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S.L.

INGENIERIA ANALITICA

5504 Sulfur Specific Analyzer

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Overview

Sievers 5504 Sulfur Specific Analyzer (SSA) offers unsurpassed sensitivity and selectivity for the measurement of total or speciated sulfur in gaseous samples. Designed for complete versatility, the SSA 5504 can be used in the laboratory or remote locations for off-line, at-line or on-line discrete sample analysis. For simplified reporting, the specially designed software automatically collects and summarizes the analytical results.

The SSA 5504's modular design, which includes the gas-sampling hardware, isothermal oven and computerized user interface, allows for straight-forward and inex-

pensive maintenance. Employing Sievers patented Sulfur Chemiluminescence Detector (SCD) technology, the SSA 5504 provides a linear, equimolar response over a wide concentration area



Features and Specifications

Features

Turnkey Solution

The SSA 5504 was conceived and designed as a turnkey solution. Its straightforward and simple design lends itself to many different applications.

Sensitive and Selective

Sievers patented sulfur chemiluminescence technology provides unsurpassed sensitivity and selectivity.

Automated Calibration

Calibration is user-friendly and easy-to-perform with fully automated scheduling software, a dedicated calibration gas port and associated valve control.

User-friendly Operation

Easy-to-use, the SSA 5504 requires minimal operator training.

Inexpensive and Easy-to-perform Maintenance

Maintenance operations are straightforward and require minimal time to complete. The oil-free vacuum pump maximizes analyzer up-time. Modular design allows for easy and efficient diagnosis and component replacement.

Easily Upgradable

Analyzer operating firmware is easily upgraded by transfer through a Flash Memory card.

Full-range Service Support

Sievers offers a full range of factory and on-site services, including Preventive Maintenance and Extended Warranty Service Agreements, Instrument Start-up and Service Training.

Rugged and Reliable

Built to withstand the rigors of industrial environments and 24-hour use, the SSA 5504 is based on a strong heritage of proven reliability, producing accurate results and long term precision.

Specifications

Analytical Specifications

Detector Type Sulfur Chemiluminescence Detector (SCD)
Minimum Detectable Level 10 ppb sulfur
Sensitivity < 0.5 picograms sulfur/sec
Precision < 5% RSD (0-400 ppm range) over 24 hours
Linear Response 4 orders of magnitude
Typical Cycle Time (Speciated Sulfur) Between 1 and 10 minutes (application dependent)
Typical Cycle Time (Total Sulfur) < 1.0 minute
Dynamic Range 10 ppb - 10% (w/w)

Input/Output Specifications

Analog Outputs (1) isolated 4 - 20mA port, (1) 0 - 1 VDC detector output
Digital Outputs (1) analyzer "Ready" output, (1) analyzer "Fault" output
Bi-directional Communication Options 10/100 Base T Network, PC based modem, Modbus[®] RTU, ASCII or Modbus Plus
Data System Alarm Outputs One high and one low alarm per component

Data Acquisition Specifications

Personal Computer Specifications Minimum of 400 MHz Pentium[®] PC, Windows[®] NT 4.X[®] with 128 megabytes of RAM, 6.0 gig HD, 3.5" floppy disk drive and CD ROM drive.

Mechanical Specifications

Dimensions 23" x 20" x 17"
Installation Clearance 6" on sides and back of analyzer
Weight 100 pounds
Ambient Temperature Range: 0° to 45° C
Ambient Humidity Range: 0-95% non-condensing
Gaseous Sampling Interface: Discrete sample injections utilizing gas sampling valve. Two customer streams and one calibration stream with automated switching. The wetted pathway is passivated with SilcoSteel[®] treatment.

Analyzer Classification

Area Classification General purpose. Climate controlled environment.
Compliance UL, CL

Utilities

Analyzer Air Quality ISA grade HC free
Carrier Gas Ultra High Purity (UHP) grade helium or hydrogen air
UHP Air < 1 ppm hydrocarbons and < 5 ppm water
Hydrogen Quality 99.995% UHP grade
AC Power 100/115/230 VAC at 50-60 Hz
Power Consumption 10 Amps

Product Literature

Click on any Product Literature title to download its PDF file.

Sulfur Chemiluminescence Detector
Nitrogen Chemiluminescence Detector

Publications

For more information on these publications, please contact us.

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Publications

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Sulfur and Nitrogen Chemiluminescence Detectors. Accessories, Standards and Consumables

Accessories

Item Description	Part Number
Stainless Steel Burner	ABI 00005-01
Model 350B to 355 Upgrade	PRD 23551 F
Flame Ionization Detector Adapter (Available for various GC's)	
Decoking Valve and Cable (Available for various GC's)	
Oil Free pump (Available for various voltages)	
Burner Covers (Available for HP 5890 and 6890)	



Standards and Consumables:

Item Description	Part Number
SCD Test Mix	NIP 00010 D
NCD Test Mix	NIP 00100-01
Ceramic Tube Package for Stainless Steel Burner	AAK 35512 C
NCD Test Mix	NIP 00100-01
Ceramic Tube Package for Stainless Steel Burner	AAK 35512 C
Synthetic Oil, 1 quart	MI 00075
Oil Filter Element for RV-5 Pump	HFL 00111 A
12-Month Maintenance Kit (for RV-5 pump systems)	PMK 55512 A