

 **QUAKELOGIC**

# QL-SpectraTrace GC-MS Analytical System

ADVANCED CHEMICAL ANALYSIS SYSTEM



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## ADVANCED CHEMICAL ANALYSIS SYSTEM

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The QL-SpectraTrace GC-MS Analytical System is a fully integrated Gas Chromatograph – Mass Spectrometer platform engineered for high-sensitivity chemical analysis in laboratory and research environments. The system combines a high-performance gas chromatograph with a quadrupole mass spectrometer, providing accurate compound separation, identification, and quantification across a wide range of analytical applications. It is designed for environmental, forensic, and general laboratory use, offering reliable performance, stable operation, and user-friendly workflow integration.



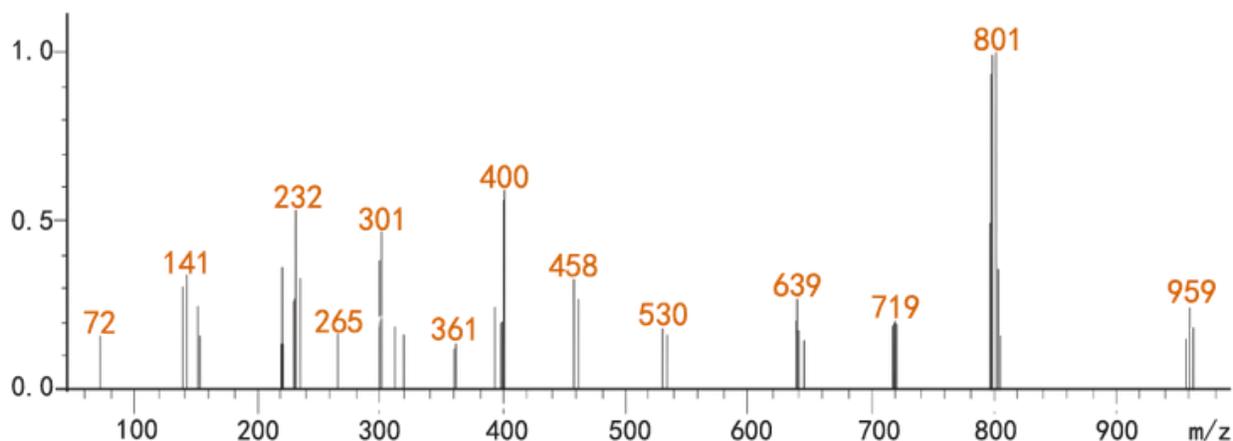
## Key Features:

- Quadrupole Mass Spectrometer with mass range of 1.5–1000 amu
- Electron Ionization (EI) source at 70 eV
- High scan speed up to 10,000 amu/sec
- Sub-picogram sensitivity (1 pg, S/N 30:1)
- Capillary GC system with Electronic Pressure/Flow Control (EPC)
- High-temperature GC oven ( $\geq 450^{\circ}\text{C}$ ) with fast ramp rates
- Integrated automatic liquid autosampler ( $\geq 100$  vial capacity)
- Turbo molecular vacuum pump with mechanical backing pump
- Full English data acquisition and analysis software
- NIST 2023 library compatibility

## ✓ Applications:

- The system is suitable for a wide range of analytical applications including environmental monitoring, forensic analysis, chemical research, and laboratory testing. It supports trace-level detection and high-throughput workflows, ensuring reliable and repeatable analytical results.

- **PBDE Compound Detection (GC-MS Analysis)**



# Technical Specifications

Mass Range:	1.5–1000 amu
Ionization:	Electron Ionization (EI), 70 eV
Scan Speed:	Up to 10,000 amu/sec
Detection Limit:	1 pg (S/N 30:1)
GC Injector:	Split/Splitless
GC Oven Temperature:	Up to $\geq 450^{\circ}\text{C}$
Flow Control:	Electronic Pressure/Flow Control (EPC)
Autosampler:	$\geq 100$ vial capacity, fully integrated
Vacuum System:	Turbo molecular pump + mechanical backing pump
Software:	Data acquisition, analysis, reporting, NIST 2023 compatible



# Connect with QuakeLogic – QL-SpectraTrace GC-MS Analytical System

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## Corporate Headquarters

QUAKELOGIC INC.  
4010 Foothills Blvd. Suite 103/194  
Roseville, CA 95747, USA

### Factory/Warehouse:

2008 Opportunity Dr. Suite 130,  
Roseville, CA 95678

## Executive Support Line

**+1 (916) 899-0391**

Direct access to executive consultation, technical support, and analytical system guidance.

Available Monday - Friday, 9 AM - 5 PM PST

## Strategic Inquiries

**[sales@quakelogic.net](mailto:sales@quakelogic.net)**

For analytical systems, laboratory solutions, chemical analysis platforms, and advanced QL-GC-MS integration projects.

## Our Commitment to Precision & Analytical Excellence

### Certified Quality Assurance

Compliant with advanced analytical and laboratory standards, ensuring accurate, reliable, and repeatable results across chemical analysis applications.

### Advanced Analytical Performance

Delivering high-sensitivity detection, precise compound identification, and stable system performance for demanding laboratory environments.

### Dedicated Client Success

Providing expert technical support, system integration assistance, and long-term service solutions for continuous and reliable operation.

## Explore Advanced Analytical & Laboratory Solutions



### Scan to Explore Advanced Analytical Solutions

Discover how QL-SpectraTrace GC-MS systems enable high-sensitivity chemical analysis, accurate compound identification, and seamless laboratory workflows.

Designed for environmental monitoring, forensic analysis, and research laboratories, delivering reliable, repeatable, and high-performance analytical results.

**[www.quakelogic.net](http://www.quakelogic.net)**