

Model 42i Series Oxygen Sensor Module

A Paramagnetic Sensor for O2 Measurement and Correction



Key Features

- Paramagnetic Technology
- Adjustable Ranges
- Real Time correction of NOx Readings
- User Selectable O2 correction concentrations

Thermo Fisher Scientific now offers an exciting option to add to its Model 42i Series of Chemiluminescent Gas Analyzers. The Paramagnetic Oxygen Sensor gives the source measurement of NOx 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 O2, 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 NOx readings for the amount of Oxygen in the sample. Selectable O2 concentrations can be used as the correction factor. (ie: NOx corrected to 6% O2 or any other percentage)

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

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

Ordering Information

Model 42i NO-NO₂-NO_x 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

Your Order Code: 42i LS



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