

Catalysis Reaction Gas Analyser CR105



- Compact 19" gas analyser
- Robust analyser with reliable diaphragm valves
- TCD detection

Get ready for tomorrow's analytics

Catalysis Reaction Gas Analyser

The GAS Catalysis Reaction Gas analyser measures permanent gases, light hydrocarbons and other gases such as light sulphur compounds and nitrous oxide, in various gas matrices

Principle of operation

Hydrogen (H_2), oxygen (O_2), nitrogen (N_2), methane (CH_4), and carbon monoxide (CO) are analysed on the upper channel, using a Molsieve column, while carbon dioxide (CO_2), ethylene, ethane, acetylene, and hydrogen sulphide (H_2S) are analysed on the lower channel using a QBond column. Carbonyl sulphide (COS) and nitrous oxide can also be measured. The upper channel is equipped with a backflush option, venting higher boiling components. The detectors used are Thermal Conductivity Detectors (TCD). See figure 1.

Instrument configuration

- GAS CompactGC^{4.0} with two TCDs
- Three capillary columns
- Heated valve oven with two 6-port valves (rotary valves optional)
- Runtime: 2 minutes
- Limit of detection: < 10 ppm
(for all components except H_2 using He carrier gas;
- Repeatability: < 1% RSD

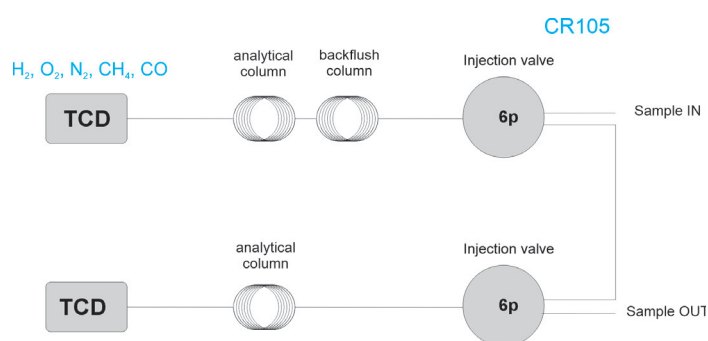


Figure 1 Analyser diagram

Results

Figures 2 and 3 show the chromatogram of both channels.

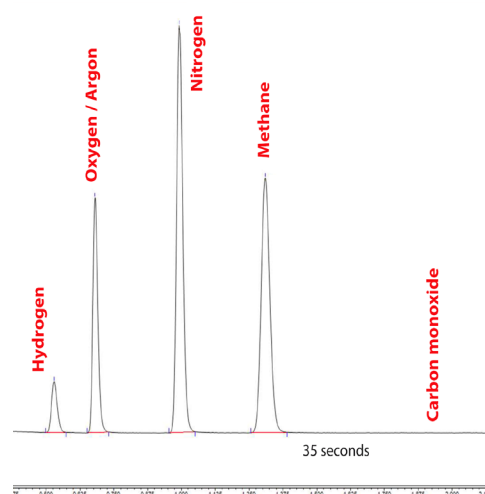


Figure 2 Example chromatogram upper channel

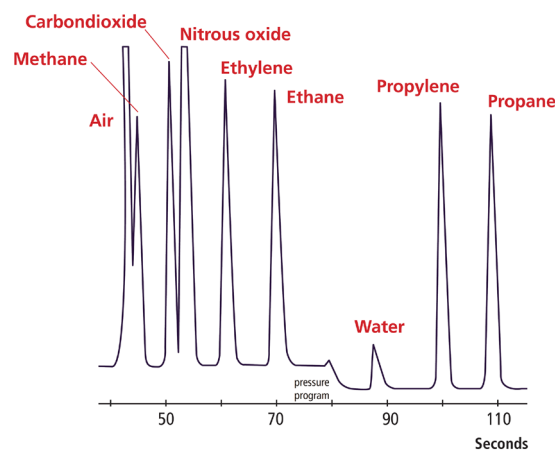


Figure 3 Example chromatogram lower channel

Ordering information CR105 - 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