

PRODUCT SPECIFICATIONS

# Thermo Scientific 48iQTL

## Trace Level Carbon Monoxide Analyzer



The Thermo Scientific™ 48iQ Trace Level Carbon Monoxide (CO) Analyzer utilizes gas filter correlation technology to measure the amount of carbon monoxide in the air.

The 48iQTL Analyzer is based on the principle that carbon monoxide (CO) absorbs infrared radiation at a wavelength of 4.6 microns.

The instrument employs pressure compensation and maintains constant temperature over the operating temperature range for stability.

Dual range and auto range are standard features in the 48iQTL. Standard features also include an intelligent zero reference to optimize drift performance and dynamic filtering to maintain data stability and integrity in changing environmental conditions.

User settable alarm levels for concentration and a wide variety of internal diagnostics are available from an easy to follow touch screen display.



### 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 48iQ Trace Level Carbon Monoxide Analyzer

Specifications	
Range	0-1000 (ppm or mg/m <sup>3</sup> )
Zero noise	0.01 ppm RMS <sup>1</sup>
Span noise	0.5% of reading above 2.5 ppm <sup>1</sup>
Detection limit	0.02 ppm <sup>1</sup>
Zero drift (24 hour)	<0.025 ppm <sup>1,2</sup>
Span drift (24 hour)	+/- 0.5% reading
Precision	0.5% of reading <sup>1,2</sup>
Response time	60 seconds <sup>1</sup>
Linearity	+/- 1% full scale or 0.04 ppm, whichever is greater
Flow rate	~0.5 SLPM (1 atm inlet pressure)
Operating temperature	5°-40° C (may be safely operated over the range of 0-45° C)
Power requirements	100-240 VAC 50/60 Hz 275W
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: RFCA-0981-054

<sup>1</sup> Dynamic filtering ON (default)

<sup>2</sup> Intelligent zero reference (default)

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

### 48iQ Trace Level CO Analyzer

Choose from the following configurations options to customize your own 48iQTL 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. Case Configuration

N = No zero/span valves

A = Internal zero/span valves

#### Your Order Code: 48iQTL

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Find out more at [thermofisher.com/48iQTL](http://thermofisher.com/48iQTL)  
[thermofisher.com/iQSeries](http://thermofisher.com/iQSeries)

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