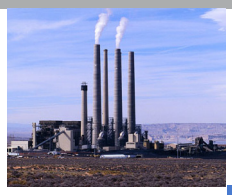
Product Specifications

Model 43*i* SO_2 Analyzer

Pulsed fluorescence 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 *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* SO_2 analyzer.

Using pulsed fluorescence technology, the Model 43*i* measures the amount of sulfur dioxide in the air up to 10ppm. 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.

Product Specifications

Preset Ranges	0-0.05, 0.1, 0.2, 0.5, 1, 2, 5, and 10 ppm 0-0.2, 0.5, 1, 2, 5, 10, 20, and 25 mg/m^3
Extended Ranges	0-0.05, 1, 2, 5, 10, 20, 50 and 100 ppm 0-2, 5, 10, 20, 50, 100, 200, and 250 mg/m^3
Custom Ranges	0-0.05 to 10 ppm 0-0.2 to 250 mg/m^3
Zero Noise	1.0 ppb RMS (10 second averaging time), 0.5 ppb RMS (60 second averaging time), 0.25 ppb RMS (300 second averaging time)
Lower Detectable Limit	2.0 ppb (10 second averaging time), 1.0 ppb (60 second averaging time), 0.5 ppb (300 second averaging time)
Zero Drift (24 hour)	Less than 1 ppb
Span Drift (24 hour)	+/-1%
Response Time	80 seconds (10 second average time) 110 seconds (60 second average time) 320 seconds (300 second average time)
Precision	1% of reading or 1 ppb (whichever is greater)
Linearity	+/-1% full scale $\leq$ 100ppm
Sample Flow Rate	0.5 liters/min. (standard) 1 liter/min. (optional)
Interferences (EPA levels)	< lower detectable limit except for the following: NO < 3 ppb, M-Xylene < 2 ppb, H_2O < 2% of reading
Operating Temperature	20°C - 30°C
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. (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 Outout (optional)
Inputs	16 Digital Inputs (standard), 8 0-10vdc Analog Inputs (optional)

Ordering Information

Model 43*i* SO_2 Analyzer
Choose from the following configurations/options to customize your own Model 43*i*

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 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: 43*i* - __ __ __ __ __

Other options:
- Teflon particulate filter
- Rack mounts
- Rear extender

Lit _43iEID_2/05

Environmental Instruments
Air Quality Instruments

Thermo
ELECTRON CORPORATION