



Refinery Gas Analyser

PG125



- Full Refinery Gas Analysis in a compact footprint
- Fast MicroGC analysis
- UOP539, DIN51666, ASTM D2163
- 19" standardised enclosure
- Programmable oven and FID for hydrocarbon analysis

Get ready for tomorrow's analytics

Refinery Gas Analyser - CompactGC^{4.0}

GAS offers a Refinery Gas Analyser in a compact 19" enclosure that measures the full range of permanent gases and C₁–C₆ hydrocarbons. The system delivers fast, accurate results while occupying minimal space. It is exceptionally stable and reliable, thanks to proven GC technologies and the use of durable diaphragm valves.

Principle of operation

The RGA, based on the CompactGC^{4.0} platform, features separate channels for the analysis of all required components (see Figure 1).

The upper channel analyses hydrogen (and helium), while channels 2 and 3 measure the remaining permanent gases. All three channels include a backflush system to protect the separation columns from higher-boiling components and employ Thermal Conductivity Detectors (TCD).

The lower channel features a programmable oven and Flame Ionisation Detector (FID) for the analysis of C₁–C₆ hydrocarbons (extendable to C₁₀ with a longer runtime), including isomers (see Figures 2 and 3 for chromatograms).

Instrument configuration

- GAS CompactGC^{4.0} with dual TCD and FID
- Seven capillary columns
- Heated valve oven with two 6-port and one 10-port diaphragm valve (rotary valves optional)
- Chromeleon CDS data system
- Runtime: 5 minutes
- Limit of detection: < 10 ppm (TCD)
< 1 ppm (FID)
- Repeatability: < 1% RSD

Results

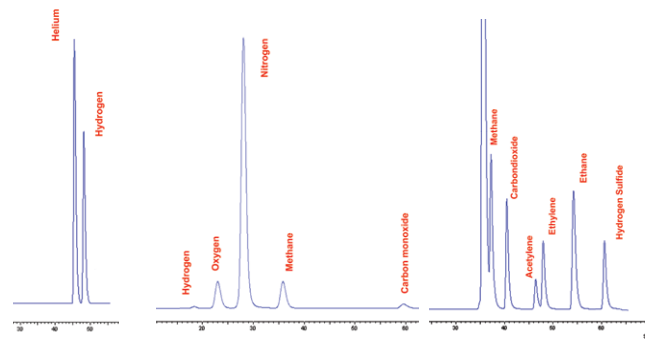


Figure 2 Chromatograms channel 1, 2 & 3

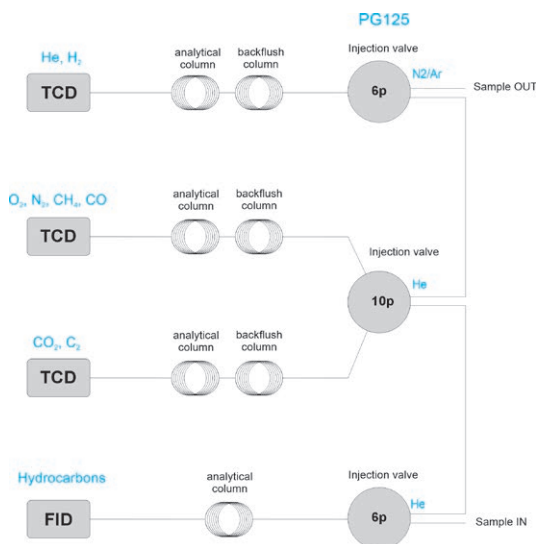


Figure 1 Diagram Refinery Gas Analyser (CompactGC^{4.0})

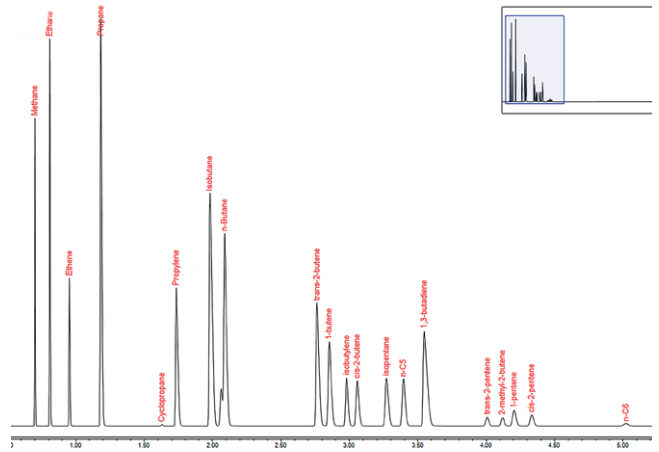


Figure 3 Chromatogram FID channel with programmable oven

Ordering information PG125 - ABCDE

For selecting options ABCDE (e.g. valve type and passivation, pump and vacuum sampling, rotameter and sample connections, pressure and moisture sensors, hydrogen sensor for safety shut-off, power plug type and more), [see the options table in the order guide](#).

About GAS

Global Analyser Solutions provides GC & GC-MS solutions for Energy, Refinery, Chemical and Environmental markets. Our analysers address a broad spectrum of measuring requirements with high precision and reliability. Please reach out for more information on our website. www.gassite.com