# Thermo Scientific Model 42*i*-Y NO<sub>v</sub> Analyzer

Chemiluminsescent gas analyzer

The Thermo Scientific<sup>™</sup> Model 42*i*-Y NO<sub>y</sub> Analyzer utilizes chemiluminescence technology to measure the amount of nitrogen oxides in the air from sub-ppb levels up to 1000 ppb.

- 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-Y analyzer is a single chamber, single photomultiplier tube design that measures NOy which includes most oxides of nitrogen with the exception of NH $_3$  and N $_2$ O.

Dual range and auto range are standard features in this instrument. Because the instrument is operated continuously in the NOy mode, the response time is less than 10 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 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.

You can easily program short-cut keys allowing you to jump directly to frequently accessed functions, menus or screens. The larger interface screen can display measurement information and status, while viewing menu and operational screens.



# Thermo Scientific Model 42i-Y NOy Analyzer

Preset Ranges	0-5, 10, 20, 50, 100, 200ppb and 0-10, 20, 50, 100, 200 and 500, 1,000 and 2,000 $\mu$ g/m3 to 0-10, 20, 50, 100, 200 $\mu$ g/m³
Zero Noise	< 25 ppt RMS (120 second averaging time)
Lower Detectable Limit	< 50 ppt (120 second averaging time)
Zero Drift (24 hour)	Negligible
Span Drift <i>(24 hour)</i>	+/- 1% full scale
Response Time	60 sec (10 second averaging time)
Linearity	+/- 1% full scale
Sample Flow Rate	1 LPM
Operational Temperature	59° F to 95° F (15° to 35° C) Performance or 32° to 113° F (0° to 45° 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 0-10vdc Analog Inputs (optional)

# **Ordering Information**

# Model 42i-Y NOv Analyzer

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

# 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:

 $A = Bench \ mounting \ (standard)$ 

B = Ears & handles, EIA

C = Ears & handles, Retrofit

# Other options:

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

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

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/ambient

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

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