 %vol
Adjustable alarm range	0 %vol ~ 20.7%vol, 21.1%vol ~ 25%vol
Unconfigurable alarm range	20.8 %vol ~ 21%vol
Resolution	O <sub>2</sub> 0.1%vol
Accuracy	≤ ± 0.2%vol
Response Time t62.5	Typical 2 seconds
Sensor Cartridge Life Expectancy (Expiration Period)	36 months under typical application conditions Extendable for 1 year through calibration after 36 months
Operating Temperature	0°C to +40°C (32°F to 104°F)
Effect of Temperature Sensitivity	≤ ± 0.3%vol of measured value at 20°C
Operating Humidity	15 to 90% non-condensing
Operating Pressure	80 – 120kPa
Calibration Gas	O <sub>2</sub> 20.9%vol
Warm Up Time	< 30 minutes
Storage Temperature	+5°C to +25°C (+41°F to +77°F)

The sensor data listed is based on the test data with O<sub>2</sub> gas under normal Lab test conditions (20-25 C, 0 - 60%RH, normal atmosphere pressure); observed performance may vary based on the actual monitoring system and the sampling conditions employed.



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### CROSS SENSITIVITIES

Each Midas S2 sensor is potentially cross sensitive to other gases and this may cause a gas reading when exposed to other gases than those originally designated. The table below presents typical readings that will be observed when a new sensor cartridge is exposed to the cross sensitive gas (or a mixture of gases containing the cross sensitive species).

Gas Measured	Chemical Formula	Concentration Applied(ppm)	Reading (%vol O <sub>2</sub> )
Carbon Dioxide	CO <sub>2</sub>	300	20.9
Hydrogen	H <sub>2</sub>	100%vol	0 (Negative Drift)
Methane	CH <sub>4</sub>	100%vol	0
Nitrogen	NO <sub>2</sub>	25	20.9

Interference differs from cartridge to cartridge and over cell life. It is not recommended to calibrate with cross sensitivity factors. The target gas should be used for calibration.

**For more information**

[automation.honeywell.com](https://automation.honeywell.com)

**Honeywell Process  
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