Model 43*i*-TLE Enhanced Trace Level SO$_2$ Analyzer

Pulsed fluorescence gas analyzer with enhanced communication capabilities for trace level ambient air 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 *i*Series platform delivers on all counts - and then goes a step farther. A core product in Thermo's new *i*Series product line is the Model 43*i* -TLE SO$_2$ analyzer.

Using pulsed fluorescence technology, the Model 43*i* -TLE measures the amount of sulfur dioxide in the air down to 50 ppt. The pulsing of the U.V. source lamp serves to increase the optical intensity whereby a greater U.V. energy throughput and lower detectable SO$_2$ concentration are realized. Reflective bandpass filters, as compared to commonly used transmission filters, are less subject to photochemical degradation and more selective in wavelength isolation. This results in both increased detection specificity and long term stability.

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.

Analyze • Detect • Measure • Control™

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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. 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	0-10, 20, 50, 100, 200, 500 and 1000 ppb 0-20, 50, 100, 200, 500, 1000 and 2000 μg/m^3
Custom Ranges	0-10 to 1000 ppb 0-20 to 2000 μg/m^3
Zero Noise	0.025 ppb RMS (300 second averaging time)
Lower Detectable Limit	0.05 ppb (300 second averaging time)
Zero Drift	< 0.2 ppb per day
Span Drift	+/-1% of full scale
Response Time	80 seconds (10 second average time)
Precision	1% of reading or 0.2 ppb (whichever is greater)
Linearity	+/-1% of full scale
Sample Flow Rate	0.5 liters/min.
Interferences **(EPA levels)**	< lower detectable limit except for the following: NO: Reads < 3 ppb when tested at 500 ppb. M-Xylene: Reads < 1 ppb when tested at 200 ppb. H_2O: Reads < 2% of reading when tested at 2% H_2O absolute
Operating Temperature	5^{0}C - 40^{0}C (20^{0}C - 30^{0}C with EPA Designation)
Power Requirements	100 vac, 115 vac, 220-240 vac +/-10% @ 165W
Size and Weight	16.75"(W) x 8.62"(H) x 23"(D), 48 lbs. 425 mm (W) x 219 mm (H) x 584 mm (D), 21.8 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 43i -TLE SO$_2$ Analyzer
Choose from the following configurations/options
to customize your own Model 43i-TLE

Voltage options:
A = 115 Vac 50/60 Hz
B = 220/240 Vac 50/60 Hz
J = 100 Vac 50/60 Hz

Internal zero /span:
N = No zero / span assembly
Z = Internal zero / span assembly
P = Internal permeation span source with zero/span assembly

Kicker type:
S = Standard
H = Heated

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: 43iTLE - __ __ __ __ __

Other options:
◆ Teflon particulate filer
◆ Rack mounts
◆ Rear extender
◆ Terminal Block Kit & Cable 37 pin
◆ Terminal Block Kit & Cable 25 pin

◆ Cable, DB37M to open end, 6' LG.
◆ Cable, DB37F to open end, 6' LG.
◆ Cable, DB25M to open end, 6' LG.
◆ Cable, RS232 Null Modem

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TÜV
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