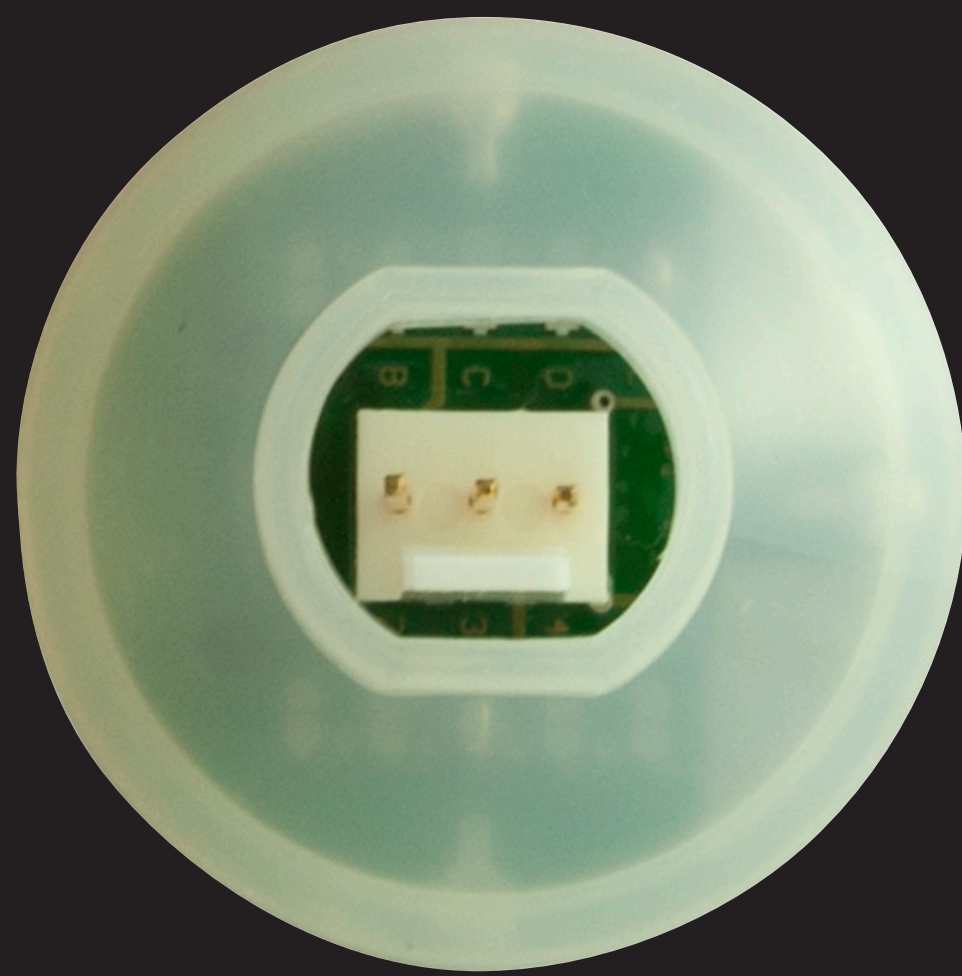




SC-I22D Oxygen Sensor

Leading the industry in
performance and reliability



ISC part number

Output

Output connector

Input

Input O ring

Range

Pressure range

Linearity error

Warm up time

Zero offset voltage

Cross interference

Response time

Operating humidity

Influence of humidity

Influence of mechanical shock

Operating temperature range

Storage temperature

Recommended storage temperature

Temperature compensation

Temperature compensation error

SC-I22D

9 – 13 mV

3 pin Molex

Threaded M16 x 1mm

Yes

0 – 100% oxygen

600 to 2500 mbar

0.1 to 1.0 bar < 3% relative

0.1 to 2.5 bar < 5% relative

< 30 minutes after sensor installed

< 0.5% oxygen reading in 100% nitrogen @ 25 °C after 36 seconds

<0.5% vol. O₂ response to 5% CO₂ balance N₂

< 5 s for 90% of final value

0 – 99% R.H. (non-condensing)

-0.03% relative per % R.H. at 25 °C

< 1% after fall from 1m

0 – 40 °C

-20 to +50 °C

+5 to +15 °C

Integrated NTC network

±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.