

Sulfate Particulate Analyzer, Model 5020i

Continuous, real-time monitor utilizing pulsed fluorescence technology



The Thermo Scientific Model 5020i is a continuous, real-time Sulfate Particulate analyzer. Utilizing pulsed fluorescence technology and thermal reduction techniques, this analyzer ensures accurate sampling and complete data capture of particulate laden flow.

After the particulate sample is drawn into the 5020i through a sample inlet it is then passed through the converter core where sulfate (SO_4) is converted to sulfur dioxide (SO_2) utilizing the thermal reduction process. The sulfur dioxide is then measured using the well established Thermo Scientific pulsed fluorescence analyzer technology.

The 5020i SPA increases analyzer up time with minimal effort by eliminating the need for batch sampling. It also gauges changes and spots trends accurately and immediately in a matter of minutes.

To continuously maximize efficiency for the operation at hand the 5020i performs direct and automatic measurement of background zero air without the need for purge gas.

Developed on the renowned iSeries platform the design of the 5020i SPA offers limited maintenance and exceptional ease of use.

iSeries features also include:

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

Key Features

- Enhanced optics for superior specificity
- Fast response time
- Direct and automatic measurement of background zero air
- Compatible with industry standard inlets and cyclones
- iSeries platform design provides reliability and ease of use

Sulfate Particulate Analyzer, 5020i

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.

Product Specifications

Preset ranges	0 - 5, 10, 25, 50, and 100 $\mu\text{g}/\text{m}^3$ (user adjustable ranges available)
Zero noise	0.20 $\mu\text{g}/\text{m}^3$ (15 minute cycle)
Lower detectable limit	0.5 $\mu\text{g}/\text{m}^3$ (15 minute cycle)
Span drift	+/- 1% (24 hours)
Response time	90 seconds
Sample flow	0.4 - 0.5 lpm
Operating temperature	20 - 30°C (detector module)
Denuder lifetime	30 days (rechargeable)
Converter core lifetime	> 6 months continuous operation (user replaceable)
Weight	Analyzer: ~20kg (detector module) Converter: ~17kg (sample conditioning module)
Dimensions	Analyzer: 42.55cm (W) x 21.89cm (H) x 58.42cm (D) Converter: 42.55cm (W) x 21.89cm (H) x 58.42cm (D)

Ordering Information

Model 5020i Sulfate Particulate Analyzer

Choose from the following configurations/options to customize your own Model 5020i SPA.

1. Nominal supply voltage and frequency

A = 120 Vac 50/60 Hz (standard)
B = 220 Vac 50/60 Hz

2. Internal zero/span

Z = Internal zero/span assembly (standard)
P = Internal permeation span source with zero/span assembly

3. Optional I/O

A = No optional I/O (standard)
C = 4-20mA current output, 6 channels
0-10v analog input, 8 channel

4. Mounting hardware

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

Other Options:

- Rack Mounts
- Rear Extender

Your Order Code: 5020i - _ _ _ _ _



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