

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

Chemiluminescent gas analyzer



## Key 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

The Thermo Scientific Low Source NO-NO<sub>2</sub>-NO<sub>x</sub> analyzer, Model 42i-LS utilizes chemiluminescent technology to measure the amount of nitrogen oxides in the air from sub-ppm levels up to 100ppm.

The Model 42i-LS is a single chamber, single photomultiplier tube design that cycles between the NO and NO<sub>x</sub> modes. The 42i-LS 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 standard features as well. If required, the instrument can operate continuously in either the NO or NO<sub>x</sub> modes allowing for response times of less than 5 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.

You can easily program short-cut keys to 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.

# 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 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.

## Low Source NO-NO<sub>2</sub>-NO<sub>x</sub> Analyzer, Model 42i-LS

<b>Preset Ranges</b>	0-2 ppm; 0-200 ppm (extended range)
<b>Custom Ranges</b>	0-0.5 ppm (0-500 ppm in extended range)
<b>Zero Noise</b>	Better than 0.005 ppm RMS (1 minute average time)
<b>Lower Detectable Limit</b>	0.01 ppm (1 minute average time)
<b>Zero Drift (24 hour)</b>	0.005 ppm
<b>Span Drift (24 hour)</b>	+/-1% full scale
<b>Linearity</b>	+/-1% full scale
<b>Sample Flow Rate</b>	~110 cc/min
<b>Operating Temperature</b>	15°C - 35°C
<b>Power Requirements</b>	100 VAC, 115 VAC, 220-240 VAC +/-10% @ 300W
<b>Size and Weight</b>	16.75"(W) x 8.62"(H) x 23"(D), 55 lbs. (25 kg)
<b>Outputs</b>	Selectable Voltage, RS232/RS485, TCP/IP, 10 Status Relays, and Power Fail Indication (standard). 0-20 or 4-20 mA Isolated Current Output (optional)
<b>Inputs</b>	16 Digital Inputs (standard), 8 0-10vdc Analog Inputs (optional)

## Ordering Information

### Model 42i LS NO-NO<sub>2</sub>-NO<sub>x</sub> Analyzer

Choose from the following configurations/options to customize your own 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:

N = No zero / span assembly (standard)  
Z = Internal zero span assembly

#### 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

#### Other options:

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

Your Order Code: 42i - LS \_\_\_\_\_

© 2009 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific Inc. and its subsidiaries.

This specification sheet is for informational purposes only and is subject to change without notice. Thermo Fisher Scientific makes no warranties, expressed or implied, in this product summary. Not all products are available in all countries. Please consult your local sales representative for details.

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

Lit\_42iLSAQI\_10/09

Air Quality Instruments

**Thermo**  
SCIENTIFIC