Multiple Gas Analyzer #1

Keep your gas products in spec! Monitor gas product purity, natural gas, and ambient air quality.

Sounds expensive and complicated to operate? Not from SRI! The SRI Multiple Gas Analyzer #1 uses just ONE gas sampling valve and TWO analytical columns to perform the same separations that require multiple valves and columns in other systems. Best of all, the Multiple Gas Analyzer #1 can achieve ppm to 100% concentrations with a single injection!

- Separates multiple gases with a single injection
- Very tolerant of user adjustments and timing variations
- Simpler than other multi-gas capable GC systems
- Multiple gas analysis in a compact unit

19.5”W x 14.5” D x 12.5” H footprint

Heated Valve Oven
1m (3’) Molecular Sieve packed column separates H₂, O₂, N₂, CH₄ & CO
10 Port Gas Sampling Valve and 1mL Sample Loop
Sample In and Out for Valve Injection

On-column Injector
2m (6’) Silica Gel packed column separates CO₂ & C₂-C₆

TCD Detector - universal response, 250ppm to 100% detection range
FID Detector - Hydrocarbon selectivity, 5ppm detection limits Methanizer in FID body- converts CO and CO₂ to Methane for FID detection
Temperature Programmable Column Oven

Specifically Designed for Separation of Whole Gas Components and Natural Gas Samples
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Separating out the hydrocarbon components of natural gas facilitates accurate BTU quantification. This compositional analysis of a natural gas standard by an SRI Multiple Gas Analyzer #1 shows good separation up to the pentanes. Performing compositional analyses of natural gas product before and after refining helps to maximize process efficiency and profit.

The basic Multiple Gas Analyzer #1 has a TCD detector only; this model provides analyses in the 250ppm to 100% range for fixed and natural gases. A second option is a TCD, Methanizer, and FID detector combination which adds 5ppm detection limits for CO, CO₂, and all hydrocarbon peaks; this model is useful for air quality monitoring and other applications. A third option is a TCD-HID detector combination, for detection limits in the 10ppm range for all analytes...the HID even sees hydrogen! Since we build each GC from the boards up, the Multiple Gas Analyzer #1 may be further customized to suit your application needs. With the optional built-in “whisper-quiet” air compressor, the Multiple Gas Analyzer #1 can be used with the SRI H2-100 hydrogen generator to separate multiple gases anywhere, without using compressed gas cylinders!

The same instrument produced this chromatogram, separating a sample mix of 1% fixed gas standard and ethane. With the built-in PeakSimple data system, the gas sampling valve was programmed to inject the sample loop contents into the carrier gas stream at 5 seconds, then rotate back at 6 minutes, after CO elution.

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(2022 pricing, prices subject to change, consult most recent price list.)

8610-0070 Multiple Gas Analyzer #1 GC with TCD detector $13,814.00
8610-0071 Multiple Gas Analyzer #1 GC with TCD, Methanizer, FID & built-in Air Compressor $20,029.00
8610-0072 Multiple Gas Analyzer #1 GC with TCD & HID detectors $20,009.00
8690-0070 Built-in Air Compressor, 120 VAC $769.00
8690-2270 Built-in Air Compressor, 220 VAC $769.00