



Air quality monitoring

## Thermo Scientific Model 48i Carbon Monoxide Analyzer

### Gas filter correlation

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

#### Introduction

The Model 48i Analyzer is based on the principle that carbon monoxide (CO) absorbs infrared radiation at a wavelength 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 Model 48i Analyzer uses an exact calibration curve to accurately linearize the instrument output over any range up to a concentration of 10,000 ppm. This state-of-the-art gas analyzer offers features such as an Ethernet port as well as flash memory for increased data storage.

Ethernet connectivity provides efficient remote access, allowing the user to download measurement information directly from the instrument without having to be onsite.

Easily programmable shortcut keys allow you to jump directly to frequently accessed functions, menus or screens. The larger interface screen can display up to five lines of measurement information while primary screen remains visible.



Model 48i Carbon Monoxide Analyzer

#### Features

- Approved to meet the following standards: U.S. EPA, UK Environmental Agency and the EU Environmental Agency
- Ethernet connectivity for efficient remote access
- Enhanced user interface with one-button programming and enlarged display screen
- Flash memory for increased data storage and user downloadable software

## Thermo Scientific Model 48i Carbon Monoxide Analyzer

Specifications	
Preset ranges	0–1, 2, 5, 10, 20, 50, 100, 200, 500, 1000, 2000, 5000 and 10000 ppm 0–1, 2, 5, 10, 20, 50, 100, 200, 500, 1000, 2000, 5000 and 10000 mg/m <sup>3</sup>
Custom ranges	0–1 to 10000 ppm, 0–1 to 10000 mg/m <sup>3</sup>
Zero noise	0.02 ppm RMS (30 second averaging time)
Lower detectable limit	0.04 ppm
Zero drift (24 hour)	< 0.1 ppm
Span drift (24 hour)	+/-1% full scale
Response time	60 seconds (30 second average time)
Precision	+/-0.1 ppm
Linearity	+/-1% full scale < 1000 ppm +/-2.5% full scale > 1000 ppm
Sample flow rate	0.5-2 liters/min
Interferences	< lower detectable limit except for the following: (EPA Levels) NO < 3 ppb, M-Xylene < 1 ppb, H <sub>2</sub> O < 3% of reading
Operating temperature	Performance specifications based on operation within 20°–30°C range (per U.S. EPA Guidelines). Instrument may be safely operated over the range of 0°–45°C.
Power requirements	100 VAC, 115 VAC, 220-240 VAC +/-10% @ 275 W
Size and weight	116.75" (W) • 8.62" (H) • 23" (D), 49 lbs. (22.2 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 0-10Vdc analog inputs (optional)
Approvals and certifications	U.S. EPA equivalent method: RFCA-0981-054 MCERTS certified: Sira MC070095/00 EN14626: TÜV 936/21203248/A Report UKCA
Country of origin	India or China

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 Fisher Scientific products. For more information on our comprehensive service solutions, visit [thermofisher.com/EPMSservice](https://thermofisher.com/EPMSservice).

**Your order code: Model 48i Carbon Monoxide Analyzer**



## Ordering information

### Model 48i Carbon Monoxide Analyzer

Choose the following configurations options to customize your own Model 48i Analyzer

#### Voltage options

A = 115 VAC 60 Hz (standard)

B = 220/240 VAC 50 Hz

D = 220 VAC 50/60 Hz with China power cord

J = 100 VAC 50/60 Hz

#### Internal zero/span and/or Oxygen Sensor

N = No zero/span valve assembly (standard)

A = No zero/span valve w/zero air scrubber

Z = Internal zero/span valve assembly

C = Internal zero/span valve w/zero air scrubber

G = Oxygen sensor with NO zero/span valves

R = Oxygen sensor with internal zero/span valves

#### Filter wheel purge

S = Standard plumbing (standard)

P = Filter wheel purge setup

#### Optional I/O

A = No optional I/O (standard)

C = 0–20, 4–20 mA current output, 6 channels, 0–10v analog input, 8 channel

#### Mounting hardware

A = Bench mounting and ears/handles, EIA

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