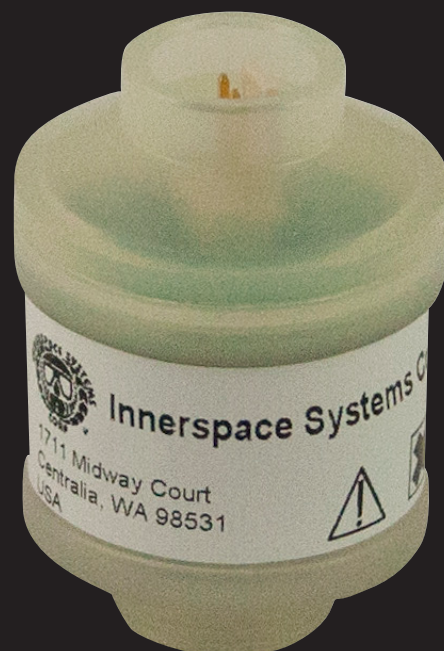
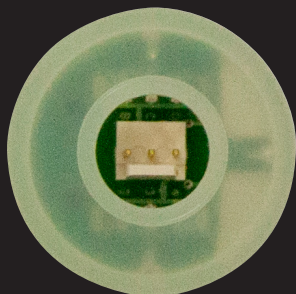




# SC-I22D Oxygen Sensor

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)           |
| 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. $O_2$ 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                   | $\geq 10$ K Ohms                                                 |
| 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.

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