



# From the inherently robust Xevo family of tandem quadrupole instruments, the Xevo TQ-S cronos provides reliable performance at an attractive price point.

#### **RELIABLE PERFORMANCE**

Achieve your objectives in full with operational performance you can rely on. A Xevo TQ-S cronos study analyzing mycotoxins in cereal (a complex matrix that can contaminate LC/MS instrumentation) showed consistent performance over 5 days of continuous use with 1,000 injections and only 3-8% relative standard deviation (RSD) for peak areas<sup>1</sup>

### AFFORDABLE PERFORMANCE

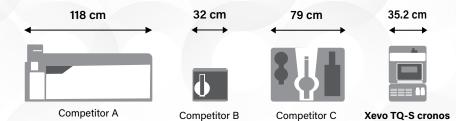
Cover your key applications with a robust and cost-efficient instrument that delivers reliable results. The Xevo TQ-S cronos can be applied to key demanding applications such as the quantification of nitrosamines in drug products<sup>2</sup> and quantification of pesticides in fruits, vegetables and cereals<sup>3</sup>.

### **COVER A WIDER VARIETY OF COMPOUNDS IN ONE ANALYSIS**

Choose the UniSpray source option to include ESI and non-ESI amenable compounds in one injection rather than changing chromatographic inlet or ionization source to extend your analytical capacity and meet changing demands

#### **ACHIEVE MORE WITH LESS**

- The Xevo TQ-S cronos is 2-3X narrower than most other instruments in its class reducing laboratory space overhead costs
- Use of the Xevo TQ-S cronos provides up to 35% lower electrical power consumption and associated heat production than other instruments in its class⁴



With benchspace at a premium, choose an instrument designed to maximize performance per square inch.

- 1. Reference figure 1 on page 3
- 2. Supporting the Challenge of Nitrosamine Drug Substance Related Impurities Analysis Brochure
- Development and Validation of a Routine Multi-Residue Method for the Quantitative Determination of Pesticide Residues in Fruits, Vegetables, and Rice Using UPLC-MS/MS
- 4. Reference table 1 on page 4



### Reliable Performance

### Keeping variability to a minimum

Be confident that you will have reliable data over multi-day studies. Two experiments using the Xevo TQ-S cronos provide evidence for the longer term stability of this instrument. By monitoring peak areas whilst running continuous injections you can see that the Xevo TQ-S cronos won't let you down.

**Experiment 1** – 4 mycotoxins in wheat flour showed consistent performance over 5 days of continuous use with 1,000 injections and only 3-8% RSD for peak areas.

**Experiment 2** – Sulfadimethoxine in protein precipitated plasma also showed consistent performance over 3 days of continuous use with 1,780 injections and only 4% RSD for peak areas.

Less than 1% of Waters tandem quadrupole mass spectrometers require a detector replacement on an annual basis\*

\*Source: Waters internal data on the service history of its tandem quadrupole mass spectrometers launched between 2006 and 2022.

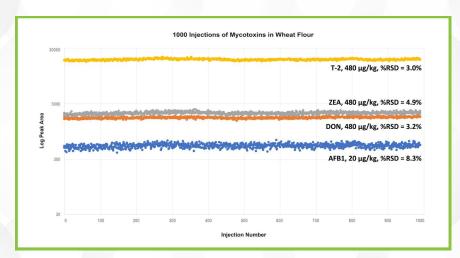


Figure 1: Experiment 1 showing data for mycotoxins in wheat flour

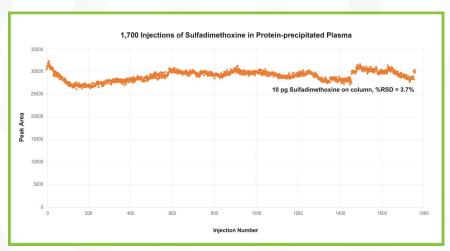


Figure 2: Experiment 2 - Sulfadimethoxine in protein precipitated plasma





# Improving Efficiency

### Lower operational costs and improved sustainability

As a leading technology innovator in chromatography, mass spectrometry, and thermal analysis instruments and software, Waters shares a common mission with our customers: to leave the world a better place than we found it. Many of our customers are actively working to address environmental sustainability in balance with the need to continually reduce operational costs. The Xevo TQ-S cronos consumes less electricity than most other instruments in its class and therefore produces less heat – lessening the need for air conditioning and lowering costs.

	Competitor B	Waters Xevo TQ-S cronos	Competitor A	Competitor C
Power	1,100W	1230W¹	1600 W	1960 W
Heat output	3,700 Btu/h	4,194 Btu/h	5,456 Btu/h	6,500 Btu/h

Table 1: Power and heat outputs for entry tier TQ products, conversion factor 1W = 3.41 Btu/h

1. Xevo TQ-S cronos Site Preparation Guide

The biggest impact on laboratory setup costs was controlling the LC-MS/MS heat output and energy usage.... It's not just lab build setup, when you calculate running costs, especially important in the current energy crisis, the savings are substantial. We now see a route to improve our analytical capability, improve our environmental footprint and by doing so make significant cost savings, this impact is such that it now helps drive our strategy for purchase.

Paul Holme, CEO at Alderley Analytical

**DECOUPLING ANALYTICAL INSIGHTS EBOOK** 



# **Ultimate Productivity**

### **Achieve more with flexible software solutions**

In an ever-changing environment, flexibility can help protect against future unknowns. The Xevo TQ-S cronos is available on both our waters\_connect and MassLynx™ Software platforms, providing the ultimate flexibility to choose a future-proof solution to meet your lab requirements.

#### waters connect

Our modern, app-based software platform, waters\_connect, delivers efficiency and usability benefits, including the unique Exception Focused Review (XFR) functionality that can save up to 50% of your data review time, ensuring your lab is as productive as possible.

### **MassLynx**

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





 $<sup>{\</sup>it *For specific configuration requirements consult with your Waters Representative}.$ 



# **Flexibility**

# **Choose the optimal separation and ionization technique for your application**

Waters market-leading separation technologies include the ACQUITY™ UPLC™ family of LC systems. Application flexibility is further enhanced by the range of quickly interchangeable ion source options made possible by universal ion source architecture.



**ACQUITY Premier** 

### UniSpray™

A novel ionization technique, exclusive to Waters, with wide compound coverage and potential sensitivity benefits. With applicability over a broad range of analytes and a simplified probe design, you can spend less time changing sources and performing maintenance, and more time analyzing your samples.



UniSpray



Xevo TQ-S cronos



Xevo TQ-S micro



Xevo TQ Absolute



## **Optimal Support**

### **Ensure your success with world-renowned services**

Waters Service and Support helps maintain system peak performance, minimize downtime, address scientific application challenges, and support stringent compliance requirements.

Waters award-winning consistent quality support and professional services ensure your success wherever your laboratory is located in the world. With Waters Service and Support offerings\* for your Xevo TQ-S cronos, you can:

### **GET UP AND RUNNING QUICKLY**

Get the onsite training and consultation you need to integrate the Xevo TQ-S cronos into your laboratory and assist with data migration and method transfer needs with Waters Professional Services.

### **MEET YOUR LAB'S UNIQUE REQUIREMENTS**

Protect your high-performance instrument investment with the comprehensive portfolio of service plans such as Waters FlexCHOICE™, which provides access to the most in-depth and up-to-date knowledge of the advanced science and technologies within Waters systems.

### **FACILITATES COMPLIANCE**

Simplify the process of qualification, validation, and record keeping so that your business can focus on delivering products to market with Waters Compliance Services – so you can meet the regulations in your industry and in the countries where you conduct business.

### REDUCE TOTAL COST OF OWNERSHIP

FlexCAPITAL™\*\* is designed to support continuous laboratory operation while satisfying the budgeting challenges of a constantly shifting landscape. Minimize total cost of ownership while optimizing instrument performance and protecting your organization from security risks associated with outdated software platforms.

### LEVERAGE YOUR EXISTING TECHNOLOGY

With the FlexUP™technology renewal program, you can upgrade your older tandem quadrupole mass spectrometry system to the Xevo TQ-S cronos – improving performance, results, and productivity while controlling costs and mitigating compliance risk.

<sup>\*</sup>Availability of offerings varies by country. Contact Waters or your local Waters representative for details.

<sup>\*\*</sup> FlexCAPITAL payment plan options and availability may vary by country. Other restrictions may apply. Contact Waters or your local Waters representative for details. Subject to Credit Approval.



waters.com/TQScronos

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



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