Thermo Fisher
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Air quality monitoring

Thermo Scientific 42iQ

NO-NO$_2$-NO$_x$ Analyzer—chemiluminescent

The Thermo Scientific™ 42iQ NO-NO$_2$-NO$_x$ Analyzer utilizes chemiluminescence technology to measure the amount of nitrogen oxides in the air from sub-ppb levels up to 100ppm.

42iQ NO-NO$_2$-NO$_x$ Analyzer

Experience the benefits

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

Introduction

The 42iQ Analyzer is a single chamber, single photomultiplier tube design that cycles between the NO and NOx modes. The analyzer has independent outputs for NO, NO$_2$ and NOx that can be calibrated separately. If required, the instrument can be operated continuously in either the NO or NOx modes allowing for response times of less than five seconds. Dual range, auto range, temperature correction and pressure correction are standard features.

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.

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Thermo Scientific 42iQ NO-NO$_2$-NO$_x$ Analyzer

Specifications	
Range	0-20 ppm; 0-30 mg/m^3
Extended ranges	0-100 ppm; 0-150 mg/m^3
Zero noise	0.20 ppb RMS (60 second averaging time)
Detection limit	0.40 ppb (60 second averaging time)
Zero drift	< 0.40 ppb (24 hour)
Span drift	±1% full scale (24 hour)
Response time	40 seconds (10 second averaging time) 80 seconds (60 second averaging time) 300 seconds (300 second averaging time)
Precision	±0.4 ppb (500 ppb range)
Linearity	±1% full scale
Flow rate	0.6-0.8 lpm
Operating temperature	0°-40°C
Power requirements	100-240 VAC 50/60 Hz, 275 Watts
Size and weight	24 in (D) x 16.75 in (W) x 8.72 in (H), 40lbs 609 mm (D) 425.45 mm (W) x 221.48 mm (H), 18kg
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

42iQ NO-NO$_2$-NO$_x$ Analyzer	
Choose from the following configurations/ options to customize your own 42iQ 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. Moly converter Material	3. SS converter Material
A = molybdenum	B = stainless steel

4. Moly zero/span	4. SS internal zero/span & sample conditioning
N = No zero/span assembly	NN = No zero/span assembly
A = Internal zero/span assembly	AN = Internal zero/span assembly
B = Internal zero/span assembly, internal permeation oven	

5. Moly sample conditioning	
N = None	
A = Ammonia scrubber	
B = Sample permeation dryer	
C = Lag volume with sample permeation dryer	

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: 42iQ-

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Your SS order code: 42iQ-

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Learn more at **thermofisher.com/49iQ** and **thermofisher.com/iqseries**

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