

Model 51i Total Hydrocarbon Analyzer

Utilizing Flame Ionization for detection of THC in emissions sources.



Key Features

- Flame Ionization Technology
- Adjustable Ranges
- Real Time correction of THC Readings

The Model 51i Total Hydrocarbon (THC) Analyzer combines proven Flame Ionization Detector (FID) technology, easy to use menu-driven firmware, and advanced diagnostics to offer unsurpassed flexibility and reliability. The Model 51i is available in Low Temperature and High Temperature versions.

The Model 51i uses a flame ionization detector, or FID, to measure organic gases and vapors. Flame ionization is a well-known technology that has been used in laboratories and industry for many years. Flame ionization detectors are highly efficient; they provide a wide linear range and sensitive detection of organic compounds.

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. We offer comprehensive, flexible support solutions for all phases of the product lifecycle. 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.

Product Specifications

Preset Ranges	0-1, 10, 100, 1000, 5000, 10000, and 50000 ppm
Custom Ranges	0-1 to 50000 ppm
Zero Noise	0.025 ppm RMS (300 second averaging time)
Minimum Detectable	0.050 ppm (300 second averaging time)
Zero Drift (24hr)	<0.20 ppm
Span Drift (24hr)	< 1% Full Scale
Response Time (90%)	5 seconds
Precision	+/-2.0% of reading
Linearity	+/-1.0% of span (at concentrations of 10% to 100% of span)
Sample Flow Rate	1-3 liter per minute
Makeup Air Flow Rate	200cc - 300cc Hydrocarbon free air
Fuel Flow Rate	~25cc Hydrogen or ~75cc H ₂ /He Mixture
Operating Temperature	+15°C to +35°C
Power Requirements	100 vac, 115 vac, 220-240 vac +/-10%, 50/60Hz, 300W
Size and Weight	16.75"(W) x 8.62"(H) x 23"(D), 60 lbs. (17.7 kg)
Outputs	Selectable Voltage, RS232/RS485, TCP/IP, 10 Status Relays, and Power Fail Indication 0-20 or 4-20 mA Isolated Current Output (optional)
Inputs	16 Digital Inputs (standard), 8 0-10vdc Analog Inputs (optional)

Ordering Information

Model 51i Total Hydrocarbon Analyzer

Choose from the following configurations/options to customize your own Model 51i

Model 51iHT

Voltage options:

A = 120 Vac 50/60 Hz (standard)

B = 220 Vac 50/60 Hz

J = 100 Vac 50/60 Hz

Internal zero / span:

M = No Internal Zero / Span, Mixed Fuel

N = No Internal Zero / Span, Hydrogen Fuel

Y = Internal Zero / Span, Mixed Fuel

Z = Internal Zero / Span, Hydrogen Fuel

Optional I/O:

A = None (standard)

C = 0-20, 4-20mA current output - 6 channel,

0-10v analog input - 8 channel

Mounting Hardware:

A = Bench mounting (standard)

B = Ears & handles, EIA

C = Ears & handles, retrofit

Model 51iLT

Voltage options:

A = 120 Vac 50/60 Hz (standard)

B = 220 Vac 50/60 Hz

J = 100 Vac 50/60 Hz

Internal zero / span:

N = No Internal Zero / Span, Hydrogen Fuel

Z = Internal Zero / Span, Hydrogen Fuel

Optional I/O:

A = None (standard)

C = 0-20, 4-20mA current output - 6 channel,

0-10v analog input - 8 channel

Mounting Hardware:

A = Bench mounting (standard)

B = Ears & handles, EIA

C = Ears & handles, retrofit

Your Order Code: 51i HT _ _ _ _

Your Order Code: 51i LT _ _ _ _



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