Chemiluminescent gas analyzer

Product Specifications

Thermo Scientific Model 42*i*-TL Trace Level Nitrogen Oxide 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 Model 42*i*-TL Trace Level Nitrogen Oxide (NO_x) Analyzer utilizes chemiluminescence technology to measure the amount of nitrogen oxides in the air from sub-ppb levels up to 1000 ppb.

The Model 42*i*-TL analyzer is a single chamber, single photomultiplier tube design that cycles between the NO, NO_x, and Zero modes. The addition of the Zero mode provides for excellent long term stability and extremely low minimum detectable limits.

The 42*i*-TL analyzer has independent outputs for NO, NO_2, and NO_x and each can be calibrated independently. 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 and field upgradability.

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 measurement information and status, while viewing the menu and operational screens.

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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.

Thermo Scientific Model 42*i*-TL Trace Level Nitrogen Oxide Analyzer

Preset Ranges	0-5, 10, 20, 50, 100, 200, 500, and 1,000 ppb
	0-10, 20, 50, 100, 200, 500, 1,000 and 2,000 µg/m^3
Custom Ranges	0-50 to 200 ppb
	0-10 to 500 µg/m^3
Zero Noise	25 ppt RMS (120 second averaging time)
Lower Detectable Limit	< 50 ppt RMS (120 second averaging time)
Zero Drift (24 hour)	Negligible
Span Drift (24 hour)	+/- 1% full scale
Response Time	60 seconds (10 second averaging time)
	90 seconds (60 second averaging time)
	300 seconds (300 second averaging time)
Linearity	+/- 1% full scale
Sample Flow Rate	1 LPM
Operational Temperature	50°- 95°F (15°- 35°C) performance or 41°- 104°F (5°- 40°C) operating
Power Requirements	100 VAC, 115 VAC, 220-240 VAC +/-10% @ 300W
Size and Weight	16.75"(W) x 8.62"(H) x 23"(D), 55 lbs. / 425 mm (W) x 219 mm (H) x 584 mm (D), 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)

Ordering Information

Model 42*i*-TL Trace Level Nitrogen Oxide Analyzer
Choose from the following configurations/options
to customize your own Model 42*i*-TL analyzer

1. Voltage options:
A = 115 VAC 60 Hz
B = 220 VAC 50 Hz
C = 220 VAC 60 Hz
D = 115 VAC 50 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)

4. Sample handling:
S = Standard plumbing (standard)
A = Ammonia scrubber

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)

Mounting Hardware:
A = Bench mounting (standard)
B = Ears & handles, EIA
C = Ears & handles, Retrofit

Other options:
- Teflon particulate filter
- Ozone particulate filer
- Rack mounts
- Rear extender

Your Order Code: 42*i* TL- __ __ __ __ __ __ __

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

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