

# Thermo Scientific 49iQPS

UV Photometric Primary Standard—calibration of ozone analyzers and transfer standards



The Thermo Scientific™ 49iQPS Ozone (O<sub>3</sub>) Primary Standard utilizes UV Photometric technology to produce ozone at a rate of up to 5000 ppb.

The Thermo Scientific 49iQPS Analyzer is a dual cell photometer, the concept adopted by NIST for the national ozone standard. The 49iQPS Analyzer can operate with ozonator flow rates of up to 6 liters a minute. Because the instrument has both sample and reference flowing simultaneously, a response time of 20 seconds can be achieved. Temperature and pressure correction are standard offerings.



## 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](http://thermofisher.com/iQapp)

## Thermo Scientific 49iQPS Ozone Primary Standard

Specifications	
Range	50-5000 ppb; 100-10000 25 µg/m <sup>3</sup>
Zero noise	0.25 ppb RMS (60 second averaging time)
Detection limit	1.0 ppb (60 second averaging time)
Response time	20 seconds (0-95%)
Lag time	10 seconds
Linearity	±1% full scale
Flow rate	1-3 LPM
Operating temperature	0°C - 45°C
Power requirements	100-240 VAC 50/60 275 Watts
Size and weight	16.75" (W) × 8.72" (H) × 24" (D), 34.53 lbs. 425.25 mm (W) × 221.48 mm (H) × 609 mm (D), 15.7kg
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
Ozonator	
Output	.025 - 1.000 ppm @ 3-4 LPM
Response	1 minute to 98% or 5 ppb of final value, whichever is greater
Stability	±4 ppb or ±1% of reading, whichever is greater

## Ordering information

### 49iQPS Ozone Primary Standard

Choose from the following configurations/options to customize your own 49iQPS 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. Zero air source:

NN = No Zero Air Source

NA = Zero air source

**Your Order Code: Model 49iQPS –**

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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[thermofisher.com/iQSeries](http://thermofisher.com/iQSeries)

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