

Application
Data Sheet

No. 17

System Gas Chromatograph

High Sensitive CO, CO₂, CH₄ Analysis
Nexis GC-2030CCC1
GC-2014CCC1

This system is designed to measure a trace amount of carbon monoxide (CO), methane (CH₄) and carbon dioxide (CO₂) in a gas sample. The sample is injected automatically through a 10-port valve. CO and CO₂ are reduced to CH₄ by means of a nickel catalyst and detected by a flame ionization detector (FID). If a sample contains a high concentration of CO, CO₂ and CH₄, a TCD can be used instead of an FID. If the matrix contains O₂, the concentration should be less than 0.1%. The system includes LabSolutions GC workstation software.

Analyzer Information

System Configuration:

One valve / two packed columns / Methanizer with FID detector

Sample Information:

CO, CO₂, CH₄

Concentration Range:

No.	Name of Compound	Concentration Range	
		Low Conc.	High Conc.
1	CO	1.0ppm	100ppm
2	CO ₂	1.0ppm	100ppm
3	CH ₄	1.0ppm	100ppm

Detection limits may vary depending on the sample. Please contact us for more consultation.

System Features

- Single channel with packed columns
- Hydrocarbons are backflushed by the pre-column while trace CO, CO₂, and CH₄ pass through a methanizer and detected with FID
- 6 minutes analysis time

Typical Chromatograms

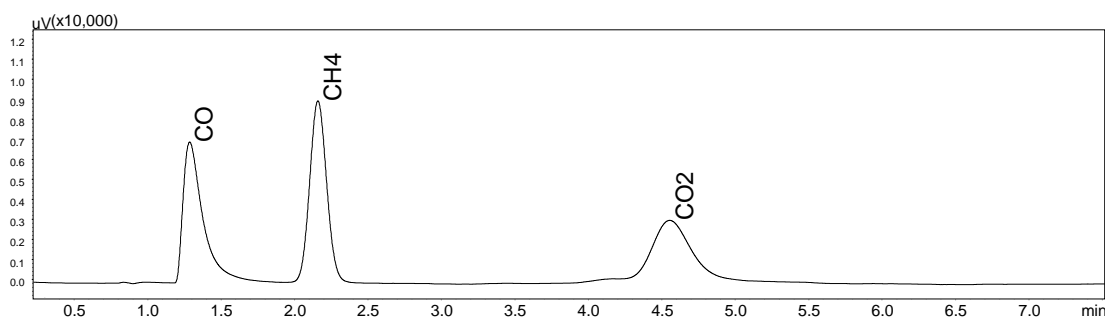


Fig. 1 Chromatogram of FID

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