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PRODUCT SPECIFICATIONS

# Thermo Scientific Model 42i-LS

# Low source NO-NO<sub>2</sub>-NO<sub>x</sub> chemiluminsescent gas analyzer

The Thermo Scientific™ Model 42*i*-LS NO-NO<sub>2</sub>-NO<sub>x</sub> Analyzer utilizes chemiluminescence technology to measure the amount of nitrogen oxides in the air from sub-ppb levels up to 100ppm.

#### **Features**

- 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

#### Introduction

The Thermo Scientific Model 42*i*-LS Analyzer is a single chamber, single photomultiplier tube design that cycles between the NO and NO<sub>x</sub> modes.

The 42*i*-LS Analyzer has independent outputs for NO, NO<sub>2</sub>, and NO<sub>x</sub>, and each can be calibrated separately. Dual range and auto range are standards features as well.



If required, the instrument can be operated continuously in either the NO or  ${\rm NO_x}$  modes allowing for response times of less than five seconds.

Temperature and pressure correction are standard features. 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 42*i*-LS Low Source NO-NO<sub>2</sub>-NO<sub>X</sub> Analyzer Thermo Fisher

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#### Thermo Scientific Model 42i-LS Low Source NO-NO<sub>2</sub>-NO<sub>X</sub> Analyzer

Specifications					
Measurement Ranges	0-0.5ppm to 0-500ppm or 0-2mg/m3 to 0-750 mg/m <sup>3</sup>				
Zero noise	Better than 0.005 ppm RMS (1 minute average time)				
Lower detectable limit	0.40 ppb (60 second averaging time)				
Zero drift (24 hour)	0.005 ppm				
Span drift (24 hour)	+/-1% full scale				
Linerarity	+/-1% full scale				
Sample flow rate	~110 cc/min				
Operating temperature	Range Performance specifi cations based on operation within 15°-35° C range. Instrument may be safely operated over the range of 0°-45° C				
Power requirements	100 VAC, 115 VAC, 220-240 VAC +/-10% @ 300W				
Size and weight	16.75" (W) × 8.62" (H) × 23" (D), 55 lbs. (25 kg)				
Outputs	Selectable voltage, RS232/RS485, TCP/IP, 10 status relays, and power fail indication (standard). 0-20 or 4-20 mA isolated current output (optional)				
Inputs	16 Digital Inputs (standard), 8 0-10 Vdc Analog Inputs (optional)				

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.

#### Ordering information

## Model 42*i*-LS Low Source NO-NO<sub>2</sub>-NO<sub>X</sub> Analyzer

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

N = No zero/span assembly (standard)

Z = Internal zero span assembly

#### 3. Converter options

M = Molybdenum (standard)

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 = I/O expansion board (4-20mA outputs – 6 channels, 0-10v inputs – 8 channels)

#### 7. Mounting hardware

A = Bench mounting and ears/handles, EIA

#### Other options

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

#### Your Order Code: Model 42i-LS

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