# Thermo Scientific Model 43*i* Series Analyzers with Oxygen Sensor Module

Pulsed fluorescence gas analyzer with paramagnetic sensor technology

The Thermo Scientific<sup>™</sup> Model 43*i* Series Analyzers with Oxygen Sensor Module is available with paramagnetic sensor technology for the measurement and correction of oxygen concentrations.

- Paramagnetic sensor technology
- Adjustable ranges
- Real-time correction of SO<sub>2</sub> readings
- User selectable 0<sub>2</sub> correction concentrations



The pulsed fluorescence technology, utilized in the standard Thermo Scientific Model 43*i* analyzer, combined with the paramagnetic oxygen sensor offers unsurpassed detection specificity and long term stability.

The paramagnetic oxygen sensor gives the source measurement of  $SO_2$  extended capabilities including the ability to read and report oxygen concentrations within the sample stream up to 100%.

Additionally, programming allows the user to correct the  $SO_2$  reading for the amount of oxygen in the sample.

Selectable  $O_2$  concentrations can be used as the correction factor. (i.e.  $SO_2$  corrected to 6%  $O_2$  or any other percentage.)

Developed on the renowned iSeries platform, the Model 43*i* i Sulfur Dioxide Gas Analyzer with Oxygen Sensor Module offers limited maintenance and exceptional ease of use.

*i*Series features also include:

- Rack mountability
- Ethernet port & connectivity options
- Flash memory for increased data storage
- Easily programmable short-cut keys
- Large interface screen





# Thermo Scientific Model 43*i* Sulfur Dioxide Gas Analyzer With Oxygen Sensor

Measurement Range	User selectable to 100% 0 <sub>2</sub>		
Repeatability	+/- 0.1% 0 <sub>2</sub>		
Zero Drift (24 hour)	+/- 0.1% 0 <sub>2</sub>		
Response Time	< 2.5 seconds to 90% FS		
Linearity	+/- 0.1% O <sub>2</sub>		
Operating Temperature	41°F - 104°F (5°C - 40°C)		
Temperature Coefficient Zero Span	Within a range of $32^{\circ}F - 149^{\circ}F$ (0°C to + 65°C) < +/- 0.03% 0 <sub>2</sub> / °C < +/- 0.05% of 0 <sub>2</sub> reading / °C		
Outputs	Selectable voltage, RS232/RS485, TCP/IP, 10 status relays and power fail indication 0-20 or 4-20 mA isolated current output		
Inputs	16 digital inputs, 8 0-10Vdc analog inputs		
Physical Dimensions	16.75" (42.5cm) W x 8.62" (21.9cm) H x 23" (58.4cm) D, 55lbs (25kg)		

## **Ordering Information**

### Model 43*i* Sulfur Dioxide Analyzer with Oxygen Sensor Module

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

Model 43 <i>i</i> 1. Voltage options: A = 120 VAC 50/60 Hz (standard) B = 220 VAC 50/60 Hz J = 100 VAC 50/60 Hz	<ul> <li>5. Mounting Hardware:</li> <li>A = Bench mounting (standard)</li> <li>B = Ears &amp; handles, EIA</li> <li>C = Ears &amp; handles, retrofit</li> <li>Your Order Code: 43i</li> </ul>	<b>Model 43<i>i</i> HL</b> <b>1. Voltage options:</b> A = 120 VAC50/60 Hz (standard) B = 220 VAC 50/60 Hz J = 100 VAC 50/60 Hz	<b>3. Optional I/O:</b> A = None (standard) C = 0-20, 4-20mA current output - 6 channels, 0-10v analog input -
<ul> <li>2. Internal zero / span and/or</li> <li>Oxygen Sensor:</li> <li>N = No zero / span assembly (standard)</li> <li>Z = Internal zero span assembly</li> <li>P = Internal permeation span source w/ zero/span assembly</li> <li>L = Oxygen Sensor with No</li> <li>Zero/Span</li> <li>K = Oxygen Sensor with Zero/Span</li> <li>3. Kicker Type:</li> <li>S = Standard</li> <li>H = Heated</li> <li>4. Optional I/O:</li> <li>A = None (standard)</li> <li>C = 0-20, 4-20mA current output - 6 channels, 0-10v analog input - 8 channel</li> </ul>		<ul> <li>2. Internal zero / span and/or Oxygen Sensor:</li> <li>N = No zero / span assembly (standard)</li> <li>Z = Internal zero / span assembly</li> <li>H = Heated kicker (no zero span)</li> <li>Y = Heated kicker w/ internal zero/span assembly</li> <li>S = Oxygen Sensor with No Zero/Span</li> <li>R = Oxygen Sensor with Zero/Span</li> <li>T = Oxygen Sensor with Heated Kicker, No Zero/Span</li> <li>K = Oxygen Sensor with Heated Kicker and Zero/Span</li> </ul>	8 channel 4. Mounting Hardware: A = Bench mounting (standard) B = Ears & handles, EIA C = Ears & handles, retrofit Your Order Code: 43i-HL

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.

### For more information, visit our website at thermoscientific.com/air

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This product is manufactured in a plant whose quality management system is ISO 9001 certified.

USA 27 Forge Parkway Franklin, MA 02038 Ph: (866) 282-0430 Fax: (508) 520-1460 customerservice.aqi@thermofisher.com India C/327, TTC Industrial Area MIDC Pawane New Mumbai 400 705, India Ph: +91 22 4157 8800 india@thermofisher.com China +Units 702-715, 7th Floor Tower West, Yonghe Beijing, China 100007 +86 10 84193588 info.eld.china@thermofisher.com Europe Takkebijsters 1 Breda Netherlands 4801EB +31 765795641 info.aq.breda@thermofisher.com

