

## Model 42i Series Oxygen Sensor Module

A Paramagnetic Sensor for O<sub>2</sub> Measurement and Correction



### Key Features

- Paramagnetic Technology
- Adjustable Ranges
- Real Time correction of NO<sub>x</sub> Readings
- User Selectable O<sub>2</sub> correction concentrations

Thermo Fisher Scientific now offers an exciting option to add to its Model 42i Series of Chemiluminiscent Gas Analyzers. The Paramagnetic Oxygen Sensor gives the source measurement of NO<sub>x</sub> extended capabilities. The ability to read and report the concentration of Oxygen in the sample stream up to 100%.

Along with the ability to measure O<sub>2</sub>, the flexibility of the iSeries

platform allows reporting through Analog Voltage outputs, c-20ma current outputs, via serial RS232 or RE 485 ports or via ethernet.

Additionally, the program allows the user to correct the NO<sub>x</sub> readings for the amount of Oxygen in the sample. Selectable O<sub>2</sub> concentrations can be used as the correction factor. (ie: NO<sub>x</sub> corrected to 6% O<sub>2</sub> or any other percentage)

## Comprehensive Service Solutions

To maintain optimal product performance, you need immediate access to experts worldwide, as well as priority status when your air quality equipment needs repair or replacement. We offer comprehensive, flexible support solutions for all phases of the product lifecycle. Through predictable, fixed-cost pricing, our services help protect the return on investment and total cost of ownership of your Thermo Scientific air quality products.

## Product Specifications

<b>Measurement Range</b>	User Selectable to 100% O <sub>2</sub>
<b>Repeatability</b>	+/- 0.1% O <sub>2</sub>
<b>Zero Drift (24 hour)</b>	+/- 0.1% O <sub>2</sub>
<b>Response Time</b>	<2.5 Seconds to 90% FS
<b>Linearity</b>	+/- 0.1% O <sub>2</sub>
<b>Operating Temperature</b>	5 - 40° C
<b>Temperature Coefficient</b>	+/- 0.05% O <sub>2</sub> / Degree C
<b>Outputs (Std.)</b>	Selectable Voltage, RS232/RS485, TCP/IP, 10 Status Relays, and Power Fail Indication. 0-20 or 4-20 mA Isolated Current Output
<b>Inputs (Std.)</b>	16 Digital Inputs, 8 0-10vdc Analog Inputs

## Ordering Information

### Model 42i NO-NO<sub>2</sub>-NO<sub>x</sub> Analyzers

Choose from the following configurations/options to customize your own Model 42i.

#### Model 42i HL

Voltage options:

- A = 120 Vac 50/60 Hz (standard)
- B = 220 Vac 50/60 Hz
- J = 100 Vac 50/60 Hz

Internal zero / span: and/or Oxygen Sensor:

- N = No zero / span assembly (standard)
- Z = Internal zero span assembly
- S = Oxygen Sensor with NO Zero/Span
- R = Oxygen Sensor with Zero/Span

Converter options:

- S = Stainless steel (standard)

Sample handling:

- S = Standard plumbing (standard)
- A = Ammonia Scrubber
- B = Bypass flow
- C = Ammonia Scrubber with Bypass Flow

Ozone handling:

- D = Drierite scrubber (standard)
- P = Permeation dryer

Optional I/O:

- A = None (standard)
- C = 0-20, 4-20mA current output - 6 channel,  
0-10v analog input - 8 channel

Mounting Hardware:

- A = Bench mounting (standard)
- B = Ears & handles, EIA
- C = Ears & handles, retrofit

#### Model 42i LS

Voltage options:

- A = 120 Vac 50/60 Hz (standard)
- B = 220 Vac 50/60 Hz
- J = 100 Vac 50/60 Hz

Internal zero / span: and/or Oxygen Sensor:

- N = No zero / span assembly (standard)
- Z = Internal zero span assembly
- S = Oxygen Sensor with NO Zero/Span
- R = Oxygen Sensor with Zero/Span

Converter options:

- M = Molybdenum
- S = Stainless steel (standard)

Sample handling:

- S = Standard plumbing (standard)

Ozone handling:

- D = Drierite scrubber (standard)
- P = Permeation dryer

Optional I/O:

- A = None (standard)
- C = 0-20, 4-20mA current output - 6 channel,  
0-10v analog input - 8 channel

Mounting Hardware:

- A = Bench mounting (standard)
- B = Ears & handles, EIA
- C = Ears & handles, retrofit

**Your Order Code: 42i HL**

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**Your Order Code: 42i LS**

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