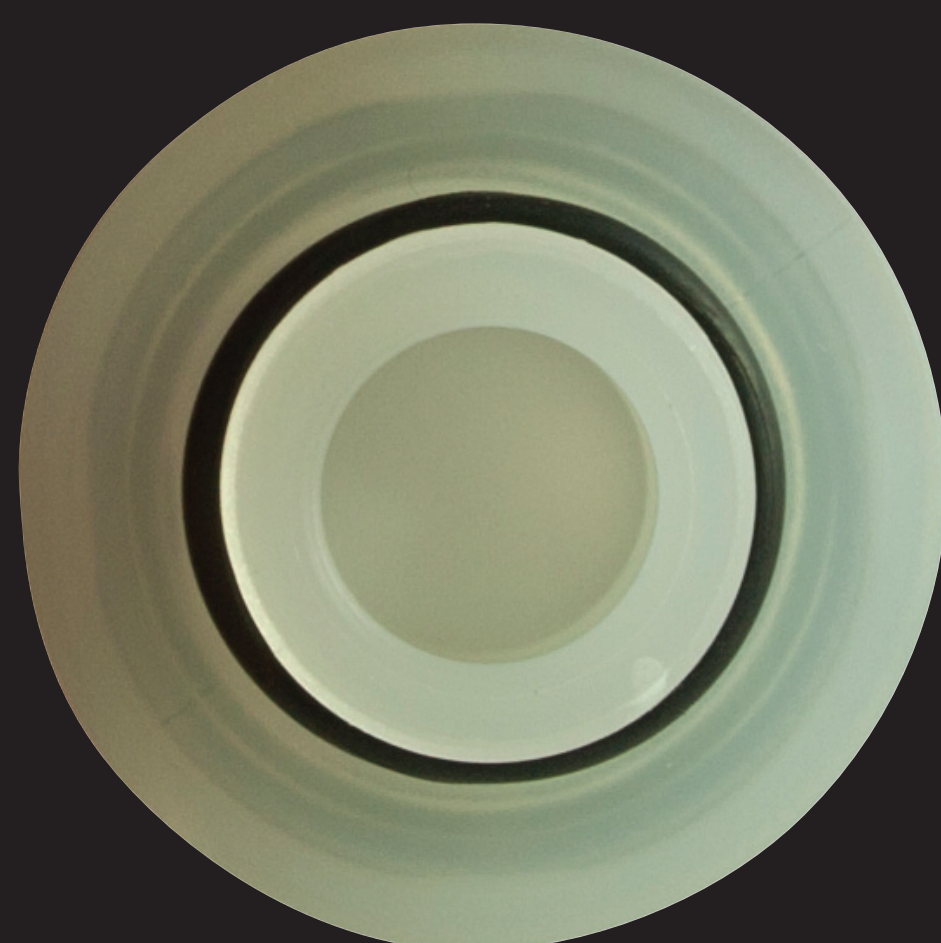
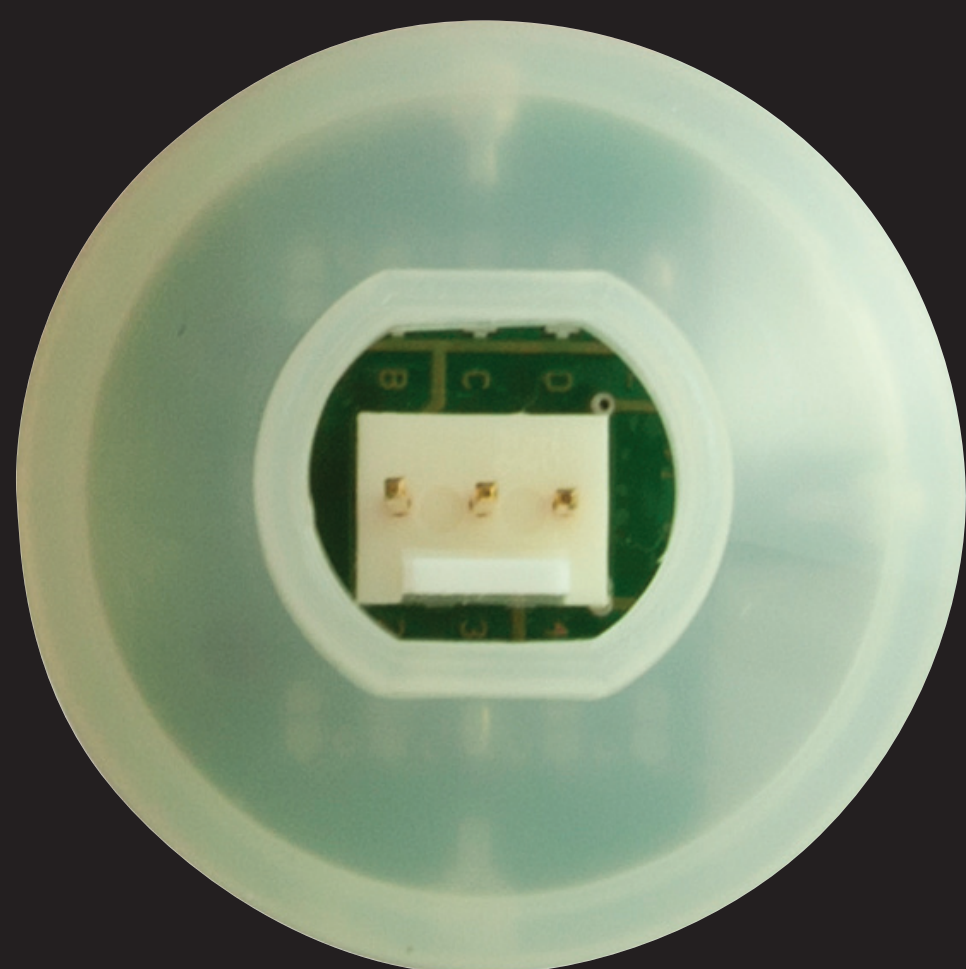




SC-I22D Oxygen Sensor

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. O₂ response to 5% CO₂ balance N₂

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.