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PRODUCT SPECIFICATIONS

Thermo Scientific Model 410*i*

Utilizing non-dispersive infrared technology Carbon Dioxide Analyzer

The Thermo Scientific™ Model 410*i* Carbon Dioxide (CO_2) Analyzer utilizes advanced Non-Dispersive Infrared (NDIR) optical filter technology to measure concentrations of CO_2. Reporting capabilities are user-selectable for either of the accepted industry standards, straight extractive or dilution sampling methods.

Features

- Advanced Non-Dispersive Infrared (NDIR) technology
- User-selectable reporting capabilities
- Expanded ambient temperature operating range
- High performance over a wider range of concentrations
- Linearity through all ranges

Introduction

This analyzer utilizes advanced Non-Dispersive Infrared technology (NDIR) with optically fixed bandpass interference filters and quantum detection to analyze concentrations of CO_2.

In addition, the expanded ambient temperature operating range provides excellent performance over a wider range of concentrations.

The Thermo Scientific Model 410*i* Analyzer is available in Standard or High Level ranges and uses an internally stored calibration curve to accurately linearize the instrument output over any range up to a concentration of either 10,000 ppm (Standard) or 25% (High level).

The Model 410*i* Analyzer combines proven detection, easy to use menu-driven software, and advanced diagnostics to offer unsurpassed flexibility and reliability.

*i*Series features also include:

- Rack mountability
- Ethernet port & connectivity options
- Flash memory for increased data storage
- Easily programmable short-cut keys
- Large interface screen

Thermo Scientific™ Model 410*i* Carbon Dioxide Analyzer

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Thermo Scientific Model 410*i* Carbon Dioxide Analyzer

Specifications	
Preset ranges	High level: 0-0.5, 1, 2, 5, 10, 20, 25% Standard: 0-200, 500, 1000, 2000, 5000 & 10000 ppm
Zero noise	High level: 10 ppm RMS (60 second averaging time) Standard: 0.1 ppm RMS (300 second averaging time)
Minimum detectable limit	High level: 20 ppm (300 second averaging time) Standard: 0.2 ppm (300 second averaging time)
Zero Drift (24 hour)	High level: +/- 40 ppm Standard: +/- 1.0 ppm
Span Drift (24 hour)	High level: < 2.0% reading – 7 days Standard: < 0.5% reading – 24 hours - <1% reading - 7 days
Response time	(90% full scale) 90 seconds (30 second averaging time)
Precision	+/- 1.0% of reading
Linearity	+/- 1.5% of span (at concentrations of 10%–100% of span)
Sample flow rate	1.0 liter per minute
Operational temperature	41°F to 113°F (+5°C to +45°C)
Power requirements	110 VAC, 115 VAC, 220-240 VAC +/- 10% @ 275W
Size and weight	16.75" (W) × 8.62" (H) × 23" (D), 39 lbs. (17.7 kg)
Outputs	Selectable voltage, RS232/RS485, TCP/IP, 10 status relays and power fail indication (standard) 0-20 or 4-20 mA isolated current output (optional)
Inputs	16 digital inputs (standard), 8 0-10 Vdc analog inputs (optional)

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

Ordering information

Model 410*i* Carbon Dioxide Analyzer

Choose from the following configurations/options to customize your own Model 410*i* Carbon Dioxide Analyzer

1. Voltage options

A = 120 VAC 50/60 Hz

B = 220 VAC 50/60 Hz

J = 100 VAC 50/60 Hz

2. Internal zero/span

N = No zero/span valve

Z = Internal zer /span valves

S = No zero/span valve with O_2 sensor

R = Internal zero/span valves with O_2 sensor

3. Filter wheel purge

P = Filter wheel purge setup (standard)

4. Sample gas concentration range

D = 0 -10,000 ppm concentration range (dilutive/ambient)

E = 0 - 25% Concentration Range (extractive)

5. Optional I/O

A = No optional I/O (standard)

C = 0 - 20, 4-20mA current output, 6 channels

0 - 10v analog input, 8 channel

6. Mounting hardware

A = Bench mounting and ears/handles, EIA

Your Order Code: Model 410*i* -

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