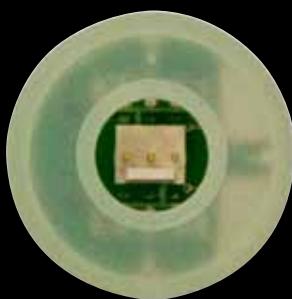




# SC-I22D Oxygen Sensor

## Leading the industry in performance and reliability



<b>ISC part number</b>	SC-I22D
<b>Output</b>	9 – 13 mV
<b>Output connector</b>	3 pin Molex
<b>Input</b>	Threaded M16 x 1mm
<b>Input O ring</b>	Yes
<b>Range</b>	0 – 100% oxygen
<b>Pressure range</b>	600 to 2500 mbar
<b>Repeatability</b>	< 1% volume oxygen at constant temperature and pressure
<b>Linearity error</b>	0.1 to 1.0 bar < 3% relative
<b>Warm up time</b>	0.1 to 2.5 bar < 5% relative (at $ppO_2 > 1.0$ bar after 10 min equilibration time)
<b>Zero offset voltage</b>	< 30 minutes after sensor installed
<b>Cross interference</b>	< 0.5% oxygen reading in 100% nitrogen @ 25 °C after 36 seconds
<b>Response time</b>	< 0.5% vol. $O_2$ response to 5% $CO_2$ balance $N_2$
<b>Operating humidity</b>	< 5 s for 90% of final value
<b>Influence of humidity</b>	0 – 99% R.H. (non-condensing)
<b>Influence of mechanical shock</b>	- 0.03% relative per % R.H. at 25 °C
<b>Operating temperature range</b>	< 1% after fall from 1m
<b>Storage temperature</b>	0 – 50 °C
<b>Recommended storage temperature</b>	-20 to +50 °C
<b>Temperature compensation</b>	+5 to +15 °C
<b>Temperature compensation error</b>	Integrated NTC network
<b>Nominal sensor life</b>	0 °C to 50 °C, 5% relative error
<b>Long term output drift</b>	> 500,000 % oxygen hours
<b>Shelf life</b>	< 1% vol oxygen per month, typically < -15% over sensor lifetime
<b>Load required</b>	24 months
<b>Input - hydrophobic membrane</b>	$\geq 10$ K Ohms
<b>Conformal coating on PCB</b>	Yes
<b>Pressure equalization - PCB</b>	Yes
<b>Weight (approximate)</b>	Yes
<b>Flow diverter</b>	25 g
<b>Packaging</b>	No
<b>Warranty period</b>	Gas barrier bag
	12 months from date of sales invoice

All specifications are applicable at standard conditions: 1013 mbar, 25 °C dry ambient air.

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