

# Thermo Scientific 43iQ

## Sulfur Dioxide Analyzer—pulsed fluorescence



The Thermo Scientific™ 43iQ Sulfur Dioxide (SO<sub>2</sub>) Analyzer utilizes pulsed fluorescence technology to measure the amount of sulfur dioxide in the air.

The pulsing of the UV source lamp serves to increase the optical intensity whereby a greater UV energy throughput and lower detectable SO<sub>2</sub> concentration are realized.

Reflective bandpass filters, as compared to commonly used transmission filters, are less subject to photochemical degradation and more selective in wavelength isolation. This results in both increased detection specificity and long term stability.



### 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 43iQ Sulfur Dioxide Analyzer

Specifications	
Range	0-10 ppm, 0-25 mg/m <sup>3</sup>
Extended ranges	0-100 ppm, 0-250 mg/m <sup>3</sup>
Zero noise	1.0 ppb RMS (10 second averaging time) 0.5 ppb RMS (60 second averaging time) 0.25 ppb RMS (300 second averaging time)
Detection limit	2 ppb (10 second averaging time) 1 ppb (60 second averaging time) 0.25 ppb (300 second averaging time)
Zero drift	<0.5 ppb (24 hour)
Span drift	±0.5% full scale (24 hour)
Response time	60 seconds (10 second averaging time) 110 seconds (60 second averaging time) 320 seconds (300 second averaging time)
Linearity	±1% full scale
Flow rate	0.5 lpm (standard)
Interferences (EPA levels)	Less than lower detectable limit except for the following: NO < 3 ppb, M-Xylene < 1ppb, H <sub>2</sub> O < 3% of reading
Operating temperature	0°-45°C
Power requirements	100-240 VAC 50/60Hz, 275 Watts
Size and weight	24 in (D) x 16.75 in (W) x 8.72 in (H), 37.1 lbs 609 mm (D) 425.45 mm (W) x 221.48 mm (H), 16.8kg
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: EQSA-0486-060

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)

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## Ordering information

### 43iQ Sulfur Dioxide Analyzer

Choose from the following configurations/options to customize your own 43iQ 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 or Digital

C = Serial, Analog and Digital

#### 3. Case Configuration

N = No zero/span valves

A = Internal zero/span valves

B = Internal zero/span valves, internal permeation oven

#### Your Order Code: 43iQ –



Find out more at [thermofisher.com/43iQ](http://thermofisher.com/43iQ)  
[thermofisher.com/iQSeries](http://thermofisher.com/iQSeries)

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