



Refinery Gas Analyser

PG100



- Robust and cost effective
- Gaseous and liquefied gas
- Optional 4th analysis channel
- ASTM D1946, D2163, D2504, D2505, D2598, D3588, D7833, EN ISO 7941, EN 15984, DIN 51666, IP 405, UOP 539, GOST 31371

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PG100v2

Refinery Gas Analyser (RGA)

The GAS Refinery Gas Analyser PG100 complies with several international standards, including ASTM D1946, D2163, D2504, D2505, D2598, D3588, D7833, EN ISO 7941, EN 15984, DIN 51666, IP 405, UOP 539, GOST 31371

Principle of operation

The GAS Refinery Gas Analyser (RGA, see figure 1), measures all components of interest in only 7 minutes, including H₂S. Three independent channels are used for the analysis of hydrogen, permanent gases, and hydrocarbons. Micropacked columns offer low carrier gas consumption and are mounted in the valve oven for isothermal operation, while capillary columns are used in the temperature programmed oven for fast and detailed hydrocarbon analysis. Sulfinert tubing guarantees optimal analysis of sulphur components. Diaphragm valves and InstantConnect detector technology result in a robust and flexible instrument with >99% uptime.

Instrument specification

- Thermo GC1600 with two InstantConnect TCDs, FID, external valve oven, 5 valves, 6 packed columns and 2 capillary columns
- Runtime 7 minutes
- Minimum detectability < 0.01 %
- Repeatability < 1 %

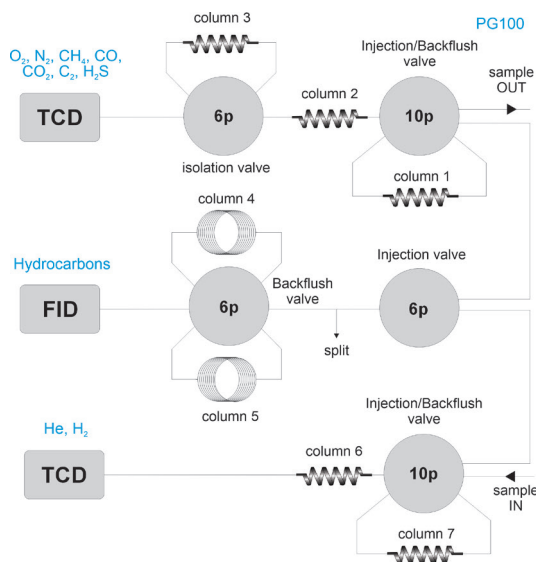


Figure 1 Diagram PG101 analyser

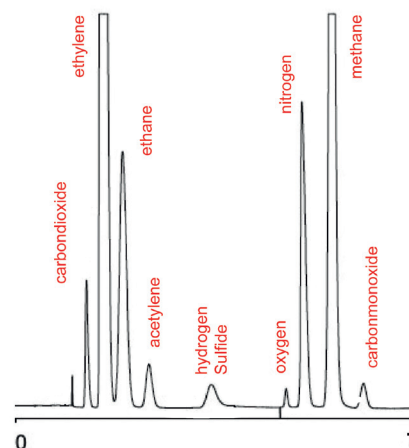


Figure 2 Chromatogram upper TCD channel (permanent gases)

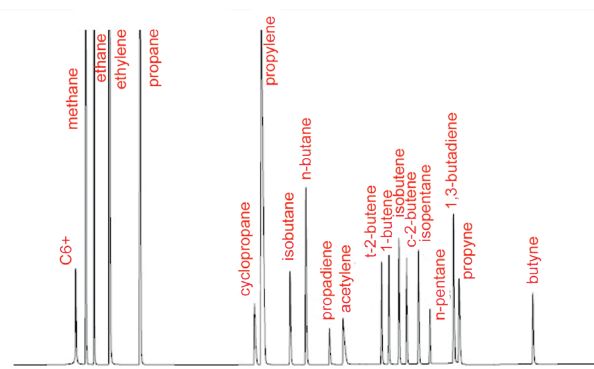


Figure 3 Chromatogram upper FID channel (C₁-C₆+ hydrocarbons)

Options

The RGA can be configured with a fourth channel, using for instant FPD or PFPD for selective sulphur analysis, PDD for ppb level permanent gases or FID for heavier hydrocarbons, or methaniser FID for low level CO and CO₂. A vaporiser or Securitiser with Liquid Sampling Valve is available for liquefied gas sample

Ordering information PG10X - ABCDE

code X	0	1	2	3
GC model, power	1600, 230V	1610, 230V	1600, 115V	1610, 115V

For the selection of 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