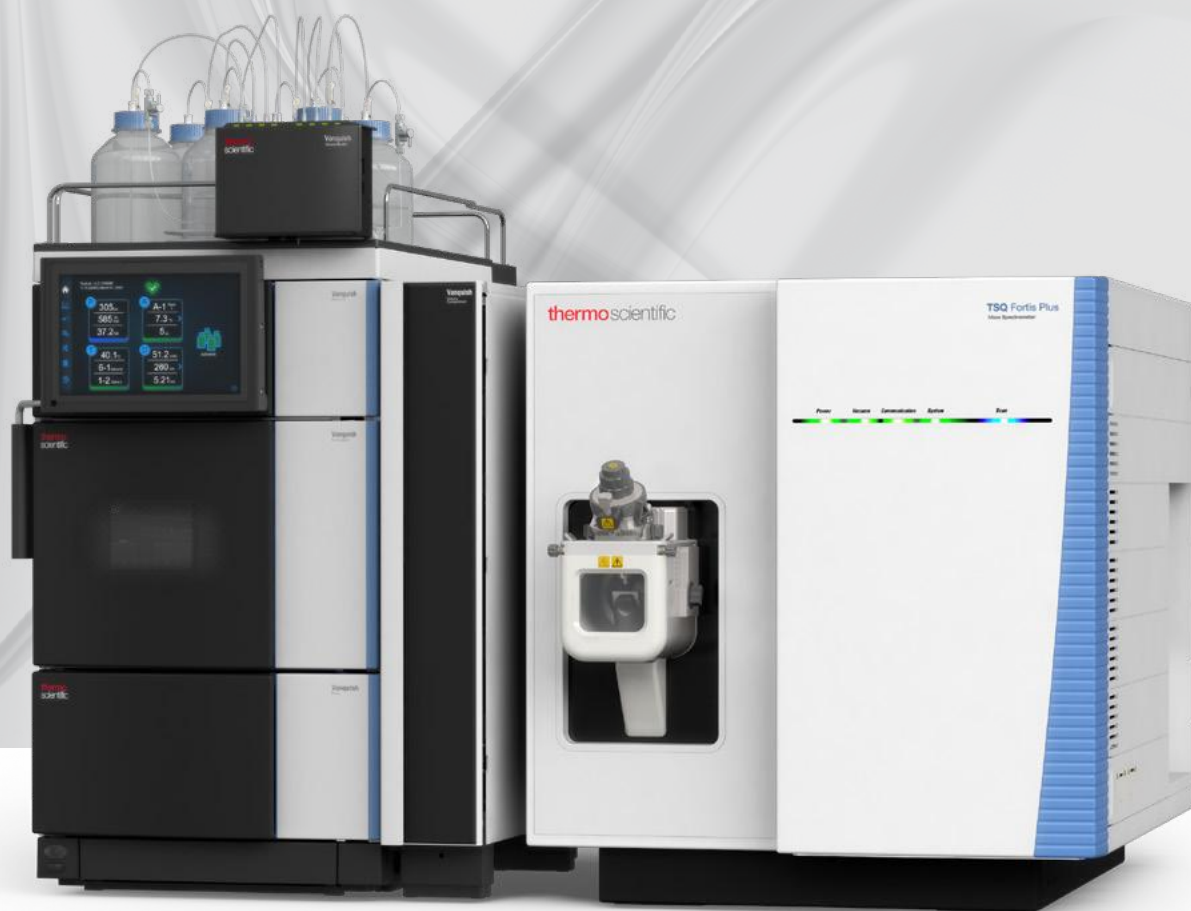


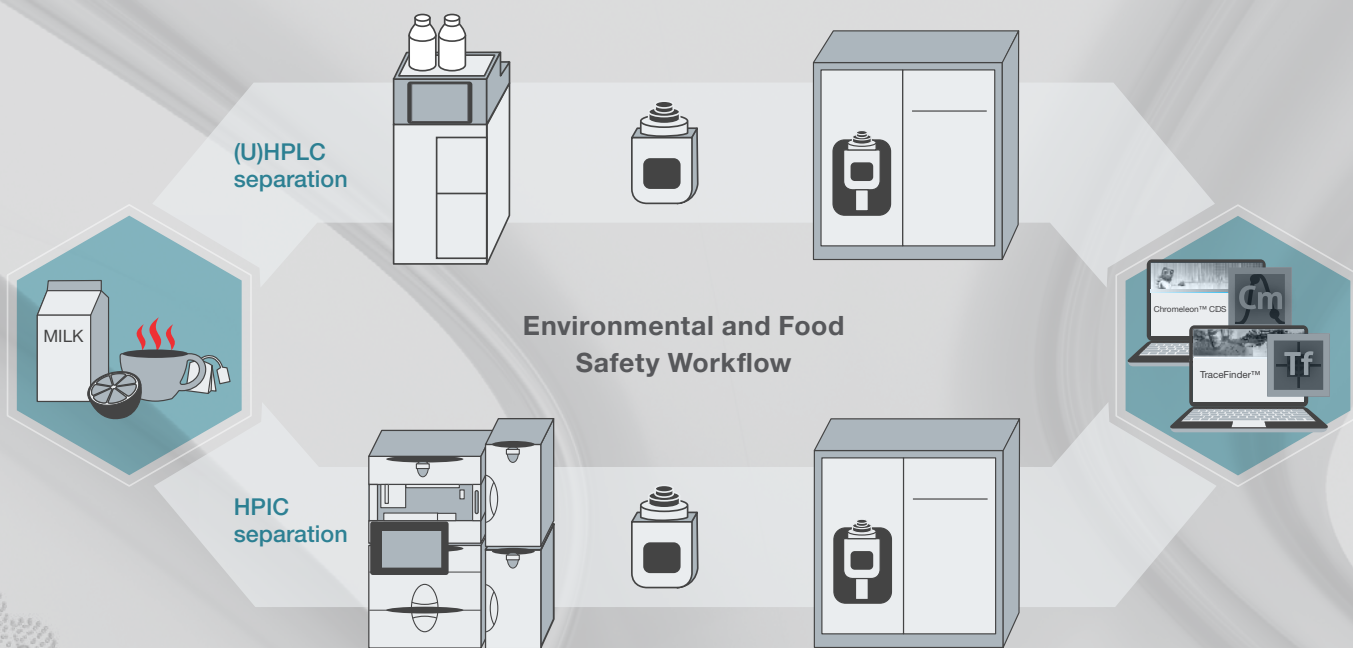
# Excel in productivity

Robust quantitative performance made simple



TSQ Fortis Plus triple quadrupole mass spectrometer

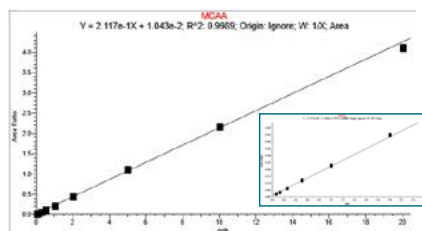
# Fast and robust quantitation for every Environmental and Food Safety workflow



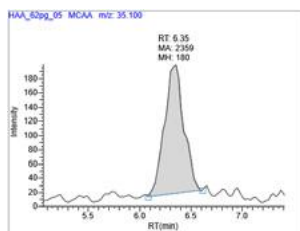
With evolving challenges in environmental and food safety applications, it's important to have the right platform for performing confident quantitation of multiple analytes in a complex mixture. The Thermo Scientific™ TSQ Fortis™ Plus mass spectrometer provides enhanced acquisition speed and sensitivity with superior robustness—enabling round-the-clock operation and the ability to report reliable results, rapidly.

- **Increased robustness**—Active Ion Management Plus (AIM<sup>+</sup>) includes the Matrix Separator Ion Guide (MSIG)—ensures extended system uptime by keeping the ion path clean
- **Maximum productivity**—Excellent quantitative capabilities with superior acquisition speeds enables fast turnaround times
- **Designed for ease-of-use**—Comprehensive workflows enabled by intuitive software that ensure confident analysis

Quantitation of disinfection by-products in drinking water at regulatory levels

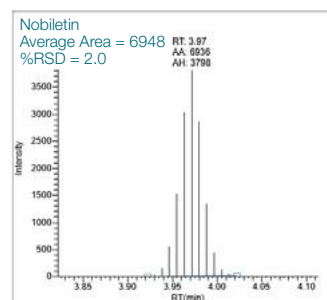


Haloacetic acids in drinking water

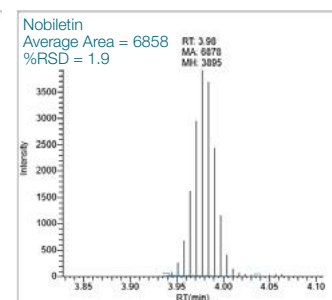


Exceeding limit of detection required for MCAA in drinking water: 0.0625 to 20 ppb

No compromise in sensitivity at <5 msec dwell times with or without polarity switching



With polarity switching



Without polarity switching

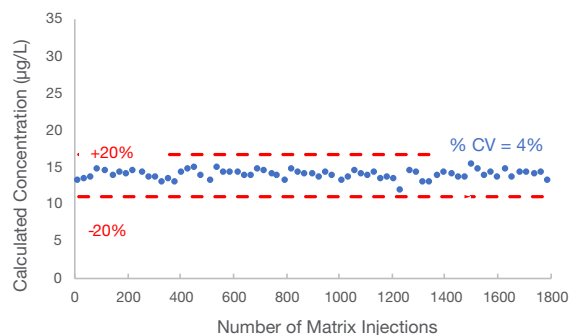
# High throughput with ease-of-use for Clinical Research and Forensic Toxicology



The TSQ Fortis Plus mass spectrometer provides a seamless user experience for clinical research laboratories that focus on processing and analyzing a large number of samples. Designed for ease-of-use, the TSQ Fortis Plus mass spectrometer portfolio enables confident quantitation of hundreds of samples in complex matrices every day.

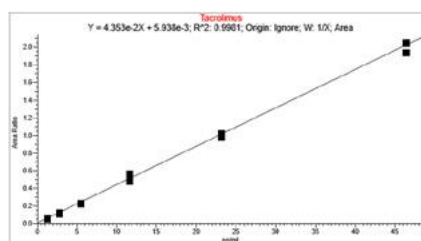
- **Enhanced robustness**—AIM+ and the MSIG enable throughput by extending system uptime
- **Increased usability**—Simplified user maintenance, an intuitive software experience, and Thermo Scientific™ mzCloud™ database integration
- **High throughput**—Proven single- and multi-channel chromatographic solutions customize workflow productivity

Meeting the requirement of every analytical laboratory in addressing large volumes of samples

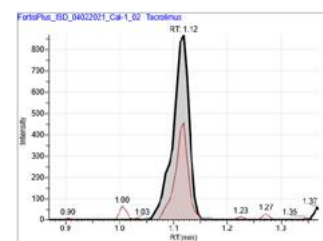


Tacrolimus quantitation in whole blood. Almost 1800 injections measured without any maintenance

Precision, accuracy, and sensitivity for demanding applications

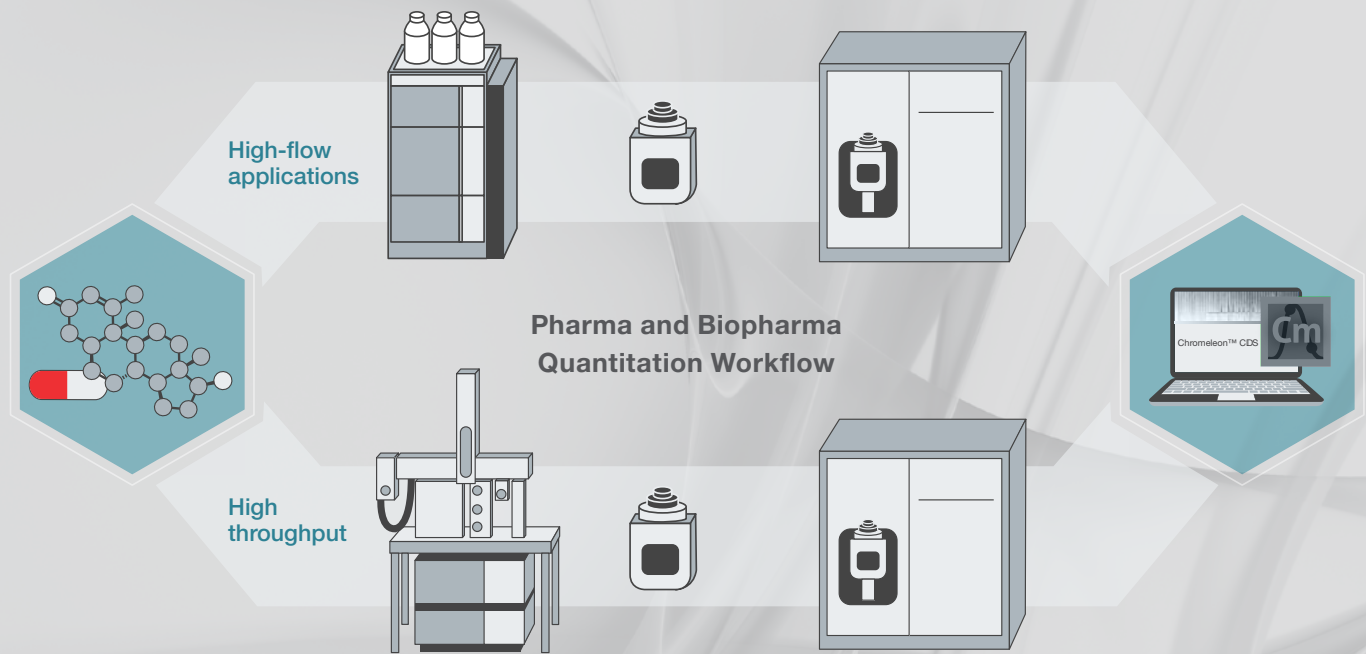


Tacrolimus exhibiting excellent linearity over the calibration ranges of 1.25 to 46.3 µg/L over five days





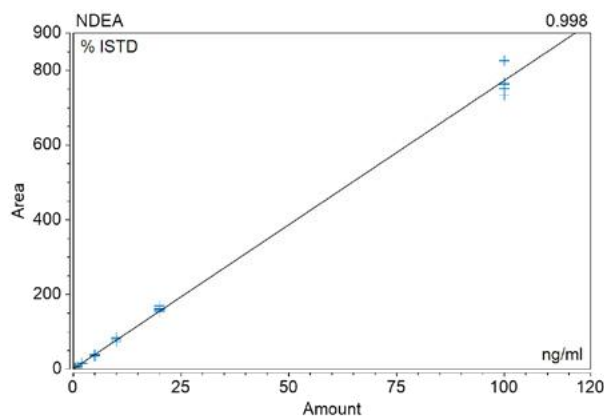
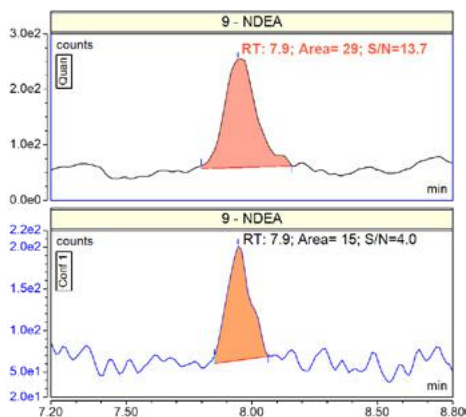
# Reliability and sensitivity to meet **Pharmaceutical** requirements



Pharmaceutical laboratories require ultimate reliability, sensitivity, and data confidence to meet analytical demands. The TSQ Fortis Plus mass spectrometer provides greater ease of use, next-level performance, and comprehensive workflows empowering the daily quantitative requirements of pharmaceutical labs.

- **Outstanding reliability**—robust and reproducible data for all molecule types provided by AIM+ and the MSIG
- **Sensitivity to meet demands**—enhanced Q2 collision cell transmission efficiency improves qualitative and quantitative reliability
- **High-throughput quantitation**—multiple liquid chromatography (LC) options combined with the speed of the TSQ Fortis Plus mass spectrometer help analyze hundreds of samples every day

## Ultimate productivity for QA/QC workflows



Improved nitrosamines response in APCI mode, leading to confidence in quantitative capabilities in Pharma QA/QC workflows

# Companion solutions for the TSQ Fortis Plus mass spectrometer

## Workflow-driven software, solutions, and support streamline your applications

Integrated workflow-driven software and solutions streamline everyday tasks—from instrument optimization and troubleshooting to routine method development and results reporting.



### Thermo Scientific™ TraceFinder™ software

Comprehensive quantitative workflows for all applications—from method development to report generation



### AppsLab method library

A comprehensive repository for application methods, data sets, and application notes



### Thermo Scientific™ Chromeleon™ software

Offers enterprise instrument control, data processing, and ability to address regulatory requirements



### Thermo Scientific™ mzCloud™ mass spectral library

The world's largest LC-MS<sup>n</sup> reference spectral library for an expansive and chemically diverse compound collection

Our global Centers of Excellence, in-your-lab training using your methods, and AppsLab library of analytical applications, ensure your success.

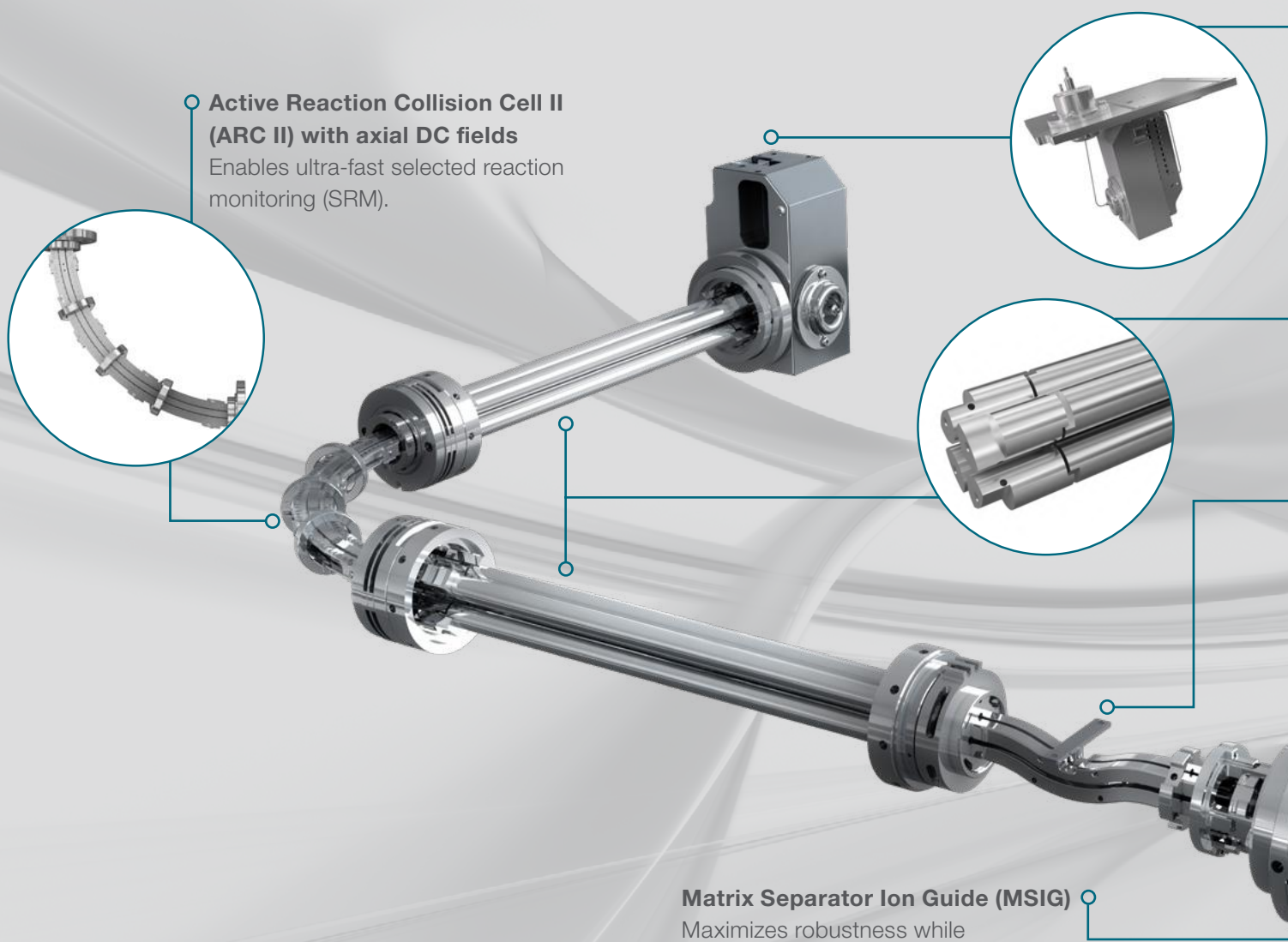
## Chromatography solutions for MS

The TSQ Fortis Plus mass spectrometer can be paired with a range of high-performance Thermo Scientific™ inlet systems.

- Thermo Scientific™ Vanquish™ Neo, Core, Flex, Horizon, and Duo UHPLC systems
- Thermo Scientific™ Transcend™ II system with Multi-channel and TurboFlow™ technology
- Thermo Scientific™ Transcend™ LX-1, LX-2, and LX-4 UHPLC systems
- Thermo Scientific™ Transcend™ TLX-2 and TLX-4 UHPLC systems
- Thermo Scientific™ Dionex™ ICS-6000 Capillary HPLC™ system
- Thermo Scientific™ Dionex™ Integriion™ HPLC™ system
- Thermo Scientific™ TriPlus™ RSH EQuan 850 system



# Advance your quantitative capabilities: TSQ Fortis Plus MS with **AIM+** Technology



**Active Reaction Collision Cell II (ARC II) with axial DC fields**  
Enables ultra-fast selected reaction monitoring (SRM).

**Matrix Separator Ion Guide (MSIG)**  
Maximizes robustness while minimizing ion loss.

## Robust, innovative design

### Benefits of the TSQ Fortis Plus mass spectrometer

#### More samples, more compound classes

The reliable instrument design and enhanced performance deliver intuitive software and comprehensive workflow solutions that meet experimental requirements today and tomorrow. The TSQ Fortis Plus mass spectrometer helps ensure superior productivity for quantifying hundreds of compounds of all types—in any matrix, by any user.

#### Robust quantitative productivity

The TSQ Fortis Plus mass spectrometer is designed to meet demands day after day, for every sample type in a variety of matrices. Equipped with a neutral blocker, ion beam guide, and segmented quadrupole mass analyzers, the TSQ Fortis Plus mass spectrometer delivers robust performance with unprecedented ease-of-use.



# Active Ion Management Plus (AIM+) Technology

The next step in precision design delivers the ultimate in ion management, inception to detection, from the Thermo Scientific™ OptaMax™ NG ion source housing to the enhanced electron multiplier. AIM+ Technology incorporates segmented quadrupoles and enhanced RF electronics to further optimize ion management precision, reliability, speed, and reproducibility.

## Robustness by design

The TSQ Fortis Plus triple quadrupole mass spectrometer is designed with robustness in mind. Regardless of your application, the TSQ Fortis Plus mass spectrometer will deliver results reliably and consistently, day after day.

### Enhanced dual-mode discrete-dynode electron multiplier detector

Extends multiplier lifetime with increased surface area. Maintains excellent linearity and dynamic range.

### QR4 segmented quadrupole mass filter with hyperbolic surfaces

Simplifies day-to-day operation by ensuring consistent performance and reproducible results across instruments and over time for increased productivity.

### Ion beam guide with neutral blocker

Provides robust performance and maximum sensitivity by blocking neutrals and efficiently transmitting ions.



### OptaMax NG ion source APCI-ready

Automates all gas and voltage connections for ease-of-use. Provides optimizable spray position for ultimate performance in HESI or APCI mode.



### Ion transfer tube and sweep cone

Provides maximum robustness and tool-free maintenance.

## Reducing the barriers to productivity: operational simplicity

With method templates, direct method transfer, and mzCloud database integration, loading or creating instrument methods is straightforward for a wide range of applications. Simplified optimization routines ensure maximum productivity.

## Speed with selectivity

The TSQ Fortis Plus MS delivers excellent quantitative performance in both selected reaction monitoring (SRM) and high-resolution SRM (H-SRM) modes, even when operated at short dwell times. Fast polarity switching speeds become ideal for UHPIC and HPIC separations.

## Your everyday partner for confident quantitation

The TSQ Fortis Plus mass spectrometer system software is an intuitive package designed to ensure ultimate productivity.

- **Simple maintenance**—easily clean ion transfer tube without breaking vacuum or requiring calibration
- **High speed and automation**—address hundreds of samples per day, or hundreds of transitions per sample
- **Dwell time prioritization routines**—enable tailored method modifications with minimal effort

# Transforming triple quadrupole mass spectrometers

The TSQ Fortis Plus mass spectrometer is one in a portfolio of latest-generation Thermo Scientific™ triple quadrupole mass spectrometers that offers confident quantitation every day, for every lab and every user.

These instruments are built on a foundation of shared, state-of-the-art hardware and software components. This makes it easier to transfer methods from one instrument to another when methods progress from single, sample-based experiments to validation and routine, high-volume targeted screening and quantitation.



## Almanac web-based monitoring and management

Stay connected to your science. See how the Thermo Scientific™ Almanac™ application can help you get the most out of your instruments.

[thermofisher.com/almanac](https://thermofisher.com/almanac)



## Technical and online support: peak performance for your instruments

Helping you keep your instruments running at peak performance is our goal. Whether you're looking for an instrument manual or spare parts, want to submit a repair request, or check on the status of your warranty or service contract, we have every support option you're looking for.

[thermofisher.com/technicalresources](https://thermofisher.com/technicalresources)



## Protecting your investments: unparalleled laboratory services

Unity™ Lab Services provides a single source for integrated lab service, support, and supply management. Our customized service offerings and world-class service experts have the flexibility and experience to address your laboratory's needs. We provide a complete portfolio of services and support solutions designed to help you improve productivity, reduce total cost of ownership, and ensure performance throughout your laboratory.

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