

# Thermo Scientific NO, NO<sub>2</sub>, NO<sub>x</sub> Analyzer with Oxygen Sensor, Model 42i Series

Chemiluminescent gas analyzer with paramagnetic Sensor technology



## Key Features

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

The Thermo Scientific NO, NO<sub>2</sub>, NO<sub>x</sub> Analyzer with Oxygen Sensor, Model 42i Series 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)

Additionally, programming allows the user to correct the NO, NO<sub>2</sub>, NO<sub>x</sub> reading for the amount of oxygen in the sample. Selectable O<sub>2</sub> concentrations can be used as the correction factor. (i.e. NO, NO<sub>2</sub>, NO<sub>x</sub> corrected to 6% O<sub>2</sub> or any other percentage.) Developed on the renowned iSeries platform the Model 42i with Oxygen offers limited maintenance and exceptional ease of use.

iSeries features also include:

- Rack mountability
- Ethernet port & connectivity options
- Flash memory for increased data storage
- Easily programmable short-cut keys
- Large interface screen

# Product Specifications

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 life cycle. 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.

## NO, NO<sub>2</sub> NO<sub>x</sub> Analyzer with Oxygen Sensor Module, Model 42i Series

<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

### NO-NO<sub>2</sub>-NO<sub>x</sub> Analyzer with Oxygen Sensor Module, Model 42i Series

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

#### Model 42i HL

##### 1. Voltage options:

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

##### 2. 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

##### 3. Converter options:

S = Stainless steel (standard)

##### 4. Sample handling:

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

##### 5. Ozone handling:

D = Drierite scrubber (standard)  
P = Permeation dryer

##### 6. Optional I/O:

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

##### 7. Mounting Hardware:

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

Your Order Code: 42i HL

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#### Model 42i LS

##### 1. Voltage options:

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

##### 2. 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

##### 3. Converter options:

M = Molybdenum  
S = Stainless steel (standard)

##### 4. Sample handling:

S = Standard plumbing (standard)

##### 5. Ozone handling:

D = Drierite scrubber (standard)  
P = Permeation dryer

##### 6. Optional I/O:

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

##### 7. Mounting Hardware:

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

Your Order Code: 42i LS

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This product is manufactured in a plant whose quality management system is ISO 9001 certified.

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