

Carbon Monoxide Analyzer, Model 48i-HL

Gas filter correlation analyzer



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

This state-of-the-art gas analyzer offers features such as an Ethernet port as well as flash memory for increased data storage and field upgradability.

The Model 48i-HL 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.

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

The Model 48i-HL uses an exact calibration curve to accurately linearize the instrument output over any range up to a concentration of 20,000ppm.

You can easily program short-cut keys to allow you to jump directly to frequently accessed functions, menus or screens. The larger interface screen can display measurement information and status while viewing menu and operational screens.

Key Features

- Ethernet connectivity for efficient remote access
- Enhanced user interface with one button programming and large display screen
- Flash memory for increased data storage and user downloadable software
- Enhanced electronics design optimizes product commonality
- Improved layout for easier accessibility to components

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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 air quality products.

Product Specifications

Preset Ranges	0-50, 100, 200, 500, 1000, 2000, 5000, 10000 and 20000 ppm 0-50, 100, 200, 500, 1000, 2000, 5000, 10000 and 20000 mg/m ³
Custom Ranges	0-50 to 20000 ppm 0-50 to 20000 mg/m ³
Zero Noise	2.0 ppm RMS (10 second averaging time)
Lower Detectable Limit	4.0 ppm
Zero Drift (24 hour)	< 4.0 ppm
Span Drift (24 hour)	+/-2% full scale
Response Time	60 seconds (30 second average time)
Precision	+/-0.1 ppm
Linearity	+/-2% full scale
Sample Flow Rate	1.0 liters/min. nominal
Operating Temperature	5 ^o C - 40 ^o C (20 ^o C - 30 ^o C with EPA Designation)
Power Requirements	100 VAC, 115 VAC, 220-240 VAC +/-10% @ 275W
Size and Weight	16.75"(W) x 8.62"(H) x 23"(D), 49 lbs. 425 mm (W) x 219 mm (H) x 584 mm (D), 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)

Ordering Information

Model 48i-HL CO Analyzer

Choose from the following configurations/options to customize your own Model 48i-HL

1. Voltage options:

A = 115 VAC 50/60 Hz
B = 220/240 VAC 50/60 Hz
J = 100 VAC 50/60 Hz

2. Internal zero /span:

N = No zero / span valve
A = No zero / span valve w/zero air scrubber
Z = Internal zero / span valves
C = Internal zero / span valves w/zero air scrubber

Other options:

- Teflon particulate filter
- Cable, DB37M to open end, 6' LG.
- Rack mounts
- Cable, DB37F to open end, 6' LG.
- Rear extender
- Cable, DB25M to open end, 6' LG.
- Terminal Block Kit & Cable 37 pin
- Cable, RS232 Null Modem
- Terminal Block Kit & Cable 25 pin

3. Filter Wheel Purge:

S = Standard plumbing (standard)
P = Filter wheel purge set-up

4. Optional I/O:

A = No optional I/O (standard)
C = 0-20, 4-20mA current output - 6 channels, 0-10v analog input - 8 channels

5. Mounting hardware:

A = Bench mounting (standard)
B = Ears & handles, EIA
C = Ears & handles, retrofit

Your Order Code: 48i - HL _ _ _ _ _

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This product is manufactured in a plant whose quality management system is ISO 9001 certified.

Lit_48iHLAQI_08/09

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