

Thermo Scientific NDIR Multi-Gas Analyzer, Model 60i

Five gas, non-dispersive infrared analyzer designed for full extractive systems



CONCENTRATIONS		
CO	76.9	PPM
CO2	12.1	%
NO	187	PPM
NO2	19.9	PPM
NOX	207	PPM
SO2	637	PPM
O2	8.4	%
SAMPLE 17:12		
RANGE 0.00 0.00 0.00 0.00		

User Interface
Concentration Screen



The Thermo Scientific Multi-Gas analyzer, Model 60i utilizes non-dispersive infrared (NDIR) optical filter technology to measure five gases in addition to an oxygen measurement via either chemical cell or paramagnetic technology.

CO CO₂ NO NO₂ SO₂ O₂

The Model 60i is the only gas analyzer with built-in safeguards to protect the instrument from moisture damage. The 60i utilizes a low sample flow rate that reduces the amount of maintenance due to high particulate and moisture loading on optical surfaces. The analyzer also continuously measures moisture and can shut off the sample pump and activating an alarm before high levels of moisture damage the sensitive components.

This analyzer is designed to eliminate the manual process of interference correction utilizing a built-in iterative algorithms to automatically correct for fractional effects of interfering gases which results in more accurate measurements.

Additionally, the Model 60i provides a direct NO₂ measurement in place of a "calculated" NO₂ method common with most other analyzers.

The wide dynamic range of the Model 60i can accommodate most power utility emission levels as well as those industries such as petrochemical, cement, pulp and paper, and other heavy industry applications.

To further protect the instrument from moisture damage, the Model 60i was designed to operate without the need for a permeation dryer, eliminating any component related moisture risks as well as lowering the cost to operate and maintain.

The intuitive interface of the Multi-Gas analyzer, Model 60i is easy to operate at any experience level. The easy to program short-cut keys allow you to jump to frequently accessed functions and menus or screens. The system can also be remotely accessed through the Thermo Scientific iPort software.

Key Features:

- Automatic and continuous moisture measurement
- Built-in iterative interference algorithms
- Direct NO₂ measurement
- Automatic alarm and shut off
- No permeation dryer needed
- Designed to meet US EPA 40CFR Part 60 requirements

Product Specifications

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 air quality products.

NDIR Multi-Gas Analyzer, Model 60i

Compound	O ₂	CO	CO ₂	NO	NO ₂	SO ₂
Minimum Range	0 - 5 %	0 - 100 ppm	0 - 5%	0 - 50 ppm	0 - 20 ppm	0 - 20 ppm
Full Scale Range	0% - 25%	0 - 2,500 ppm	0% - 25%	0 - 2,000 ppm	0 - 500 ppm	0 - 10,000 ppm
Lower Detection Limit		0.5 ppm	0.05%	0.5 ppm	0.2 ppm	0.2 ppm
Electrochemical Cell	0.20%					
Paramagnetic Cell	0.10%					
Zero Drift (24 Hours)		< 1 ppm	< 0.1%	< 1.2 ppm	< 1 ppm	< 0.5 ppm
Electrochemical Cell	< 0.2%					
Paramagnetic Cell	< 0.1%					
Zero Drift (7 Day)		< 3.0 ppm	< 0.5%	< 5.0 ppm	< 3.0 ppm	< 3.0 ppm
Electrochemical Cell	< 0.2%					
Paramagnetic Cell	< 0.1%					
Span Drift (24 Hours)		< 1% of span	< 1% of span	< 1% of span	< 1% of span	< 1% of span
Electrochemical Cell	< 0.2%					
Paramagnetic Cell	< 0.1%					
Span Drift (7 Day)		< 1% of span	< 1% of span	< 1% of span	< 1% of span	< 1% of span
Electrochemical Cell	< 0.2%					
Paramagnetic Cell	< 0.1%					
Accuracy		+/- 2% of span	+/- 2% of span	+/- 2% of span	+/- 2% of span	+/- 2% of span
Electrochemical Cell	+/- 0.25 % of span					
Paramagnetic Cell	+/- 0.1 % of span					
Response Time		70 seconds	70 seconds	70 seconds	70 seconds	70 seconds
Electrochemical Cell	60 seconds					
Paramagnetic Cell	45 seconds					
Linearity		2% of full scale or 5% of measured value (whichever is smaller)				
Electrochemical Cell	0.20%					
Paramagnetic Cell	0.10%					
Zero Noise	0.050%	<0.2 ppm	0.03%	<0.2 ppm	<0.1 ppm	<0.1 ppm
Display Resolution		0.1 ppm	0.01%	0.1 ppm	0.1 ppm	0.1 ppm
Electrochemical Cell	0.1%					
Paramagnetic Cell	0.01%					
Repeatability	1% of range					
Flow Rate	1.0 liter per minute					
Operating Temperature	5°C - 45°C (in non-condensing environments)					
Power Requirements	100 VAC, 115 VAC, 220-240 VAC +/- 10% at 275 watts					
Size and Weight	425mm (16.75") (W) x 219mm (8.62") (H) x 584mm (23") (D), 22.2kg (49lbs)					
Outputs	6 analog outputs selectable voltage, 6 additional optional outputs available					
Inputs	10 digital inputs (standard) or 16 digital inputs with an optional I/O board					
Precision (% of point)	+/- 1%, measured with single gases at the span concentration					

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

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