

# Gas Chromatography–Mass Spectrometry System with TCD and FID for Gas Analysis

This configuration is focused on the measurement of gaseous samples and light volatile components, including permanent gases and low-molecular hydrocarbons. It enables the separation of gas mixtures followed by selective detection using multiple complementary detector types.

The platform combines mass-selective detection with thermal-conductivity and flame-ionization detectors to cover a broad range of gas-phase analytes. Permanent gases such as hydrogen and carbon monoxide are determined using thermal conductivity detection, while carbon dioxide and hydrocarbon species are evaluated by FID and mass spectrometry. The system supports both qualitative identification and calibration-based quantification in gas analysis workflows.



## Key Features

- **Dedicated analysis of gaseous and highly volatile compounds**
- **Combined MS, TCD, and FID detection in one platform**
- **Suitable for H<sub>2</sub>, CO, CO<sub>2</sub>, hydrocarbons, and VOC gases**
- **Complementary identification and quantification strategies**
- **Reproducible, method-based gas analysis workflows**



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