Delivering Performance and **SPEED**

xevo™ | MRT

Waters™

Resolution AND Speed Without Compromise

Whether you're in academia or industry achieve exceptional science - 100% of the time with the Xevo™ MRT Mass Spectrometer. This state-of-the art QTof delivers 100K resolution at 100 Hz with sub ppm mass accuracy for confident identification and greater productivity in your lab.

DELIVERING PERFORMANCE AT SPEED

The high resolution and mass accuracy of the Xevo MRT Mass Spectrometer are independent of acquisition rate. Working at **maximum resolution** ensures you can resolve analytes in complex matrices, providing **comprehensive, high accurate mass data** for scientific interpretation.

INCREASE COMPOUND IDENTIFICATION CONFIDENCE

Probe deeper at biologically relevant concentrations with high levels of mass accuracy. Search tolerances can be minimized resulting in efficient data review, improving turnaround times for increased lab productivity.

CONNECTED SOLUTIONS

A complete workflow for metabolomics, lipidomics, and metabolite identification through market leading chemistry and cutting-edge, informatics ensures your lab is operating with **maximum efficiency** – reducing the time to result.

EXCEPTIONAL SCIENCE - EVERY DAY

System performance is critical. From **instrument stability** and **robustness** for extended studies to **precision measurements** in every injection, innovative multi reflecting time-of-flight technology delivers **high quality experimental outcomes** for every lab, every day.

Extraordinary Performance

Without compromises

EXCEPTIONAL SCIENCE FOR EVERY LAB, SCIENTIST, PROBLEM, QUESTION, AND SAMPLE... SOLVED

The exceptional combination of high mass resolving power of 100,000 FWHM and mass accuracy of <500 part per billion (ppb) of the Xevo MRT Mass Spectrometer are achieved independent of acquisition rates, up to 100Hz. Maximum performance, matched to throughput levels that matter for complex and challenging analyses, increases statistical power and confidence in results.

FEELING TRAPPED?

Unlike other high-resolution MS technologies, multi-reflecting time-of-flight delivers mass resolution consistent over a broad *m/z* range independent of scan speed, even at the fastest acquisition rates for MS and MS/MS data, ensuring confident identification of analytes across a range of samples and matrices – an ideal solution for metabolite profiling and discovery.

Figure A.

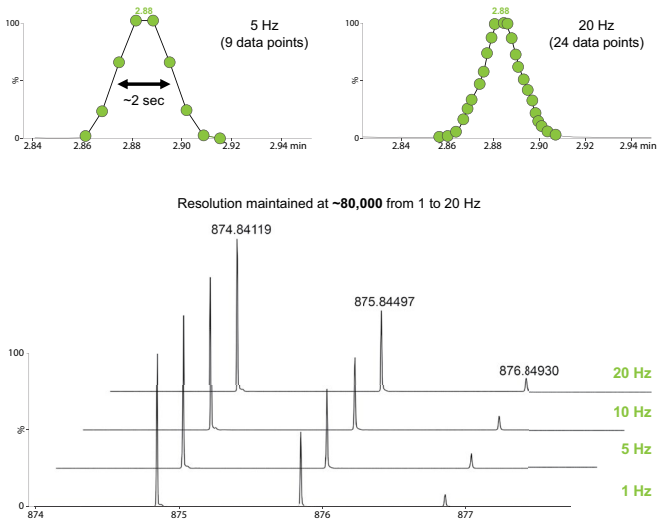


Figure B.

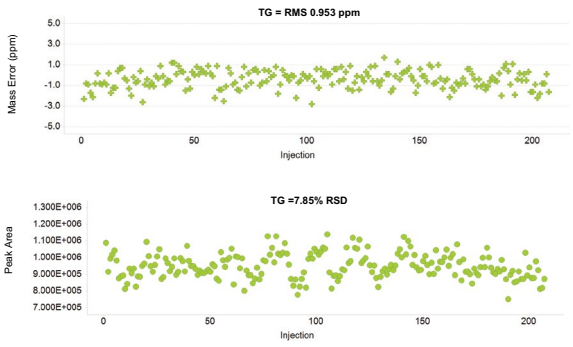


Figure C.

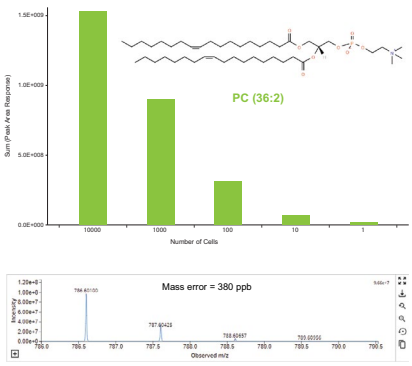


Figure A. Extracted ion chromatogram of a triglyceride lipid from a 4 min LC-MS acquisition measured at 5 and 20 Hz. Mass resolution of 80,000 FWHM maintained at scan rates of 1, 5, 10 and 20 Hz. Figure B. Mass measurement accuracy and peak area over 200 injections of a triglyceride lipid spiked into Plasma. Figure C. Bulk cell dilution of human pancreatic cancer cells (PANC1) with a mass measurement accuracy of 380 ppb for the PC 36:2 lipid.

Connected Solutions

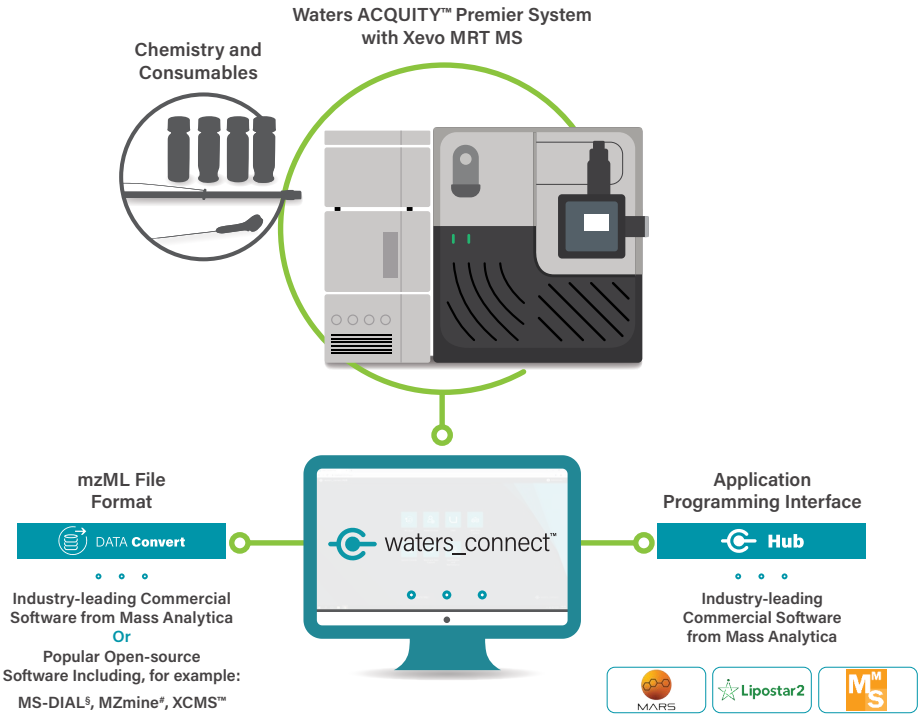
From advanced chemistry to flexible informatics

Make meaningful scientific discoveries more efficient with dedicated workflows combining column chemistries, separations, and informatics with the exceptional data quality of the Xevo MRT Mass Spectrometer. The waters_connect™ platform allows you to process and report your data in the way that you want. Whether using a Waters supported solution or exporting data via mzML to custom scripted workflows, we have you covered.

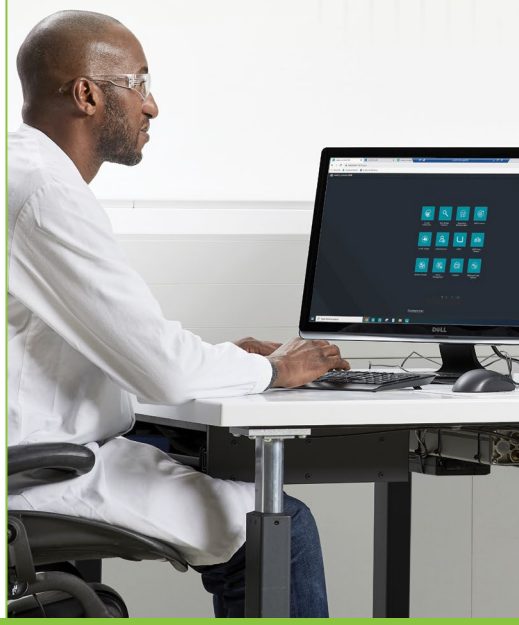
THE XEVO MRT MASS SPECTROMETER READILY INTEGRATES WITH YOUR EXISTING PIPELINE AND WORKFLOW STRATEGY

Waters has partnered with Mass Analytica™ (mass-analytica.com) and their market leading metabolomic, lipidomic, and metabolite identification software packages, MARS, Lipostar2, and MassMetaSite, respectively. Through either the waters_connect Application Programming Interface (API) or via mzML*, there is the option for you to transfer your data into the relevant software package for statistical interpretation and identification of analytes.

The DATA Convert Application within the waters_connect Platform enables you to convert to and export mzML file formats, ensuring a seamless integration of technology and informatics for every lab.



The waters_connect platform provides flexible data processing options, either using third-party applications via the waters_connect API or conversion of data sets to mzML file format via DATA Convert.



* HUPO Proteomics Standards Initiative,
# https://mzio.io/#mzmine,
§ http://prime.psc.riken.jp/compms/msdial/main.html

Unlocking a New Level of Confidence

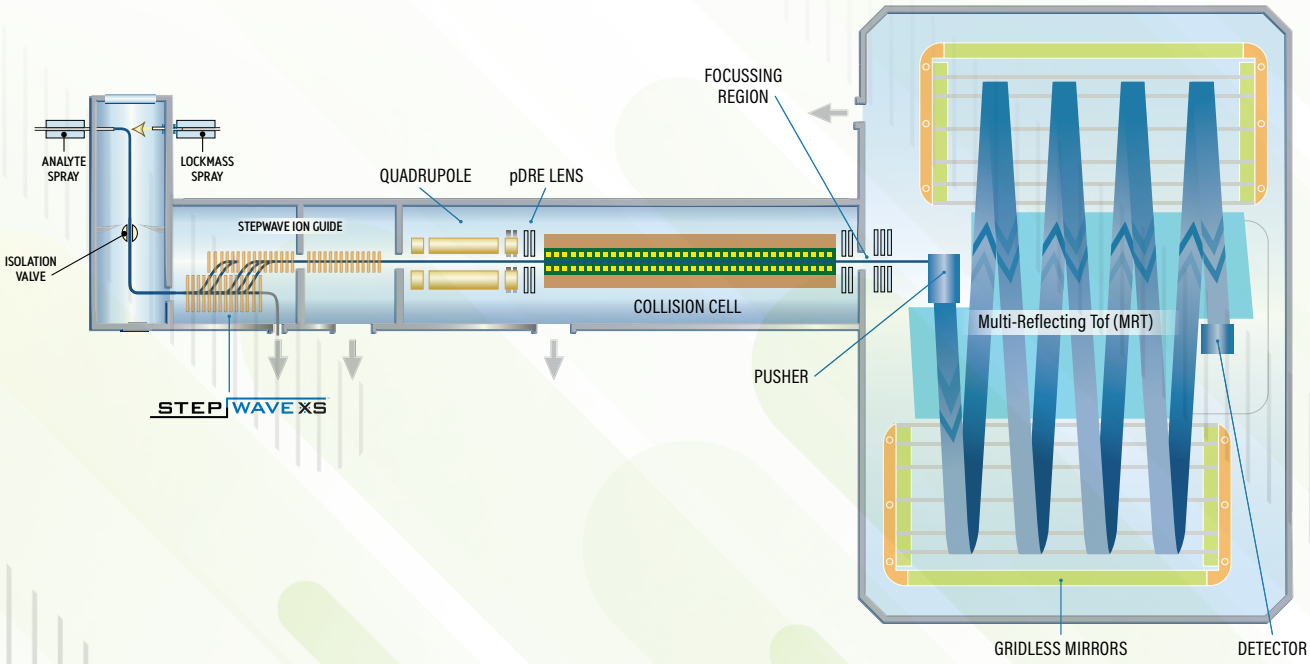
By bringing an analytical powerhouse to every lab

To meet the most challenging analytical problems that you experience head on, Waters has taken cutting-edge technology that was pioneered in the SELECT SERIES™ MRT, scaling the raw power and resolution at speed into a compact flexible, benchtop platform.

THE MRT XEVOLUTION

The Xevo MRT Mass Spectrometer has been engineered to deliver high-end technology into a benchtop platform to solve your most challenging problems. The novel acquisition system, with dual gain analogue-to-digital converter, delivers long term system stability over a high dynamic range, ensuring exceptional quality data with consistent robustness and reproducibility.

The 4 m flight path with a total of 8 reflections within the MRT mass analyzer, achieves 100,000 FWHM resolution at scan rates of up to 100 Hz - for ultimate MS/MS performance.



For your local sales office, please visit waters.com/contact

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