

# GC-QToF with GC and autosampler

The Agilent GC-QToF system is a high-resolution gas chromatography system coupled with quadrupole time-of-flight mass spectrometry, designed for the precise analysis of volatile and semi-volatile compounds. It offers superior mass accuracy, sensitivity, and resolution, making it ideal for advanced applications in environmental analysis, forensics, food safety, and chemical research. The system enables accurate identification and quantification of complex compound mixtures with high confidence.



## Key Features

### Gas Chromatograph (GC 8590)

- Temperature range: up to 450°C
- Fast oven ramping for quick analysis
- Equipped with high-performance HP-5ms column (non-polar, low bleed, 15 m × 0.250 mm internal diameter × 0.25 µm film thickness, max working temperature: 325 °C)

### Mass Spectrometer (GC-QToF 7280) Ionization: EI (Electron Ionization)

- Mass Range: 10–1050 m/z
- Sensitivity: <2 ppm with internal reference
- Data Acquisition Mode: Full scan, MS/MS

### Typical Data Generated

- Total Ion Chromatograms (TIC)
- Extracted Ion Chromatograms (EIC)
- High-resolution mass spectra with accurate mass measurements
- MS/MS fragmentation spectra for structure elucidation.



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