

2020 PGC-Chemi Specifications

Input/Output Specifications	
Analog Outputs for Total Sulfur	(1) isolated 4-20 mA port; (1) 0-1VDC detector output
Digital Outputs	(1) analyzer 'Ready' output ; (1) analyzer 'Fault' output
Bi-directional Communication Options	PC-based modem; Ethernet card
Data Acquisition Specifications	
Personal Computer Specifications	Complete, late-model computer, Windows 98/XP®, fold-down keypad
Software Specifications	C.I. Analytics' proprietary software, <i>SulfurWorks</i> , for instrument control, data acquisition, data storage, and data retrieval
Mechanical Specifications	
Dimensions	61" (H) x 27" (W) x 19" (D)
Installation Clearance	12" on sides and back of analyzer
Weight	Approximately 300 lbs.
Ambient Temperature Range	0° to 45° C
Ambient Humidity Range	0-95% non-condensing
Process Stream Sampling (for sample in gaseous state)	Discrete sample injections utilizing gas sampling valve. Five customer streams plus one calibration stream with automated switching.
Analyzer Classification	
Area Classification	Class 1, Division II, Groups B, C, D
Compliance	Built to meet CSA/CENELEC requirements for Class 1, Division II, Groups B, C, D
Utilities	
Analyzer Air Quality	ISA-grade, HC-free
Carrier Gas	Ultra-High-Purity (UHP) grade helium or hydrogen air
UGP Air	< 1ppm hydrocarbons and < 5ppm water
Hydrogen Quality	99.995% UHP grade
AC Power	100/115/230VAC at 50/60Hz
Power Consumption	10 Amps
Analytical Specifications	
Detector Type	Sulfur Chemiluminescence Detector (SCD)
Minimum Detectable Level	Total Sulfur in gases: 10 ppb Total Sulfur in hydrocarbon liquids: 100 ppb Species Sulfur in Gases: 400 ppb
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)

This publication is not intended to form the basis of a contract and the company reserves the right to amend or alter the design of equipment or change its specification without prior notice.

For More Information:

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2020 PGC-Chemi

High-Class, Low-Level Analyzer for Total or Species Sulfur

THE 2020PGC -CHEMI

ANALYZER MEASURES

ON-LINE TOTAL SULFUR

OR SPECIES SULFUR

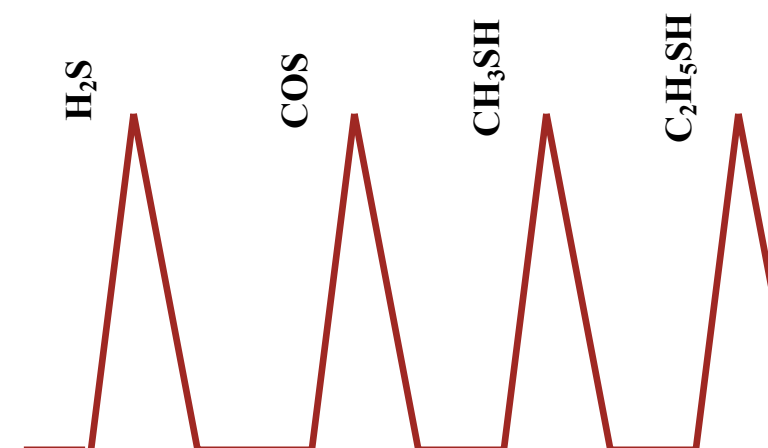
COMPOUNDS IN LIQUIDS

OR GASES MORE

LINEARLY, SIMPLY AND

RELIABLY THAN ANY

OTHER ON-LINE METHOD.



Turn-Key Solution

The Model 2020PGC-Chemi is C.I. Analytics' response to today's



process analysis requirements. It is simple in design and may be used as either an On-line Total Sulfur Analyzer or as an On-line Species Sulfur Analyzer. The 2020PGC-Chemi is shipped as a turn-key solution, having been optimized to perform exactly to each customer's unique specifications.

Ultra-Sensitive and Sulfur-Specific

C.I. Analytics' Sulfur Chemiluminescence Detector (SCD) provides unsurpassed sensitivity and selectivity when it comes to process sulfur analysis.

Rugged and Reliable

The 2020PGC-Chemi is intentionally designed to withstand the rigors of any process environment. It has been developed to perform reliably on a continuous basis, making it ideal for 24-hour, on-line applications. Maintenance is simple and inexpensive.

Powerful Data Management System



The 2020PGC-Chemi's basic operations, GC work, as well as data acquisition, storage, analysis, and retrieval are carried out by a Windows 98/XP®-based complete computer and C.I. Analytics' proprietary software, *SulfurWorks*. Calibration and sample measurement are performed quickly and easily. Anyone familiar with Windows-based programs will find the 2020PGC-Chemi to be both efficient and user-friendly. The built-in screen allows for real-time display of sample progress, while the fold-down keypad locks conveniently out of sight when not in use.

Multiple-Stream Selection

The 2020PGC-Chemi can be enhanced with the multi-stream selection option. Enabling this capability allows for fully-automated monitoring of up to six process streams. One stream may be reserved for automatic calibration.

Typical Applications

- Odorant and other sulfur compounds in Natural Gas
- PPB-level H₂S and COS in Ethylene
- Sulfur species in Butylene and Gasoline
- Sulfur in liquified Petroleum