

## Model 43i-HL High Level SO<sub>2</sub> Analyzer

Pulsed Florescence gas analyzer for 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 major product in Thermo's new iSeries product line is the Model 43i-HL SO<sub>2</sub> analyzer.

Using pulsed fluorescence technology, the Model 43i-HL SO<sub>2</sub> measures the amount of sulfur dioxide in the air from sub ppm levels up to 1,000 ppm in standard range mode and from 100 ppm up to 10,000 ppm in extended range.

Dual range and auto range are standard features in this instrument as well as temperature and pressure correction. User

settable alarm levels for concentration and for a wide variety of internal diagnostics are available from an easy to follow menu structure.

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.

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 measurement information and status, while

## 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 (ROI) and total cost of ownership of your Thermo Electron air quality products.

## Product Specifications

Standard Ranges	0-10, 20, 50, 100, 200, 500 and 1000 ppm 0-20, 50, 100, 200, 500, 1000 and 2000 mg/m <sup>3</sup>
Extended Ranges	0-100, 200, 500, 1000, 2000, 5000 and 10000 ppm 0-200, 500, 1000, 2000, 5000, 10000 and 20000 mg/m <sup>3</sup>
Custom Ranges	0-10 to 1000 ppm (standard), 0-100 to 10,000 ppm (extended) 0-20 to 2000 mg/m <sup>3</sup> (standard), 0-200 to 20,000 mg/m <sup>3</sup> (extended)
Zero Noise	0.25 ppm (300 second averaging time)
Lower Detectable Limit	0.5 ppm (300 second averaging time)
Zero Drift (24 hour)	less than 1 ppm per day
Span Drift (24 hour)	+/- 1% full scale
Response Time	80 sec (10 second averaging time)
Linearity	+/- 1% full scale
Sample Flow Rate	0.6 to 1.0 liters/min.
Interferences (EPA levels)	< lower detectable limit except for the following: NO: < 3 ppb, tested at 500 ppb, M-Xylene < 1 ppb, tested at 200 ppb, H <sub>2</sub> O < 2% of reading, tested at 2% H <sub>2</sub> O absolute
Operational Temperature	5°C - 40°C, (20°C - 30°C with EPA Designation)
Power Requirements	100 vac, 115 vac, 220-240 vac +/-10% @ 300W
Size and Weight	16.75"(W) x 8.62"(H) x 23"(D), 55 lbs. / 425 mm (W) x 219 mm (H) x 584 mm (D), 25 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 HL SO<sub>2</sub> Analyzer

Choose from the following configurations/options to customize your own Model 43i HL

#### Voltage options:

A = 115 Vac 50/60 Hz (standard)  
B = 220/240 Vac 50/60 Hz  
J = 100 Vac 50/60 Hz

#### Internal zero / span:

N = No zero / span assembly (standard)  
Z = Internal zero span assembly

#### Optional I/O:

A = None (standard)  
C = I/O expansion board  
(4-20mA outputs - 6 channels, 0-10v inputs - 8 channels)

#### Mounting Hardware:

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

Your Order Code: 43i - HL \_ \_ \_ \_

#### Other options:

- Teflon particulate filter
- Ozone particulate filter
- Rack mounts
- Rear extender

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