

## Air quality monitoring

## Thermo Scientific 42iQHL

### High Level NO-NO<sub>2</sub>-NO<sub>x</sub> Analyzer

The Thermo Scientific™ 42iQ 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.



**42iQHL High Level  
NO-NO<sub>2</sub>-NO<sub>x</sub> Analyzer**

#### Introduction

The 42iQHL analyzer is a single chamber, single photo multiplier tube design that cycles between the NO and NO<sub>x</sub> modes. This instrument 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 be operated 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 offerings of the 42iQHL analyzer.

#### Experience the benefits

- Predictive diagnostics
- Proactive communication
- User-friendly touchscreen display
- Trusted reliability of a Thermo Scientific™ gas analyzer

#### Non-stop intelligence

The Thermo Scientific™ iQ Series Gas Analyzer provides a smart environmental monitoring solution designed for reliability, easy operation and proactive maintenance. Get more control over your instrument's performance, costs, workflow and data availability.

## Thermo Scientific 42iQ High Level NO-NO<sub>2</sub>-NO<sub>x</sub> Analyzer

Specifications	
Ranges	0-5000 ppm; 0-7500 mg/m <sup>3</sup>
Zero noise	0.025 ppm RMS (60 second averaging time)
Detection limit	0.050 ppm (60 second averaging time)
Zero drift (24 hour)	0.05 ppm
Span drift (24 hour)	+/-1% full scale
Response time (in manual mode)	2.5 seconds NO 5.0 seconds NO <sub>x</sub>
Vacuum	28.5" Hg
Linearity	+/-1% full scale
Sample flow rate	25 cc/min.
Bypass flow rate (option)	50-1100 cc/min.
Operating temperature	0°-40°C
Power requirements	100-240 VAC 50/60 Hz 275W
Size and weight	24 in (D) x 16.75 in (W) x 8.72 in (H), 60lbs 609 mm (D) 425.45 mm (W) x 221.48 mm (H), 27.2kg
Analog I/O	4 Isolated voltage inputs 0-10 V 6 Isolated analog voltages outputs, with 4 selectable ranges 6 Isolated analog current outputs, with 2 selectable ranges
Digital I/O	16 digital inputs (TTL) 8 solenoid driver outputs 10 digital reed relay contact outputs
Serial ports	1 RS-232/485 port 1 RS-485 external accessory port
Other ports	3 Full speed USB ports (one in front, two in rear) 1 Gigabit ethernet port
Communication protocols	MODBUS, streaming
Approvals and certifications	CE, TUV-SUD safety, UL STD 61010-1, CSA STD C22.2 NO. 61010-1, US EPA: EQOA-0880-047, UKCA

## Ordering information

### 42iQHL NO-NO<sub>2</sub>-NO<sub>x</sub> Analyzer

Choose from the following configurations/ options to customize your own 42iQHL Analyzer

#### 1. Power cord

A = 100-120 VAC 50/60 Hz (NA)

B = 220 VAC 50/60 Hz (EU)

C = 220 VAC 50/60 Hz (CHN)

#### 2. Communications

N = No I/O

A = Serial RS232/RS485

B = Analog and digital

C = Serial, analog and digital

#### 3. Pump voltage

A = 100-120 Vac 60 Hz (standard)

B = 220 Vac 50Hz

C = 220 Vac 60Hz

#### 4. Moly converter material

A = Molybdenum

#### 4. SS converter material

B = Stainless steel

#### 5. Moly sample conditioning

N = None

B = Bypass flow

#### 5. SS sample conditioning

N = None

A = Ammonia (NH<sub>3</sub>) scrubber

B = Bypass flow

C = Bypass flow with ammonia (NH<sub>3</sub>) scrubber

#### 6. Internal zero/span

N = No zero/span assembly

A = Internal zero/span assembly

B = No zero/span assembly w/ O<sub>2</sub> sensor

C = Internal zero/span assembly w/ O<sub>2</sub> sensor

Maintain your investment and get the most out of your Thermo Scientific™ products. Our comprehensive, flexible support solutions provide immediate access to experts worldwide and priority status when your air quality equipment needs repair or replacement.

**Your Moly order code: 42iQHL-**

     

**Your Your SS order code: 42iQHL-**

     

Learn more at [thermofisher.com/42iQHL](https://thermofisher.com/42iQHL) and [thermofisher.com/iQSeries](https://thermofisher.com/iQSeries)

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