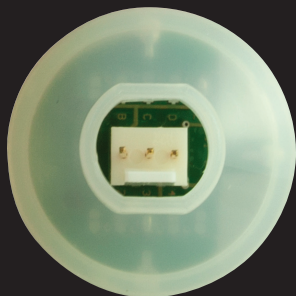




# SC-I22D Oxygen Sensor

Leading the industry in  
performance and reliability



ISC part number	SC-I22D
Output	9 – 13 mV
Output connector	3 pin Molex
Input	Threaded M16 x 1mm
Input O ring	Yes
Range	0 – 100% oxygen
Pressure range	600 to 2500 mbar
Linearity error	0.1 to 1.0 bar < 3% relative 0.1 to 2.5 bar < 5% relative
Warm up time	< 30 minutes after sensor installed
Zero offset voltage	< 0.5% oxygen reading in 100% nitrogen @ 25 °C after 36 seconds
Cross interference	< 0.5% vol. O <sub>2</sub> response to 5% CO <sub>2</sub> balance N <sub>2</sub>
Response time	< 5 s for 90% of final value
Operating humidity	0 – 99% R.H. (non-condensing)
Influence of humidity	-0.03% relative per % R.H. at 25 °C
Influence of mechanical shock	< 1% after fall from 1m
Operating temperature range	0 – 40 °C
Storage temperature	-20 to +50 °C
Recommended storage temperature	+5 to +15 °C
Temperature compensation	Integrated NTC network
Temperature compensation error	±5% of full scale over the operating temperature range. Worst case tracking error (within first hour after maximum temperature step) is ±7.5% of full scale, (gas sample must be brought to ambient temperature). Percent readout is only within ±1% at constant pressure (e.g. a 10% increase in pressure will result in a 10% increase in reading).
Nominal sensor life	≥ 33 months in air at 25 °C and 50% R.H.
Long term output drift	< 1% vol oxygen per month, typically < -15% over sensor lifetime
Shelf life	24 months
Load required	≥ 10 K Ohms
Input - hydrophobic membrane	Yes
Conformal coating on PCB	Yes
Pressure equalization - PCB	Yes
Weight (approximate)	28 g
Packaging	Gas barrier bag
Warranty period	12 months

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

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