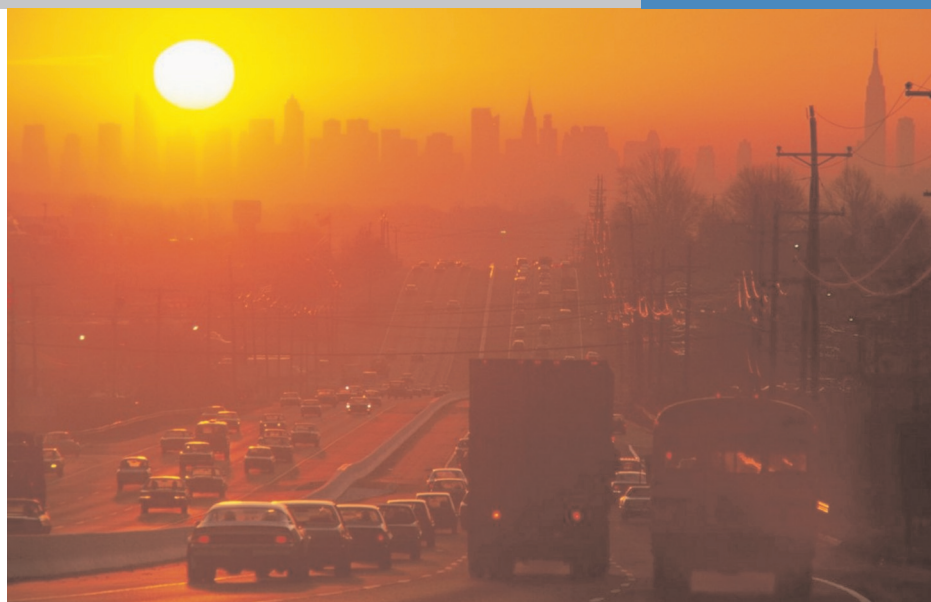


Model 5020 SPA Sulfate Particulate Analyzer

Continuous real-time monitor measuring total sulfate in ambient air

Features and Benefits

- User friendly - Easy to use “bluebox” technology and operator interface
- Continuous real-time analyzer means no batch sampling
- Direct measurement of background zero air without the need for purge gas
- Enhanced optics improve sulfate specificity
- Can be used with industry standard inlets and cyclones



Continuous Results

The Model 5020 SPA, Sulfate Particulate Analyzer represents a significant leap forward in continuous sulfate analysis. The Model 5020 converts SO_4 to SO_2 using a thermal reduction technique. SO_2 is then analyzed using pulsed fluorescence spectroscopy. The result is a continuous analyzer producing data points every 10 seconds. Isokinetic extraction of the sample assures complete capture of the particulate laden flow.

Not only is the SPA less complex to set-up and operate than other sulfate analyzers but it offers the same software environment as other Thermo gas analyzers. The SPA can also be used with industry standard inlets to assure consistency with other established particulate methods. With an improved optical bench, customers can be confident in a high precision trace level analyzer.

SPA, Sulfate Particulate Analyzer Specifications

| | |
|---------------|---|
| Preset Ranges | 0-10, 25, and 50 $\mu\text{g}/\text{m}^3$ (user adjustable ranges also available) |
|---------------|---|

| | |
|------------|---|
| Zero Noise | 0.20 $\mu\text{g}/\text{m}^3$ (15 minute cycle) |
|------------|---|

| | |
|------------------------|---|
| Lower Detectable Limit | 0.50 $\mu\text{g}/\text{m}^3$ (15 minute cycle) |
|------------------------|---|

| | |
|------------|-----------------|
| Span Drift | +/- 1% per week |
|------------|-----------------|

| | |
|---------------|------------|
| Response Time | 90 seconds |
|---------------|------------|

| | |
|-------------|---|
| Sample Flow | 1.2 liter/minute nominal at inlet 0.45 liter/minute into an analyzer |
|-------------|---|

| | |
|-----------------------|---------------------------|
| 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: ~8kg (sample conditioning module) |
|--------|---|

| | |
|------------|---|
| Dimensions | Analyzer: 42.55 cm wide x 21.89 cm high x 58.42 cm deep Converter: 42.55 cm wide x 17.15 cm high x 38.74 cm deep |
|------------|---|

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Thermo
ELECTRON CORPORATION

Environmental Instruments 27 Forge Parkway Franklin, MA
Air Quality Products

(886) 282-0430
(508) 520-0430
(508) 520-1460 fax

www.thermo.com/air