



THE TRIPLE QUAD THAT KNOWS THE VALUE OF TIME



QSight® Triple Quadrupole LC/MS/MS Platform

For research use only. Not for use in diagnostic procedures.





**THE IDEAL SYSTEM
FOR WHATEVER ANALYSIS
YOU PERFORM**



BETTER LC/MS/MS DETECTION, WHATEVER YOUR APPLICATION

METABOLOMICS

This quickly evolving field specializes in measuring unique chemical fingerprints generated during cellular function and is a crucial component of systems biology research. The varied chemical nature of these biomarkers makes the robust QSight 220 system a perfect instrument for measuring metabolic signatures from complex biological sample types.

PROTEOGENOMICS

Proteogenomics is a newly emerging field that harnesses the combined insight of genetic information and transcriptional proteomic analysis. The QSight system's workflow uses that genetic information to predict and validate variant insights by mass spectral analysis of unique peptides associated with target proteins and biomarkers of interest.

PERSONALIZED MEDICINE

The convergence of pharmacokinetics and metabolomics has driven the need for dynamic results as the field of precision medicine aims to provide optimal personalized care based on accurate and sensitive biological measurements. The QSight system's triple quad technology harnesses the power of mass spec to provide industry-leading accuracy, reliability, and reproducibility for biomarker discovery and analysis, regardless of sample type.

WHAT COULD YOU DO WITH AN EXTRA 35 DAYS OF SAMPLE TESTING?

You know firsthand how quickly things are changing in the life science field – and your lab needs to change to keep pace. There's increased market pressure to analyze more – and more complex – samples with fewer resources and skilled personnel. Sounds like a scenario in which 15% more uptime might come in handy.

That's what the QSight triple quadrupole LC/MS/MS system is designed to give you.

More productivity, more samples

For example, the system's self-cleaning source means you don't have to power down the system for scheduled cleaning and maintenance. This means up to 35 days more sample testing per year than competitors' systems. The dual-source design also reduces complexity for multiplexing, with shorter run times and fewer wash cycles – and that's a productivity boost as well. And the flow-based pressure differential pulls ions for better sensitivity and increased reliability – and with fewer sample preparation requirements, you get less variability from sample to sample.

What's more, the system is easy for everyone in your lab – including novice technicians – to learn and use, with software that streamlines everything from method development to results processing and reporting. And it requires absolutely no instrument-to-instrument method optimization.

The QSight LC/MS/MS system: Finally, a triple quad that gives you more of what you need most: time.

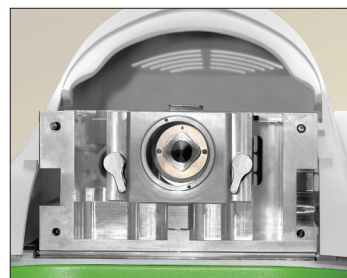


INNOVATIONS COME TOGETHER TO SET THIS SYSTEM APART

An exceptional solution for a wide range of academic and research applications, including metabolomics, proteogenomics, pharmacology, and biomarker discovery, the QSight LC/MS/MS platform delivers the key technologies you count on in a triple quadrupole solution – in a compact, easy-to-use design.

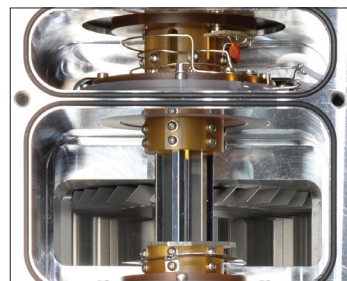
High sensitivity, even higher productivity

Unique StayClean™ technology employs hot-surface induced desolvation (HSID™), a multi-orthogonal sampling interface that can significantly increase your uptime. A continuous flow of hot gas forms a barrier that prevents most of the ions or clusters from hitting the side walls. It also acts as a constant cleaning agent that flushes away any potential deposits. Plus, solvated charged species are entrained and desolvated in the hot flow of gas, reducing chemical noise and delivering a higher signal-to-noise ratio.



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.



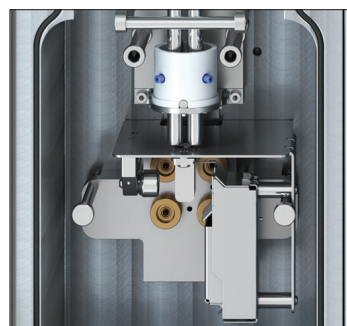
Two sources are better than one

The system's dual-source technology has two separate ion inlets that operate independently and can be set in ESI or APCI modes, enabling combinations such as ESI/ESI, ESI/APCI, and APCI/APCI – with the same or opposite polarities. Unlike single-source instruments, our dual-source technology enables you to collect data in two complementary modes, maximizing the output from a single injection. Plus, it enables you to employ one probe for tuning and another probe for high flow analysis, giving you the capabilities of two MS systems in one.



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.



Inside and Out, It's LC/MS/MS Done Right

Dual Source Two independent probes provide true multiplexing flexibility

StayClean Source Self-cleaning design delivers maximum sensitivity and exceptional uptime

Mass Filters High-quality precision rods provide highly stable, precise mass filtering

UniField Detector Patented technology counts positive and negative ions without high-voltage switching

HSID Interface Provides low background and reliable results day after day, with equal response at any flow rate

Laminar Flow Ion Guide Highly efficient field-free transmission

Collision Cell Fast, efficient fragmentation (fast MRMs) shortens cycle time with zero crosstalk

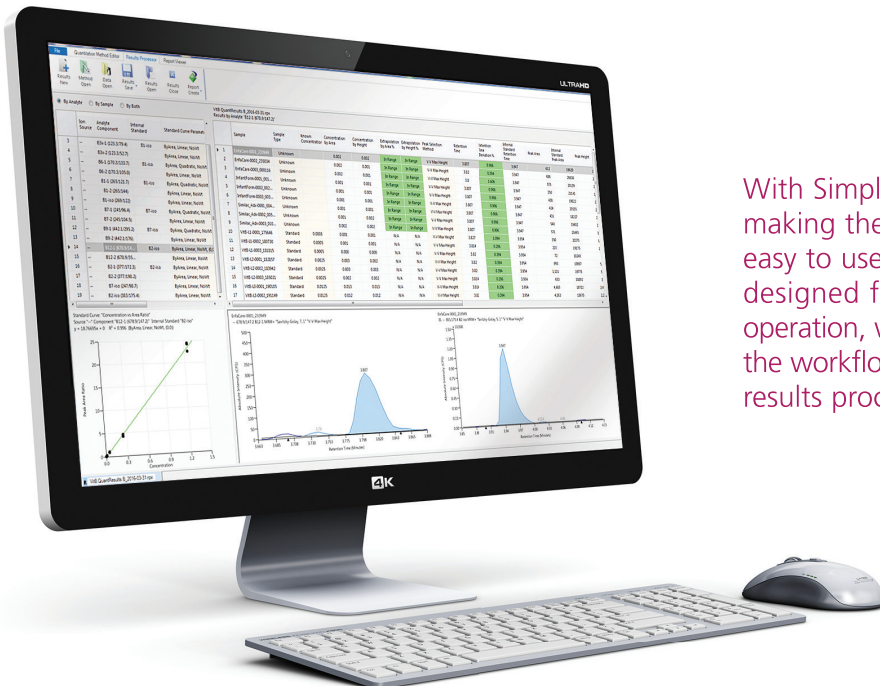
Modular Plug-and-play design for ease of service

Small Footprint, Vertical Design Compact 50 cm x 50 cm x 110 cm – no benchtop needed

PERKINELMER PATENTS	US	CA	UK
MASS SPECTROMETER INTERFACE	7,091,477 7,405,398 8,546,750 8,946,622	2,470,452*	
MASS SPECTROMETER ION GUIDE PROVIDING AXIAL FIELD, AND METHOD	7,868,289		
METHOD AND APPARATUS FOR DETECTING POSITIVELY CHARGED AND NEGATIVELY CHARGED IONIZED PARTICLES	7,728,292		
MULTI-PRESSURE STAGE MASS SPECTROMETER AND METHODS	9,343,280		2466156 2489623

*Pending application

WE'RE DELIVERING SOFTWARE AND SYSTEMS THAT ARE SIMPLICITY ITSELF



With Simplicity™ 3Q software, it's all about making the QSight instrument simple and easy to use. This modular software suite is designed for intuitive, straightforward operation, with wizards guiding you through the workflow, from method development to results processing and reporting.

Simplicity 3Q Acquire Module

A great solution for data acquisition, Simplicity 3Q Acquire streamlines acquisition method development and batch acquisition, with the highest levels of automation. It's capable of real-time acquisition of more than one thousand MRMs and provides a real-time simultaneous display of large numbers of transitions. And for batch acquisition, it delivers a simple sample editor with an integrated concentration table, and easy table controls.

Simplicity 3Q Quant Module

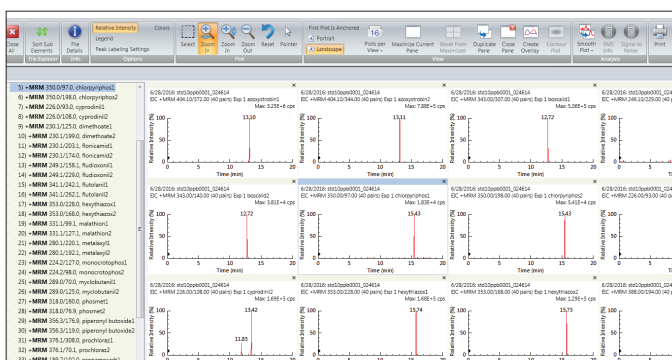
For data analysis and reporting, Simplicity 3Q Quant software uses autopopulation from data acquisition files for an exceptionally fast, smooth, streamlined workflow for high-throughput situations. And with a full-on view of all navigation data, the software's RapidView Heads-up Display™ lets you concentrate on your data – and your results.

Simplicity 3Q View Module

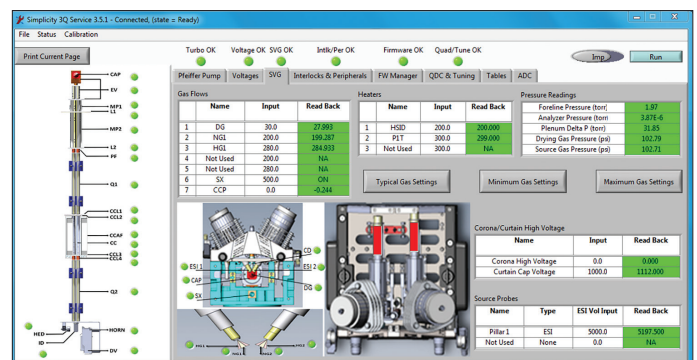
Simplicity 3Q View delivers flexible multi-analyte viewing, overlay plotting, and signal-to-noise analysis. Plus, it provides total ion currents (TICs) and extracting ion currents (XICs) for data exploration and evaluation.

Simplicity 3Q Service Module

The Simplicity 3Q Service module uses AdvIO™ Electronics to review all settings and feedback, quickly diagnosing or ruling out hardware concerns. And because diagnostics are extremely accurate, downtime is vastly diminished, while repairs are done efficiently and effectively – without return calls.



Simultaneous review of several analyte MRMs.



Intuitive, real-time read-back facilitates instrument troubleshooting.

LC technology that delivers a whole new level of confidence

For the QSight triple quad LC/MS/MS instrument, we've paired the industry's most robust, flexible, mass spectrometer with the equally capable QSight LX50 UHPLC system, delivering all the sensitivity, specificity, and carryover-elimination capabilities you need for demanding applications.

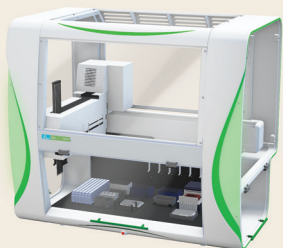
The system delivers three key technologies that help optimize your workflow and enable even higher levels of productivity:

- **Precision Sampling Module** With the most advanced fluidics technology in the business, the system's Precision Sampling Module protects your samples from degradation and precipitation, with a precise temperature that ensures stability, and uniform cooling as well. And with its injection-to-injection reproducibility and zero carryover or contamination, you get outstanding analytical performance and column life.
- **Solvent Delivery Module** The self-cleaning Solvent Delivery Module uses a rugged linear drive to deliver ultraprecise UHPLC gradient flows of more than 18,000 psi. Each pump head is individually motor-driven and controlled, generating maximum flow control and pulse reductions. And the system is self-priming and can purge itself in minutes – freeing your scientists to handle other important tasks.
- **Column Stability Module** The system's Column Stability Module maintains a precise, consistent temperature for the column and mobile phases for reproducible retention times, along with enhanced selectivity, improved peak shape, and shorter analysis times. And elevated temperatures reduce column back pressure, allowing for higher solvent flow rates regardless of column and particle size.



The Newest Member of an Elite Team

We offer a comprehensive portfolio of technologies that fits your workflow perfectly – everything from sample preparation to extraction, detection, and characterization.



JANUS® G3 WORKSTATION

The JANUS G3 Workstation delivers application versatility along with flexible throughput, capacity, and dynamic volume range – perfect for genomics, biotherapeutics, high-throughput screening, and high-content analysis. And an array of liquid handling deck designs and preprogrammed methods provide seamless integration into any workflow.



CHEMAGIC™ 360 PLATFORM

Based on our patented magnetic bead technology, the chemagic 360 instrument is the ideal solution for nucleic acid isolation in human genetics, biobanking, HLA typing, and virus/bacteria detection – all in a compact benchtop design. Plus, it's configurable with three kinds of chemagic rod heads and can handle sample volumes from 10 μ to 10 ml.



DROPLETQUANT®

The DropletQuant spectrophotometer provides full-spectral microvolume quantitation scans of 96 samples in fewer than five minutes. With sample-throughput flexibility and input volumes of 2 μ L, the DropletQuant instrument enables faster time to results. And its wide linear dynamic range for DNA and protein, internal optical calibration, and unique sample plate design prevent cross-contamination and sample evaporation.

EVERYTHING YOU NEED UNDER ONE ROOF



The right accessories, consumables, and methods

We have the consumables and accessories for applications in chromatography and mass spectrometry, and our comprehensive portfolio of solutions is designed to ensure you receive accurate, repeatable results throughout the lifetime of your instrument.

OneSource[®]
Laboratory Services

Driving your science and your business

With our OneSource[®] organization, you're benefiting from multivendor service and support from the absolute best in the business. That means thousands of certified technicians in the field who are familiar with all the techniques you employ. A broad portfolio of services, plus a deep-seated knowledge of the business requirements of our customers, uniquely qualifies us to help empower your science and drive your business.

For more information about the QSight Triple Quadrupole LC/MS/MS, go to www.perkinelmer.com/QSight

PerkinElmer, Inc.
940 Winter Street
Waltham, MA 02451 USA
P: (800) 762-4000 or
(+1) 203-925-4602
www.perkinelmer.com



For a complete listing of our global offices, visit www.perkinelmer.com/ContactUs

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