

QUAKELOGIC

ADVANCED TRIPLE

QUADRUPOLE LC-MS/MS

SYSTEM

Q1-SpectraTrace
QX



QL-SPECTRATRACE QX

ADVANCED TRIPLE QUADRUPOLE LC-MS/MS SYSTEM



DISCOVER HIGH-PRECISION PFAS ANALYTICAL PERFORMANCE

QuakeLogic's QL-SpectraTrace QX Advanced Triple Quadrupole LC-MS/MS System is a high-performance analytical platform engineered for ultra-trace PFAS analysis in environmental, drinking water, wastewater, soil, and regulatory laboratories. Combining a high-sensitivity triple quadrupole mass spectrometer with an integrated UHPLC system, advanced analytical software, and automated laboratory workflows, the QL-SpectraTrace QX delivers exceptional analytical sensitivity, quantitative accuracy, long-term operational stability, and supports EPA Method 533 and EPA Method 537.1 Version 2 analytical workflows.

- Improves laboratory efficiency through automated calibration, intelligent quality control, advanced data processing, and high-throughput analytical workflows.
- Reduces operating costs with automated sample preparation, reliable analytical components, and low-maintenance system architecture designed for continuous laboratory operation.
- Enhances operator productivity through intuitive software, automated batch processing, quality control management, and comprehensive application support.
- Provides reliable PFAS analysis with integrated UHPLC technology, high-sensitivity triple quadrupole mass spectrometry, and excellent long-term analytical reproducibility for accredited environmental laboratories.

STANDARD FEATURES »

- Triple Quadrupole Mass Spectrometer
- UHPLC Binary Gradient System
- Electrospray Ionization (ESI)
- High-Performance Collision Cell
- 384-Position Autosampler
- Automated Working Standard Preparation
- Automatic Sample Dilution
- Automated Sample Reanalysis
- Intelligent Quality Control
- EPA 533 & 537.1 Workflows
- Advanced Data Processing Software
- Windows 11 Compatible
- Instrument-Grade Nitrogen Generator
- Factory Tested
- Standard Warranty

KEY FEATURES

- Delivers precise and reliable PFAS analysis through a high-sensitivity triple quadrupole mass spectrometer, integrated UHPLC system, and advanced analytical software.
- Provides high-performance quantitative analysis with a mass range of 5–1,000 m/z, fast scan speed, and excellent analytical sensitivity.
- Electrospray ionization source supports positive and negative ionization modes for flexible analysis across a wide range of environmental applications.
- High-capacity autosampler with automated sample preparation, dilution, and reanalysis functions improves laboratory efficiency and analytical throughput.
- Integrated laboratory software supports EPA Method 533 and EPA Method 537.1 Version 2 workflows for regulatory PFAS analysis.
- Automated calibration, quality control, and batch processing provide accurate quantitative results and reliable laboratory operation.
- Instrument-grade nitrogen generator, integrated UPS, and automatic protection functions support reliable operation while reducing routine maintenance requirements.
- Complete installation, application training, technical support, and comprehensive documentation improve operator productivity and laboratory readiness.

PRODUCT FEATURES

Product Type

Advanced Triple Quadrupole LC-MS/MS System

Mass Spectrometer

Triple Quadrupole (QQQ) Mass Spectrometer

Mass Analysis

5–1,000 m/z Mass Range

20,000 amu/sec Scan Speed

Ionization Source

Electrospray Ionization (ESI) Source

Positive & Negative Ionization Modes

UHPLC System

Binary Gradient Solvent Delivery

18,000 psi Maximum Pressure

Sample Automation

384-Position Autosampler

Automated Sample Preparation & Dilution

Laboratory Software

Microsoft Windows 11 Professional Compatible

Advanced Data Processing

Analytical Workflows

EPA Method 533 & 537.1

Automated QC & Batch Processing

Electrical Requirements

Configurable to Customer Requirements

For more information about the features, specifications, and available configurations of the QL-SpectraTrace QX Advanced Triple Quadrupole LC-MS/MS System, please contact QuakeLogic.

SYSTEM CONFIGURATION

Component	Configuration
Product Type	Advanced Triple Quadrupole LC-MS/MS System
Mass Spectrometer	Triple Quadrupole (QQQ) Mass Spectrometer
Mass Range	5–1,000 m/z
Ionization Source	Electrospray Ionization (ESI)
UHPLC System	Binary Gradient Solvent Delivery
Operating Pressure	18,000 psi Maximum
Autosampler	384-Position Automatic Autosampler
Sample Preparation	Automated Sample Preparation & Dilution
Laboratory Software	Microsoft Windows 11 Compatible
Analytical Methods	EPA Method 533 & EPA Method 537.1 Version 2
Gas Supply	Instrument-Grade Nitrogen Generator
Power Protection	Uninterruptible Power Supply (UPS)

ANALYTICAL PERFORMANCE

Specification	Value
Mass Range	5–1,000 m/z
Scan Speed	≥20,000 amu/sec
MRM Sensitivity	≤1 pg
Dynamic Linear Range	≥6 Orders of Magnitude
Polarity Switching	≤50 ms
Maximum Pressure	≥18,000 psi
Flow Rate	1–4,000 µL/min
Autosampler Capacity	Up to 384 Samples
Acquisition Modes	Full Scan, SIM, MRM, Product Ion, Precursor Ion & Neutral Loss

STANDARD FEATURES & SUPPORT

AUTOMATED WORKING STANDARD PREPARATION

Automates preparation of working standards to improve laboratory efficiency and reduce manual sample handling.

COMPREHENSIVE QUALITY CONTROL PACKAGE

Supports regulatory environmental laboratory workflows with automated quality control evaluation and recovery verification.

TECHNICAL APPLICATION SUPPORT

Provides application guidance and technical assistance for environmental and PFAS analytical workflows.

OPTIONAL FEATURES & ACCESSORIES

OPTIONAL DUAL ESI/APCI CONFIGURATION

Supports both electrospray and atmospheric pressure chemical ionization for expanded analytical flexibility across diverse sample types.

TECHNICAL SPECIFICATIONS

Specification	Description
Product	QL-SpectraTrace QX Advanced Triple Quadrupole LC-MS/MS System
Product Type	Triple Quadrupole LC-MS/MS System
Mass Spectrometer	Triple Quadrupole (QQQ) with High-Performance Collision Cell
Ionization Source	Electrospray Ionization (ESI), Positive & Negative Modes
Mass Range	5–1,000 m/z
Scan Speed	≥20,000 amu/sec
MRM Sensitivity	≤1 pg
Dynamic Linear Range	≥6 Orders of Magnitude
Polarity Switching	≤50 ms
UHPLC System	Binary Gradient Solvent Delivery
Maximum Pressure	≥18,000 psi
Flow Rate	1–4,000 µL/min
Autosampler	Up to 384 Sample Positions
Column Oven	Ambient +5°C to 90°C
Laboratory Software	Microsoft Windows 11 Professional Compatible
Acquisition Modes	Full Scan, SIM, MRM, Product Ion Scan, Precursor Ion Scan & Neutral Loss Scan
Sample Automation	Automated Sample Preparation, Dilution & Reanalysis
Standard Preparation	Automated Working Standard Preparation
Installation & Training	Complete Installation, Operational Qualification & On-Site Application Training
Application Support	Environmental & PFAS Analytical Workflow Support
Analytical Methods	EPA Method 533 & EPA Method 537.1 Version 2
Data Processing	Automated Calibration, Quantitative Analysis & Batch Processing
Gas Supply	Instrument-Grade Nitrogen Generator
Power Protection	Uninterruptible Power Supply (UPS)
Documentation	Operating Manuals, Maintenance Guides & Application Methods
Warranty	Standard Manufacturer Warranty

**Corporate
Headquarters:**

- **QUAKELOGIC INC.**
- 2008 Opportunity Dr. Suite 130
- Roseville, CA 95678, USA
- Monday – Friday
- 9:00 AM – 5:00 PM (PST/PDT)

Contact Us:

- For product information, quotations, technical support, or partnership opportunities, our team is ready to assist you with professional and timely service.

Phone:

+1 (916) 899-0391

Email:

sales@quakelogic.net

Website:

<https://products.quakelogic.net/>

About QuakeLogic:

- QuakeLogic Inc. is a California-based engineering and technology company providing innovative, reliable, and high-quality solutions to customers worldwide.

Our Commitment

- At QuakeLogic, we are committed to quality, innovation, and customer satisfaction. We build lasting partnerships by delivering reliable solutions and dependable support.

Scan to View Product:



Q1-SpectralTrace QX

