

# Thermo Scientific 42iQLS

Low Source NO-NO<sub>2</sub>-NO<sub>x</sub> Analyzer  
chemiluminescent



The Thermo Scientific™ 42iQ Low Source 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 500ppm.

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

The 42iQLS 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](https://thermofisher.com/iQapp)

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

Specifications	
Range	0-100ppm; 0-150 mg/m <sup>3</sup>
Extended ranges	0-500ppm; 0-750 mg/m <sup>3</sup>
Zero noise	0.005 ppm RMS (60 second averaging time)
Detection limit	0.01 ppm (60 second averaging time)
Zero drift	≈0.005 ppm
Span drift	±1% full scale
Response time (NO/NO <sub>x</sub> mode)	15 sec (10 second averaging time)
	85 sec (60 second averaging time)
	305 sec (300 second averaging time)
Response time (NO mode)	15 sec (10 second averaging time)
	65 sec (60 second averaging time)
	305 sec (300 second averaging time)
Linearity	±1% full scale
Flow rate	≈100 cc/min measured at atmospheric pressure
Operating temperature	0°- 40°C
Power requirements	100-240 VAC 50/60 Hz 275 Watts
Size and weight	16.75" (W) × 8.72" (H) × 24" (D), 40 lbs
	4.25.45mm (W) x 221.48mm (H) x 609mm (D), 18.1kg
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	MODBUS, Streaming, AK, Gesytec (Bayern-Hessen)
Approvals and Certifications	CE, TUV-SUD Safety, EN15267-2 (pending)

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](http://thermofisher.com/EMservice)

**USA**  
27 Forge Parkway  
Franklin, MA 02038  
Ph: (508) 520-0430  
Fax: (508) 520-2800  
[orders.aqi@thermofisher.com](mailto:orders.aqi@thermofisher.com)

**India**  
C/327, TTC Industrial Area  
MIDC Pawane  
New Mumbai 400 705, India  
Ph: +91 22 4157 8800  
[india@thermofisher.com](mailto:india@thermofisher.com)

**China**  
+Units 702-715, 7th Floor  
Tower West, Yonghe  
Beijing, China 100007  
Ph: +86 10 84193588  
[info.eid.china@thermofisher.com](mailto:info.eid.china@thermofisher.com)

**Europe**  
Ion Path, Road Three,  
Winsford, Cheshire CW73GA  
UK Ph: +44 1606 548700  
Fax: +44 1606 548711  
[sales.epm.uk@thermofisher.com](mailto:sales.epm.uk@thermofisher.com)

## Ordering information

### 42iQ Low Source NO-NO<sub>2</sub>-NO<sub>x</sub> Analyzer

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

#### 1. Power Cord

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

B = 220 VAC 50/60 Hz (CHN)

C = 220 VAC 50/60 Hz (EU)

#### 2. Communications

N = No I/O

A = Serial RS232/RS485

B = Analog and Digital

C = Serial, Analog and Digital

#### 3. Converter Material

A = Molybdenum

B = Stainless steel

#### 4. Internal Zero/Span

N = No Zero/Span Assembly

A = Internal Zero/Span Assembly

#### 5. Sample Conditioning

N = None

A = O<sub>2</sub> Sensor

#### Your Order Code: 42iQLS

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Find out more at [thermofisher.com/42iQLS](http://thermofisher.com/42iQLS)  
[thermofisher.com/iQSeries](http://thermofisher.com/iQSeries)

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