### **thermo**scientific

PRODUCT SPECIFICATIONS

# Thermo Scientific 48iQ

### Carbon Monoxide Analyzer—gas filter correlation



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

The 48iQ Analyzer is based on the principle that carbon monoxide (CO) absorbs infrared radiation at a wave length of 4.6 microns. Because infrared absorption is a nonlinear measurement technique, it is necessary for the instrument electronics to transform the basic analyzer signal into a linear output.

The 48iQ Analyzer uses an exact calibration curve to accurately linearize the instrument output over any range up to a concentration of 10,000ppm.



### **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 48iQ Carbon Monoxide Analyzer

Specifications	401Q Carbon Monoxide Analyzer
Range	0-10000 (ppm or mg/m³)
Zero noise	0.02 ppm RMS (30 second averaging time)
Detection limit	0.04 ppm (30 second averaging time)
Zero drift	< 0.1 ppm (24 hour)
Span drift	±0.5% reading (24 hour)
Response time	60 seconds (30 second averaging time)
Precision	±0.1ppm
Linearity	$\pm 1\%$ full scale $\leq 1000$ ppm $\pm 2.5\%$ full scale $> 1000$ ppm
Flow rate	1.0 SLPM (1 atm inlet pressure)
Operating temperature	5-45°C (may be safely operated 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), 34.3 lbs 609 mm (D) 425.45 mm(W) x 221.48 mm (H), 15.6 kg
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) 10 Digital reed relay contact outputs 8 Solenoid driver 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
Approvals and certifications	CE, TUV-SUD Safety, US EPA: RFCA-0981-054, UKCA

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/EPMservice

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#### Ordering information

#### 48iQ Carbon Monoxide Analyzer

Choose from the following configurations options to customize your own 48iQ 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

B = Internal Zero/Span Valves, Internal Zero Air Scrubber

C = Oxygen Sensor, No Zero/Span Valves

#### Your Order Code: 48iQ -

Find out more at thermofisher.com/48iQ thermofisher.com/iQSeries

