# Thermo Scientific Model 42*i*-HL High Level NO-NO<sub>2</sub>-NO<sub>x</sub>

Chemiluminsescent gas analyzer for the measurement of nitric oxide, nitrogen dioxide and nitrogen oxide

The Thermo Scientific<sup>TM</sup> Model 42*i*-HL High Level NO, NO<sub>2</sub>, NO<sub>x</sub> Analyzer utilizes chemiluminescence technology to measure the amount of nitrogen oxides in the air from 10 ppm up to 5000 ppm. The Model 42*i*-HL analyzer is a single chamber, single photomultiplier tube design that cycles between the NO and NO<sub>x</sub> modes.

- Ethernet connectivity for efficient remote access
- Enhanced user interface with one button programming and large display screen
- Flash memory for increased data storage and user downloadable software
- Enhanced electronics design optimizes product commonality
- Improved layout for easier accessibility to components



The Thermo Scientific Model 42i-HL analyzer has independent outputs for NO,  $\mathrm{NO}_2$ , and  $\mathrm{NO}_x$  and each can be calibrated separately. Dual range and auto range are standard features as well. If required, the instrument can be operated continuously in either the NO or  $\mathrm{NO}_x$  modes allowing for response times of less than 5 seconds.

Temperature and pressure correction are standard offerings of the Model 42*i*-HL analyzer. User-settable alarm levels for concentration and for a wide variety of internal diagnostics are available from an easy to follow menu structure.

This state-of-the-art gas analyzer offers features such as an Ethernet port as well as flash memory for increased data storage.

Ethernet connectivity provides efficient remote access, allowing the user to download measurement information directly from the instrument without having to be on-site.

Easily programmable short cut keys allow you to jump directly to frequently accessed functions, menus or screens. The larger interface screen can display up to five lines of measurement information.





# Thermo Scientific Model 42i-HL NO-NO, -NO, Analyzer

Preset Ranges	0-10, 20, 50, 100, 200, 500, 1000, 2000, 5000 ppm
Noise	25 ppb
Lower Detectable Limit	50 ppb
Zero Drift	(24 hour) 50 ppb
Span Drift	(24 hour) +/-1% full scale
Rise Fall Times	(0-90%) 2.5 seconds NO Mode; 5.0 seconds NOx Mode
Linearity	+/-1% full scale
Sample Flow Rate	25 cc/min. and bypass flow rate 250 to 1100 cc/min.
Vacuum	28.5" Hg
Power Requirements	100 VAC, 115 VAC, 220-240 VAC +/-10% @ 500W
Temperature	Performance specifications based on operation within 15°-35° C range. Instrument may be safely operated over the range of 0°-45° C
Size and Weight	16.75"(W) x 8.62"(H) x 23"(D) [42.5 cm (W) x 21.9 cm (H) x 58.4 cm (D)] 70 lbs. (31.75 kg) including pump
Outputs	Selectable Voltage, RS232/RS485, TCP/IP, 10 Status Relays, and Power Fail Indication (standard). 0-20 or 4-20 mA Isolated Current Outout (optional)
Inputs	16 Digital Inputs (standard), 8 0-10 Vdc Analog Inputs (optional)

#### **Ordering Information**

# Model 42i-HL High Level NO-NO,-NO, Analyzer

Choose from the following configurations/options to customize your own Model 42*i*-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 - 8 channel

#### 7. Mounting Hardware:

A = Bench mounting (standard)

B = Ears & handles, EIA

C = Ears & handles, retrofit

## Other Options:

- · Teflon particulate filter
- · Ozone particulate filter
- · Rack mounts
- Rear extender

Your Order Code: Model 42i-HL - \_\_ \_ \_ \_ \_ \_ \_ \_ \_

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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