# Thermo Scientific Model 42*i*Series Analyzers with Oxygen Sensor Module

Chemiluminsescent gas analyzer with paramagnetic oxygen sensor technology

The Thermo Scientific<sup>TM</sup> Model 42i Series Analyzers with Oxygen Sensor Module gives the source measurement of  $NO_x$  extended capabilities to read and report the concentration of oxygen in the sample stream up to 100%.

- Paramagnetic technology
- Adjustable ranges
- Real-time correction of NO<sub>2</sub> readings
- User selectable 0<sub>2</sub> correction concentrations



Along with the ability to measure  $\mathrm{O}_2$ , the flexibility of the *i*Series instrument platform allows reporting through analog voltage outputs, 4-20mA current outputs, via serial RS232 or RS485 ports or via Ethernet.

Additionally, programming allows the user to correct the NO,  $\mathrm{NO_2}$ ,  $\mathrm{NO_x}$  reading for the amount of oxygen in the sample.

Selectable  $\rm O_2$  concentrations can be used as the correction factor. (i.e. NO, NO $_2$ , NO $_x$  corrected to 6% O $_2$  or any other percentage.)

Developed on the renowned *i*Series instrument platform, the Thermo Scientific Model 42*i* analyzers with Oxygen Sensor Module offers limited maintenance and exceptional ease of use.

iSeries features also include:

- Ethernet port
- Flash memory for increased data storage
- Ethernet connectivity for remote access
- Off-site measurement downloads
- Easily programmable short-cut keys
- A large interface screen





#### Thermo Scientific Model 42i Series Analyzers with Oxygen Sensor Module

Measurement Range	User Selectable to 100% O <sub>2</sub>
Repeatability	+/- 0.1% O <sub>2</sub>
Zero Drift (24 hour)	+/- 0.1% O <sub>2</sub>
Response Time	<2.5 seconds to 90% FS
Linearity	+/- 0.1% O <sub>2</sub>
Operating Temperature	5 - 40° C
Temperature Coefficient	+/- 005% O <sub>2</sub> / 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 0-10 Vdc analog inputs

#### **Ordering Information**

#### Model 42i Series Analyzers with Oxygen Sensor Module

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

8 channel

#### Model 42i-HL analyzer

#### 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 -

# 7. Mounting Hardware:

A = Bench mounting (standard)

B = Ears & handles, EIA

C = Ears & handles, retrofit

#### **Your Order Code:**

42i-HL - \_ \_ \_ \_

# Model 42i-LS analyzer

#### 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 - \_ \_ \_ \_

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 products.

#### For more information, visit our website at thermoscientific.com/air

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

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