## **thermo**scientific

PRODUCT SPECIFICATIONS

# Thermo Scientific 42iQ

# NO-NO<sub>2</sub>-NO<sub>x</sub> Analyzer—chemiluminescent



The Thermo Scientific<sup>™</sup> 42iQ NO-NO<sub>2</sub>-NO<sub>x</sub> Analyzer utilizes chemiluminescence technology to measure the amount of nitrogen oxides in the air from sub-ppb levels up to 100ppm.

This analyzer is a single chamber, single photomultiplier tube design that cycles between the NO and NO<sub>x</sub> modes.

The 42iQ Analyzer has independent outputs for NO, NO<sub>2</sub> and NO<sub>x</sub> that can be calibrated separately. 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 five seconds. Dual range, auto range, temperature correction and pressure correction are standard features.



## **Non-Stop Intelligence**

- Predictive Diagnostics
- Proactive Communication
- Personal Device Connectivity

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.



The iQ companion app for the iQ Series Gas Analyzer delivers the ultimate in ease of use and smart engineering. The iQ app allows for remote monitoring of iQ gas analyzers, simplified

ways of contacting us and instant access to product resources. Download the iQ app at **thermofisher.com/iQapp** 

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

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Specifications						
Range	0-20 ppm; 0-30 mg/m <sup>3</sup>					
Extended ranges	0-100 ppm; 0-150 mg/m <sup>3</sup>					
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)					
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, US EPA: RFNA-1289-074					

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 on our comprehensive service solutions visit thermofisher.com/EMservice

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### **Ordering information**

### 42iQ NO-NO<sub>2</sub>-NO<sub>x</sub> 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

C = Serial, Analog and Di	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							

### Your Order Code: 42iQ -

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Find out more at thermofisher.com/42iQ thermofisher.com/iQSeries

