



XeVO™ | G3 QToF

Characterization
with complete
confidence

Waters

THE SCIENCE OF WHAT'S POSSIBLE.™

ULTIMATE PERFORMANCE

Ensure maximum coverage of analytes and with improved transmission low m/z ions, labile species, while still excelling in traditional biopharmaceutical workflows and addressing emerging needs to characterize new modalities.

CONNECTED PRODUCTIVITY

Harmonize workflows across development, manufacturing and QC by deploying the Xevo G3 QToF and the BioAccord™ System with ACQUITY™ Premier within the waters_connect™ ecosystem.

EXTENDED FLEXIBILITY

Improved quantitative capabilities, with wider inter- and intra-spectrum dynamic range for comprehensive quantitative/qualitative analysis, ideal for screening and targeted applications.

UNQUESTIONED CONFIDENCE

Ensure high quality data with consistent robustness and reproducibility through advances in ion optics, maintaining performance and productivity over a longer time period.

Complete Coverage for Confident Characterization

The Xevo™ G3 QToF, an analytical workhorse, is designed to characterize and quantify a diverse set of molecules.

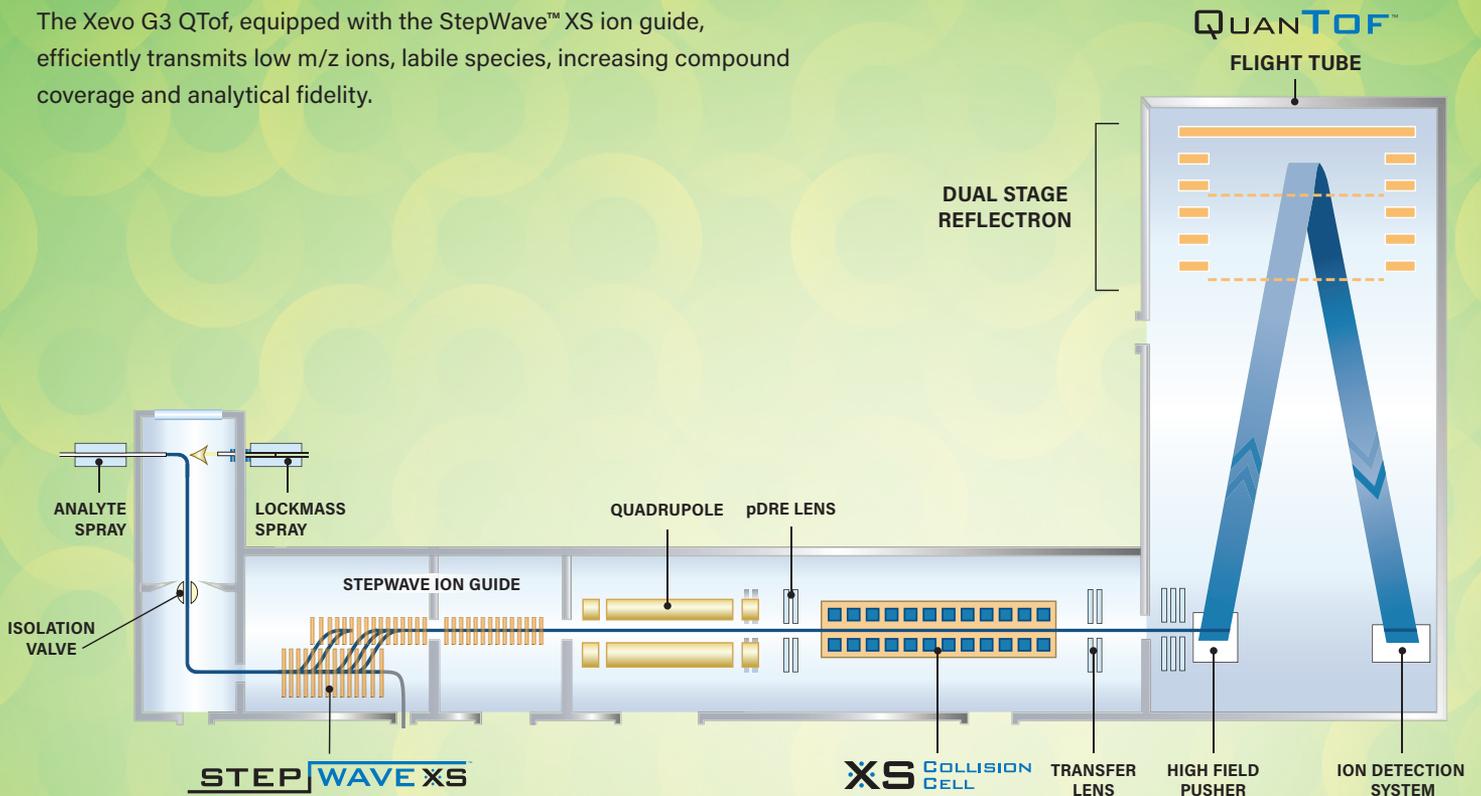
Ultimate Performance

Increase your application coverage

As labs extend their capabilities, more is required from their analytical systems. The Xevo G3 QToF incorporates new technology building blocks that improve a scientists' ability to characterize:

1. Complex biologics with inclusion of a m/z 16,000 calibration range and tailored informatics.
2. Challenging small molecules with updates to the ion optics and detection system that maximize transmission and dynamic range.

The Xevo G3 QToF, equipped with the StepWave™ XS ion guide, efficiently transmits low m/z ions, labile species, increasing compound coverage and analytical fidelity.



Extended application coverage with the latest technology.

Connected Productivity

Harmonize your workflows across the pipeline

Harmonizing workflows across development, manufacturing and QC is key to ensuring lab productivity. The Xevo G3 QToF is ideal for characterizing biomolecules and processes before transitioning to dedicated attribute monitoring assays on either the Xevo G3 QToF or BioAccord System with ACQUITY Premier.

The waters_connect Ecosystem offers seamless, compliant-ready workflows to understand and monitor biotherapeutic variation. Systems and users can be connected through waters_connect, with security-controlled access, full data traceability, with the operational efficiency and scalability of networked deployment.

Achieve robust and unbiased performance for analysis of your biotherapeutics with ACQUITY Premier Systems and Columns and an expanding array of informatics tools, including Peptide MAM, INTACT Mass, and CONFIRM Sequence applications.

waters_connect™ Platform

Peptide **MAM**

INTACT **Mass**

CONFIRM **Sequence**

UNIFI

The waters_connect software applications and workflows.

Characterization

Attribute Monitoring

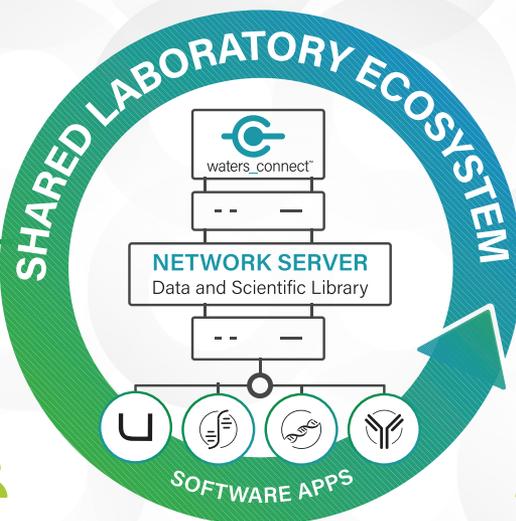
Routine Analysis/
QC Release

XeVO™ | G3 QToF

BioAccord™
SYSTEM

2x

2x



Attribute Characterization
LC-MS(/MS) Platforms

Deployable LC-MS Systems in
(cGMP) Attribute Analysis Labs

Harmonize your workflows with Xevo G3 QToF, the BioAccord System and tailored informatics.

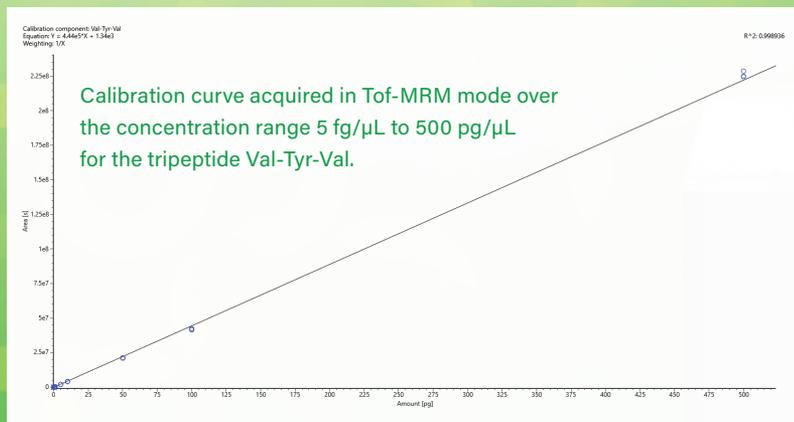
Delivering Qualitative and Quantitative Performance

Is it detected and how much is detected?

Analytical laboratories are under pressure to maximize system usage, so a flexible multifunctional instrument that can deliver high quality qualitative and quantitative data sets is critical.

The Xevo G3 QToF, has evolved to address those needs, with updates to core technology delivering up to 5 orders of linear dynamic range through application of adaptive intensity control for targeted Tof-MRM analysis.

For untargeted and screening experiments, with up to 4x increase in-spectrum dynamic range, the Xevo G3 QToF is able detect and quantify components of interest in the most challenging of complex matrices.



Utilizing Tof-MRM to answer critical questions.



Complete Confidence

High quality reliable data sets every time

Instrument stability and uptime are unquestioned necessities in a fast-paced high-throughput environment. The evolved design of the Xevo G3 QToF has been engineered to deliver consistent robustness and reproducibility, maintaining performance and productivity over a longer time period. With updated ion optics and optimized ion beam conditioning the Xevo G3 QToF is a true analytical workhorse that deliverables high quality data routinely.

Xevo G3 QToF

A benchtop quadrupole time-of-flight mass spectrometer that identifies, quantifies and confirms the broadest range of compounds in the most complex and challenging samples – a true analytical workhorse.

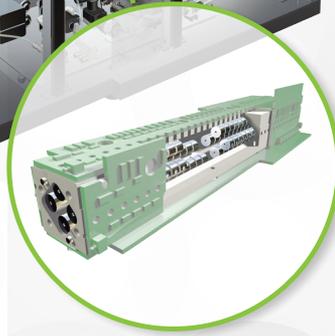
Stepwave XS

- The co-joined ion guide, efficiently transmits thermally labile species increasing compound coverage.
- The redesigned optics not only provides enhanced sensitivity for challenging compounds but further improves levels of analytical robustness.



Universal Ion Source

- The most extensive range of ion sources for the broadest range of analytes.
- Tool free design enables ease of use and simplifies routine maintenance.
- Source options are quickly interchangeable and ready to use within minutes.



QuanTof

Simultaneously delivers mass resolution, dynamic range, mass accuracy, and speed of analysis, so that the narrowest chromatographic peaks from the most complex sample matrices can be identified and quantified with no compromise in performance.



Dual Stage Reflection

Improves focusing of ions for high resolution spectra.

High Field Pusher

Increases duty cycle and instrument sensitivity.

ADC Detector

Provides 4 orders of in-spectrum dynamic range and 5 orders of inter-scan dynamic range for targeted analysis.

XS Collision Cell

- Focuses the ion beam for maximum transmission of ions to the oaToF mass analyzer.
- Allows rapid data acquisition with maximum sensitivity.

Unhindered Analytical Capabilities

Extending the reach of characterization

Having an extensive toolkit at your disposal protects against future unknowns and the ever-increasing complexity of samples.

The Xevo G3 QToF is equipped with the universal source architecture, maximizing versatility and minimizing downtime. With options including ESI, ESCI™, APCI, APGC™, ASAP™, UniSpray™, nanoFlow ESI, and DESI XS* the Xevo G3 QToF can be used for many different applications and molecule types — swap your source not your instrument.

Support of a range of inlets including ACQUITY Premier System, ACQUITY UPLC™ PLUS Series, ACQUITY UPLC M-Class, and ACQUITY 2D-LC* ensures your lab is equipped for the future and can handle challenging and complex samples.

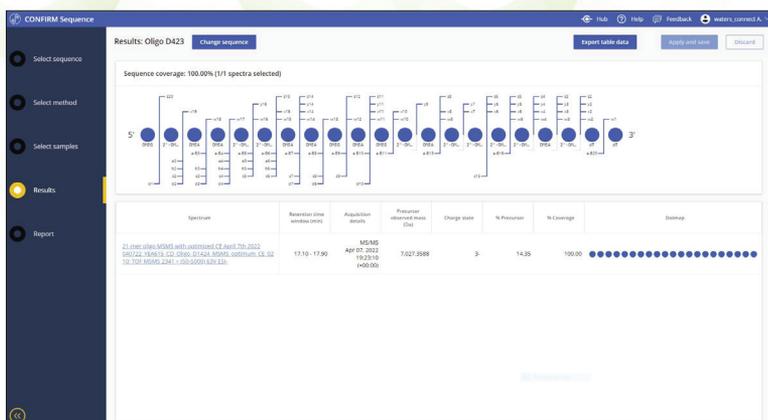
The Xevo G3 QToF is available on both our waters_connect and MassLynx™ Software platforms, providing the ultimate flexibility to meet your labs analytical requirements.

waters_connect

The modern, app-based software platform, waters_connect, offers seamless, compliant-ready workflows ensuring data traceability and transferability in a fast paced, highly connected laboratory.

MassLynx

The well-established MassLynx Software package delivers market-leading versatility and flexibility for all application areas.



Sequence coverage map of a 21mer heavily modified oligonucleotide within the CONFIRM Sequence application, displaying all the confirmed fragment ions.



* For specific configuration requirements consult with your Waters Representative.



XeVO™

G3 QToF

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