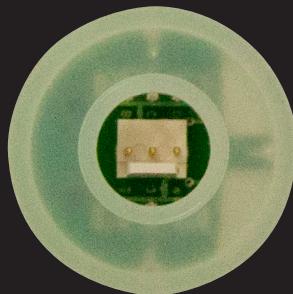




SC-I22D Oxygen Sensor

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

Repeatability

< 1% volume oxygen at constant temperature and pressure

Linearity error

0.1 to 1.0 bar < 3% relative

0.1 to 2.5 bar < 5% relative

(at $ppO_2 > 1.0$ bar after 10 min equilibration time)

< 30 minutes after sensor installed

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

< 0.5% vol. O_2 response to 5% CO_2 balance N_2

< 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 – 50 °C

-20 to +50 °C

+5 to +15 °C

Integrated NTC network

0 °C to 50 °C, 5% relative error

> 500,000 % oxygen hours

< 1% vol oxygen per month, typically < -15% over sensor lifetime

24 months

≥ 10 K Ohms

No

Yes

Yes

Yes

25 g

No

Gas barrier bag

12 months from date of sales invoice

Warm up time

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

Cross interference< 0.5% vol. O_2 response to 5% CO_2 balance N_2 **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 – 50 °C

Storage temperature

-20 to +50 °C

Recommended storage temperature

+5 to +15 °C

Temperature compensation

Integrated NTC network

Temperature compensation error

0 °C to 50 °C, 5% relative error

Nominal sensor life

> 500,000 % oxygen hours

Long term output drift

< 1% vol oxygen per month, typically < -15% over sensor lifetime

Shelf life

24 months

Load required

≥ 10 K Ohms

Input - membrane protection grille

No

Input - hydrophobic membrane

Yes

Conformal coating on PCB

Yes

Pressure equalization - PCB

Yes

Weight (approximate)

25 g

Flow diverter

No

Packaging

Gas barrier bag

Warranty period

12 months from date of sales invoice

All specifications are applicable at standard conditions: 1013 mbar, 25 °C dry ambient air.**Innerspace Systems Corporation** 1711 Midway Court, Centralia, WA 98531, USA

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