



## The Triple Quad That Surpasses Expectations

When it comes to analyzing food, cannabis, and environmental samples, we know it can be challenging to meet stricter regulations that demand lower detection limits. We also know that throughput and efficiency are paramount in doing your job and doing it well. You can have it all.

Our QSight® triple quad LC/MS/MS family has always been known for its robust and reliable performance. But now there's something new – something better: the high-performance 400 series. Our ready-to-implement solution has the highest sensitivity and throughput the industry has ever seen and the capability to test for the most challenging samples and analytes.

With patented flow-based technology; unique, independent dual-probe source; self-cleaning interface design; and intuitive, easy-to-use software, the QSight 400 is more efficient than ever. See what it can do for you.

**The triple quad you know just got even better.**



QSight® Triple Quad LC/MS/MS  
400 Series with the QSight LX50 UHPLC

## See What's Next

The latest in triple quad technology is here. Our QSight 400 LC/MS/MS system, with the QSight LX50 high-performance UHPLC, provides the capability and confidence required to analyze the most complex food, cannabis, and environmental samples. With the highest level of sensitivity and throughput, you'll be able to meet even the most stringent regulatory requirements rapidly, easily, and effectively.

### It's easy to use

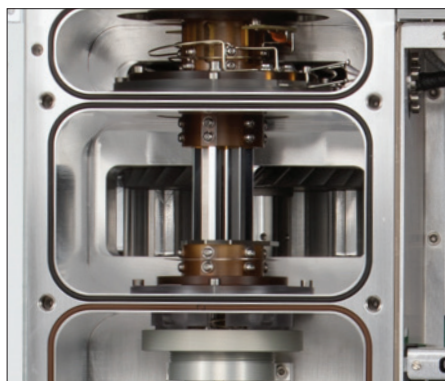
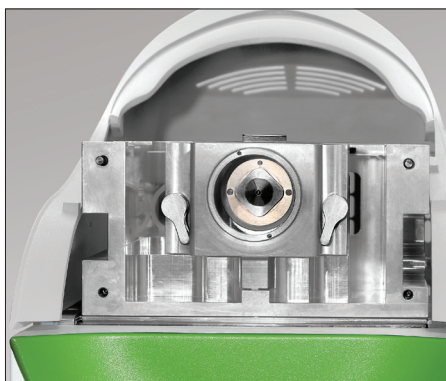
Our ready-to-implement methods and robust and reliable instrumentation mean you can run samples immediately. With plug-and-play modules and user-friendly software, you can get from method development and sample prep to results and reporting in no time. Plus, the QSight 400 system's stable, reliable performance means you don't have to worry about recalibration or maintenance – just set and forget.

### It's highly efficient

The QSight 400 system's unique dual source and self-cleaning interface provide high throughput and minimize the frequency of cleaning, making it the most efficient triple quad in your lab. Independently operating ion inlets enable users to collect data in two complementary modes, maximizing the output from a single injection. It's patented core flow-based technology provides natural advantages by utilizing hot gas for efficient desolvation and preventing ions from hitting the side walls, minimizing cleaning needs and enhancing sensitivity.

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## See What's Below the Surface



### High sensitivity, even higher productivity

The QSight 400 has **StayClean™ technology** – a hot-surface-induced desolvation (HSID™) system – built right in. The continuous hot gas acts as a cleaning agent, while charged species are entrained and desolvated in the gas' hot flow, reducing chemical noise and providing a higher signal-to-noise ratio. This saves up to three workdays per month on cleaning and maintenance for an estimated 15% higher uptime than other systems. This translates to higher productivity and high return on your investment.

### The most efficient desolvation process

The **coaxial flow electrospray** design prevents dispersion of like charge species in front of the sampling orifice, which creates more effective ion sampling and leads to greater sensitivity. With no cross-flow, turbulent formation is minimized, and ion fluctuation is reduced.

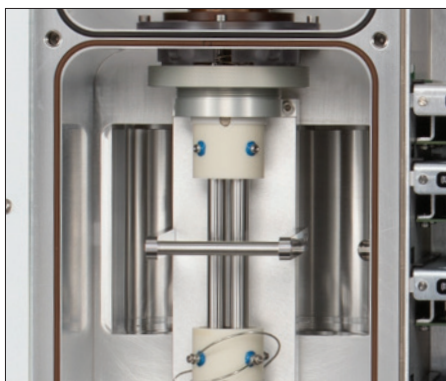
### Go with the flow

Ions are transferred from the HSID interface to the system's **Laminar Flow Ion Guide™**, then moved to the analyzing region by a flow of background gas – no axial electrical fields are necessary. This means the system is not susceptible to field fluctuations and delivers consistently high levels of performance. Instrument drift and frequent reoptimization and cleaning are eliminated, for better productivity.

### Two sources are better than one

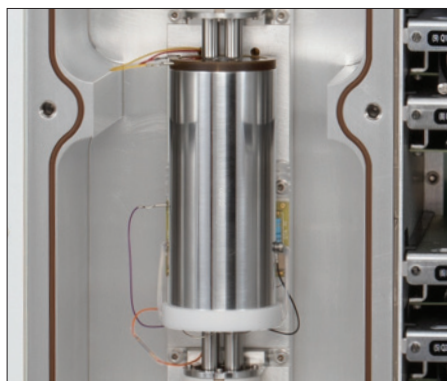
The system features a dual-source configuration that can be set in electrospray ionization (ESI) or atmospheric pressure chemical ionization (APCI) modes, enabling combinations such as ESI/ESI, ESI/APCI, and APCI/APCI – with the same or opposite polarities and with rapid and automated probe switching. Unlike single-source instruments, our dual-source technology enables you to collect data in two complementary modes, maximizing the output from a single injection. These two independent ion inlets enable true multiplexing capability and provide significant advantages in rapid method development.





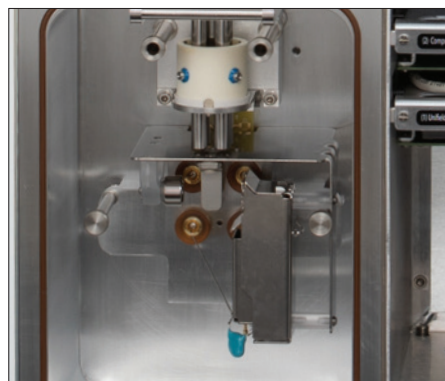
### Precise innovations translate to higher performance

The patented **High-Performance Mass Filter** is the first of its kind, providing high resolution without sacrificing transmission. You get better selectivity better signal-to-noise ratio with no compromise in sensitivity.



### Fast, efficient fragmentation

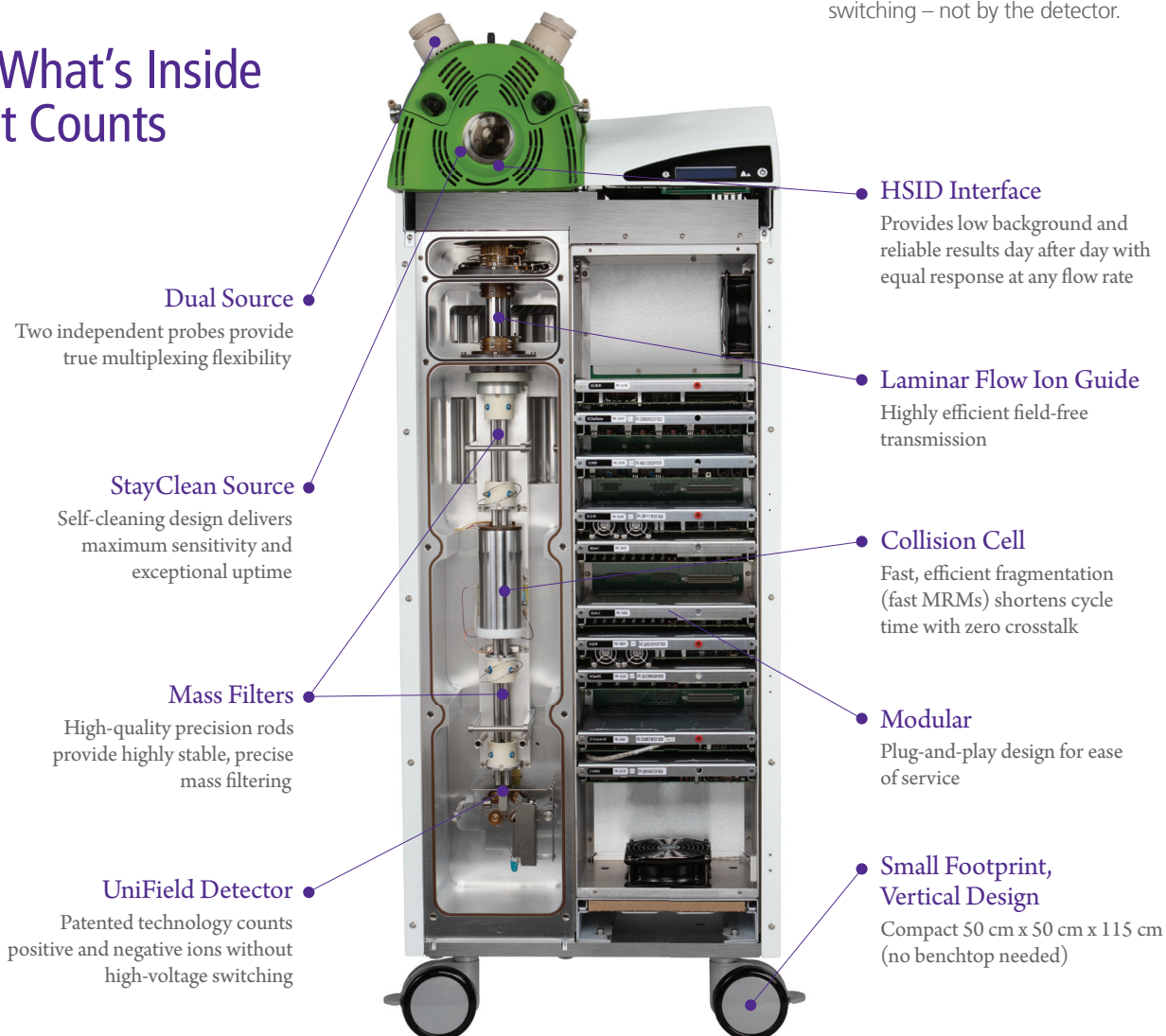
The QSight **triple quad collision cell** is designed for fast and efficient fragmentation. Its special design helps create a high field at entrance and a low field at exit, facilitating ion movement quickly by field gradient. This rapid movement shortens cycle time (fast MRMs) without signal loss and with nearly zero crosstalk, high sensitivity.



### See how easy it is to switch

With its high-energy dynode to attract positive ions, the QSight system's **UniField Detector™** causes positive ions to collide with the dynode to form electrons (which cascade into the detector) while negative ions are detected as usual for pulse counting. What you get is near-simultaneous detection of positive and negative ions without the need for high-voltage switching. Polarity switching happens in microseconds, limited only by the ion source and ion path polarity switching – not by the detector.

## It's What's Inside That Counts



# A Powerful Mass Spec For Whatever Work You Do

There's a member of the ready-to-implement QSight LC/MS/MS family to fit whatever applications your lab relies on most. Across the portfolio, you'll find the same trusted, proven detection technologies with shared capabilities, including StayClean, HSID, torrent dual source, UniField Detector, and modular stacked electronics with a powerful and precise UHPLC front end – the QSight LX50 UHPLC. These instruments are the go-to solution for diverse sample types and tough matrices in the food, cannabis, and environmental industries.

## QSight 400 LC/MS/MS

The flagship of the QSight family, this robust, powerful triple quad system delivers the exponentially better sensitivity and throughput that commercial testing labs, global food manufacturers and exporters, and highly regulated cannabis labs need to meet their most stringent requirements. It provides the ultimate quantitation performance – exceeding most requirements – and essentially futureproofs your lab.

## QSight 200 LC/MS/MS

This reliable, robust LC triple quad workhorse provides exceptional sensitivity with high throughput for confident quantitation in commercial testing, food testing and manufacturing, cannabis analysis, and environmental quality control. It's the perfect instrument for labs that need uncompromising – and accessible – high performance.

## QSight 100 LC/MS/MS

For routine analysis of everyday samples in simpler matrices, our value triple quad still delivers rugged high performance, linearity, and sensitivity in an affordable, compact footprint. This is your everyday partner for confident quantification.



## The Right Accessories, Consumables, and Support

We offer a broad range of validated columns, cartridges, vials and other required consumables and spares to ensure you receive accurate, repeatable results throughout the lifetime of your instrument. Plus, you can count on the absolute best service and support team in the business. We have the unique qualifications that can help power your science and your business: analytic method services, asset procurement and disposition, business intelligence, qualification and validation, lab relocation, instrument service and repair, and a deep-seated knowledge of our customers' business requirements.

For more information about the QSight triple quadrupole LC/MS/MS 400 series, go to [www.perkinelmer.com/QSight](http://www.perkinelmer.com/QSight)

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