PRODUCT SPECIFICATIONS

# Thermo Scientific 410iQ

### Carbon Dioxide Analyzer



The Thermo Scientific<sup>™</sup> 410iQ Carbon Dioxide (CO<sub>2</sub>) Analyzer utilizes advanced Non-Dispersive Infrared (NDIR) optical filter technology to measure concentrations of CO<sub>2</sub>.

This analyzer utilizes advanced Non-Dispersive Infrared technology (NDIR) with optically fixed bandpass interference filters and quantum detection to analyze concentrations of CO<sub>2</sub>.

The 410iQ Analyzer uses an internally stored calibration curve to accurately linearize the instrument output over any range up to a concentration of 10,000 ppm.



### **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** 



## thermo scientific

#### Thermo Scientific 410iQ Carbon Dioxide Analyzer

Specifications	
Preset ranges	0-10,000 ppm
Zero noise	0.5 ppm RMS (60 second averaging time)
Detection limit	1.0 ppm (60 second averaging time)
Zero drift	±1.0 ppm (24 hour)
Span drift	±2.0% of reading (24 hour)
Response time	90 seconds (30 second averaging time)
Linearity	$\pm 1.5\%$ of span (at concentrations of 10%–100% of span)
Flow rate	1.0 SLPM (1 atm inlet pressure)
Operating temperature	5°C to 45°C (may be safely operated over the range of 0-45°C)
Power requirements	100-240 VAC 50/60 Hz, 275 Watts
Size and weight	16.75" (W) × 8.72" (H) × 24" (D), 31.3 lbs. 425.45mm (W) × 221.48mm (H) × 609mm (D), 14.2 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) 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, Gesytec (Bayern-Hessen)
Approvals and Certifications	CE, TUV-SUD Safety

#### **Ordering information**

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410iQ Carbon Dioxide Analyzer
Choose from the following configurations/options to customize your own 410iQ Carbon Dioxide 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 Valve
A = Oxygen Sensor, No Zero Span Valve
B = Zero/Span Valve

#### Your Order Code: 410iQ -

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

#### USA

27 Forge Parkway Franklin, MA 02038 Ph: (866) 282-0430 Fax: (508) 520-2800 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

#### China

8/F Bldg C of Global Trade Ctr, No.36, North 3rd Ring Road, Dong Cheng District Beijing, China 100013 Ph: +86 10 84193588 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

# Find out more at thermofisher.com/410iQ thermofisher.com/iQSeries

