

Model 48i CO Analyzer

Gas filter correlation gas analyzer with enhanced communication capabilities for ambient air and source emissions monitoring



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

A change is in the air

The industry's new best-of-breed. Our customers told us exactly what they're looking for in a gas monitoring solution: reliability, simplicity, ease of use. The new *iSeries* platform delivers on all counts - and then goes a step farther.

A core product in Thermo's new *iSeries* product line is the Model 48i CO analyzer.

Using gas filter correlation technology, the Model 48i measures the amount of carbon monoxide in the air. The Model 48i 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 uses an exact calibration

curve to accurately linearize the instrument output over any range up to a concentration of 10,000ppm.

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 on-site.

You can easily program soft-keys to 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.

Comprehensive Service Solutions

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. Thermo Electron offers comprehensive, flexible support solutions for all phases of the product lifecycle. Through predictable, fixed-cost pricing, Thermo services help protect the return on investment and total cost of ownership of your Thermo Electron air quality products.

Product 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 ³
Custom Ranges	0-1 to 10000 ppm 0-1 to 10000 mg/m ³
Zero Noise	0.02 ppm RMS (60 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.
Operating Temperature	20°C - 30°C
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. (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 Outout (optional)
Inputs	16 Digital Inputs (standard), 8 0-10Vdc Analog Inputs (optional)

Ordering Information

Model 48i CO Analyzer

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

Voltage options:

A = 120 Vac 50/60 Hz
B = 220 Vac 50/60 Hz
J = 100 Vac 50/60 Hz

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

Filter Wheel Purge:

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

Optional I/O:

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

Mounting hardware:

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

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

Other options:

- Teflon particulate filter
- Rack mounts
- Rear extender



This specification sheet is for informational purposes only and is subject to change without notice. Thermo makes no warranties, expressed or implied, in this product summary. © 2005 Thermo Electron Corporation. All rights reserved. Thermo Electron Corporation, Analyze. Detect. Measure. Control are trademarks of Thermo Electron Corporation

Lit_48iEID_3/05

Environmental Instruments
Air Quality Instruments
www.thermo.com/air

27 Forge Parkway
Franklin, MA 02038 USA

+1 (866) 282-0430
+1 (508) 520-1460 fax

Takkebijsters 1
Breda, BL 4817
The Netherlands

+33 (0) 76 5879888
+33 (0) 76 5816520 fax

Thermo
ELECTRON CORPORATION