

## Midas<sup>®</sup> SENSOR CARTRIDGE SPECIFICATIONS

### Oxygen (O<sub>2</sub>) MIDAS-L-O2S



Gas Measured	Oxygen (O <sub>2</sub> )
<b>Cartridge Part Number</b>	MIDAS-L-O2S 3 year warranty
<b>Sensor Technology</b>	3 electrode electrochemical cell
<b>Measuring Range (ppm)</b>	O <sub>2</sub> 0 – 25% v/v
<b>Minimum Alarm 1 Set Point</b>	5% v/v
<b>Repeatability</b>	< ± 0.1% v/v
<b>Linearity</b>	< ± 0.2% v/v
<b>Response Time t<sub>92.5</sub></b>	< 10 seconds
<b>Sensor Cartridge Life Expectancy</b>	≥ 36 months under typical application conditions
<b>Operating Temperature</b>	0°C to +40°C (32°F to 104°F)
<b>Effect of Temperature</b>	
Zero	
Sensitivity	< ± 0.3% of measured value / °C
<b>Operating Humidity (continuous)</b>	15 – 90% rH
<b>Effect of Humidity</b>	
Zero	Follows actual concentration of O <sub>2</sub> present
Sensitivity	(eg. 20.9% v/v @ 30% rH, 20.04% v/v @ 99% rH / 40°C)
<b>Operating Pressure</b>	70 – 110kPa
<b>Effect of Position</b>	No effect in typical application
<b>Long Term Drift</b>	
Zero	No drift
Sensitivity	<5% signal loss over operating life
<b>Calibration Gas</b>	Oxygen (O <sub>2</sub> )
<b>Challenge Gas (Bump Test)</b>	Air mixture
<b>Warm Up Time</b>	< 30 minutes
<b>Storage Temperature</b>	+5°C to +25°C (+41°F to +77°F)

#### Cross Sensitivities

Each Midas<sup>®</sup> 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 / Vapor	Chemical Formula	Concentration applied (ppm)	Reading (% O <sub>2</sub> )
Carbon Dioxide	CO <sub>2</sub>		Enhance O <sub>2</sub> reading by 0.3% / % CO <sub>2</sub>
Hydrogen	H <sub>2</sub>	100% v/v	-9
Methane	CH <sub>4</sub>	100% v/v	No response
Nitrogen Dioxide	NO <sub>2</sub>	25ppm in air	No response