PRODUCT SPECIFICATIONS

# Model 43*i*-HL high level SO<sub>2</sub>

Pulsed fluorescence gas analyzer for source emissions monitoring

The Thermo Scientific<sup>™</sup> Model 43i-HL<sup>™</sup> High Level SO<sub>2</sub> Analyzer utilizes pulsed florescence technology to measure the amount of sulfur dioxide in the air. Measuring sub ppm levels up to 1,000 ppm in standard range mode, and from 100 ppm up to 10,000 ppm in extended range.

## **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



## Introduction

Dual range and auto range are standard features in the Thermo Scientific

Model 43*i*-HL High Level SO<sub>2</sub> Analyzer as well as temperature and pressure correction.

Alarm levels are user settable for concentration. A wide variety of internal diagnostics are available from an easy to follow menu structure. Ethernet connectivity provides efficient remote access, allowing the user to download measurement information directly from the instrument without having to be on-site. A flash memory offers increased data storage and user downloadable software.

Easily programmable short-cut keys allow you to jump directly to frequently accessed functions, menus or screens. The larger interface screen can display measurement information and status, while the primary screen remains visible.



Thermo Scientific<sup>™</sup> Model 43*i*-HL<sup>™</sup> High Level SO<sub>2</sub> Analyzer



## thermo scientific

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

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) mg			
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 < 100ppm			
Sample flow rate	0.5 liters/min. (standard) 1 liter/min. (optional)			
Interferences	< lower detectable limit except for the following:			
EPA levels	NO: < 3 ppb, tested at 500 ppb, M-Xylene < 1 ppb, tested at 200 ppb, $\rm H_2O<2\%$ of reading, tested at 2% $\rm H_2O$ absoluteg			
Operating temperature Performance specifications based on operation within 20°-30° C rails Instrument may be safely operated over the range of 0°-45° C				
Power requirements	100 VAC, 115 VAC, 220-240 VAC +/-10% @ 165W			
Size and weight	16.75" (W) × 8.62" (H) × 23" (D), 55 lbs. (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)				

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 products.

Ordering information Model 43*i*-HL SO<sub>2</sub> Analyzer

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

i. voltage options				
A = 120 VAC50/60 Hz (standard)				
B = 220 VAC 50/60 Hz				
J = 100 VAC 50/60 Hz				
2. Internal zero/span				
N = No zero/span assembly (standard)				
Z = Internal zero span assembly				
H = Heated kicker (no zero span)				
Y = Heated kicker w/ internal zero/span assembly				
S = Oxygen sensor with no zero/span				
R = Oxygen sensor with zero/span				
T = Oxygen sensor with heated kicker, no zero/span				
K = Oxygen sensor with heated kicker and zero/span				
3. Optional I/O				
A = None (standard)				
C = 0-20, 4-20mA current output – 6 channels, 0-10v analog input – 8 channel				

4. Mounting hardware

A = Bench mounting and ears/handles, EIA

#### Your Order Code: Model 43i-HL

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## USA

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## Find out more at thermofisher.com/43i-HL

