



Permanent gas analyser

PG215



- Compact 19" permanent gas analyser
- Robust analyser with reliable diaphragm valves
- TCD detection
- ASTM D1946, D2504, D2505

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PG215v3

Permanent gas analyser - CompactGC^{4.0}

The GAS permanent gas analyser (PGA) is the customised solution for analysing permanent gases, C₂ isomers and H₂S in various gas matrices such as hydrocarbon streams. The analyser complies with ASTM D1946, D2504 and D2505.

Principle of operation

Diagram 1 illustrates the principle of the permanent gas analyser. Hydrogen (H₂), oxygen (O₂), nitrogen (N₂), methane (CH₄), and carbon monoxide (CO) are analysed on column 3 (Molsieve), while carbon dioxide (CO₂), ethylene, ethane, acetylene, and hydrogen sulphide (H₂S) are analysed on column 2 (Hayesep). Carbonyl sulphide (COS) can also be measured. Column 1 (Hayesep) is used to backflush propane and higher-boiling components to vent. The detector used is a Thermal Conductivity Detector (TCD).

Instrument configuration

- GAS CompactGC^{4.0} with single TCD
- Three micro packed columns
- Heated valve oven with two 6-port valves (rotary valves optional)
- Runtime: 7 minutes
- Limit of detection: < 10 ppm (for all components except H₂ using He carrier gas;
- Repeatability: < 1% RSD

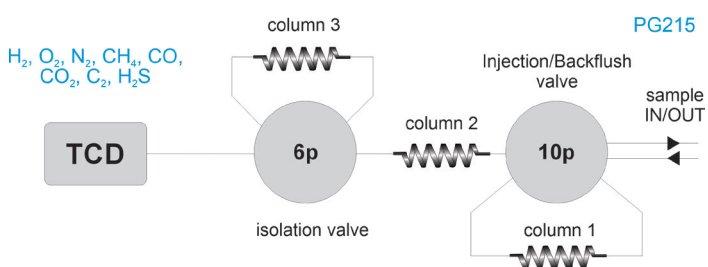


Figure 1 Diagram Permanent gas analyser (CompactGC^{4.0})

Results

Figure 2 shows the chromatogram of the permanent gas analyser based on CompactGC^{4.0}.

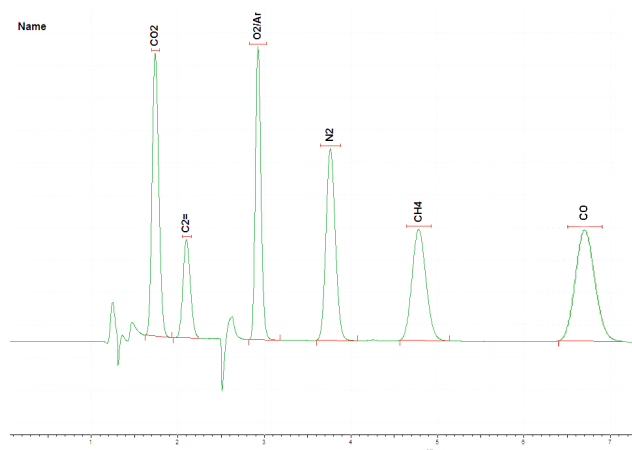


Figure 2 Chromatogram PGA

Ordering information PG215 - 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