



Improved
sensitivity and
throughput

As an industry pioneer in microflow UHPLC, Eksigent, part of AB SCIEX, understands that sensitivity, throughput, and cost of ownership are of the utmost importance for high-throughput LC/MS/MS laboratories.

The Eksigent ekspert™ microLC 200 System is engineered from the ground up with these priorities in mind. Redefine what is possible in high-throughput LC/MS/MS compared to your analytical flow solution.

- Up to a 4X increase in sensitivity
- Accelerate separations by up to 5X
- Software support for 21CFR Part 11 and IQ/OQ/PQ service available
- Up to 95% reduction in mobile phase consumption and MS cleaning
- Maximizes lab space with functionally stackable design

Worlds only dedicated micro flow UHPLC

The Eksigent ekspert™ microLC 200 System can increase the throughput and sensitivity of mass spectrometry platforms.

The ekspert microLC 200 system is fully optimized for integration with the AB SCIEX mass spectrometry portfolio with operational control through Analyst® Software. The software support includes 21CFR part 11 and IQ/OQ/PQ services. The system has minimum dead volume flow path and low dispersion hybrid electrodes designed for the Turbo V™ and IonDrive™ Turbo V sources. These are incorporated in a small functionally stackable footprint for integration with the AB SCIEX 4500, 5500 and 6500 series of mass spectrometers.

Further to increasing throughput, the microflow rate regime of the ekspert microLC 200 system can also improve the sensitivity performance of mass spectrometers, from the API 4000 to the 6500 series. This makes the ekspert microLC 200 system a sound strategy when added LC/MS/MS sensitivity is needed.



Accelerate your throughput

Increase sensitivity and throughput – reduce sample volume and solvent consumption

Sensitivity is always important, but in many applications, sample volume is limited or incurred sample reanalysis (ISR) strategies have to be considered.

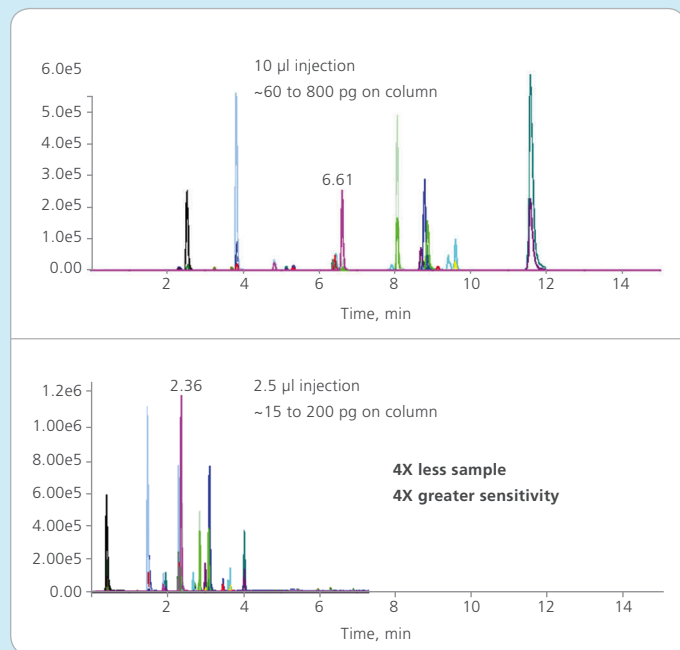
In these situations, the all new ekspert™ microLC 200 system excels – with up to 4X more sensitivity, up to 5X more throughput, and up to 10X less sample volume consumption. Unique microflow pumping capabilities make this possible, along with the advanced dynamic load-and-wash of the HTC-xt autosampler and near-zero sample loss injection technology.

Accelerated throughput

Scientists who need to increase throughput while simultaneously improving the robustness of their assays will appreciate the ekspert microLC binary gradient pumping system. The system is designed to support columns of 0.3 mm – 1 mm ID. The system significantly reduces the required mixing volumes and produces impressive gradient delays of 1-3 μ L – with accelerated separations and faster cycle times for complex samples.

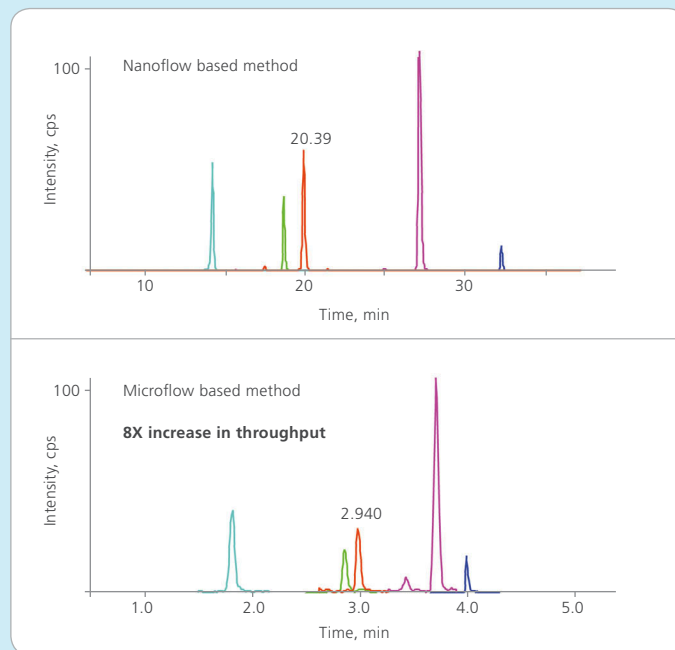
For example, peptide quantitation applications migrated to the ekspert micro LC from nano flow based methods stand to gain up to 10X higher throughput and significantly improved robustness compared to traditional nano flow approaches, while simultaneously improving gradient speed and precision.

Increase sensitivity while using less sample



Less sample, more sensitivity: Separation of 23 pharmaceutical and personal care products compounds in water on the ekspert™ microLC 200. With 4X less sample injected, peak height, peak area and signal to noise increased by 4X.

Accelerate your throughput while increasing robustness



Increasing throughput and robustness of peptide quantification: Select peptides from a multiplexed assay of P450 peptides in digested liver microsomes were compared between nanoflow and a higher throughput microflow approach on the ekspert™ microLC 200. Throughput has been increased by 8X versus the nanoflow experiment for the same sample.

Robust performance for accelerated integration

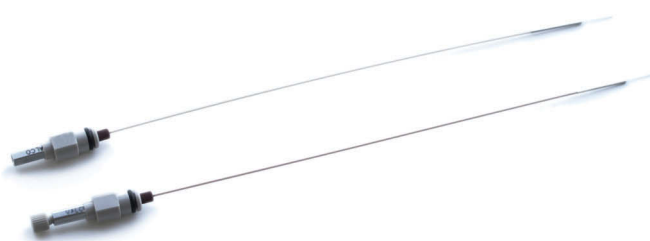
The Eksigent ekspert™ microLC 200 System is a dedicated splitless micro flow UHPLC system designed to deliver optimal microflow performance and streamlined integration for your most challenging separations – on any mass spectrometry platform.

- Flow path designed for minimum dead volume
- Pumping system engineered for reliability and reduced maintenance costs
- Combine with micro flow rate optimized columns and electrodes

Columns and electrodes optimized for high-throughput microflow LC/MS/MS



Eksigent packs and sells a wide range of microLC column sizes and phases with hardware and fittings optimized for the ekspert microLC 200 system



Small electrodes, big advantage: Reduced dispersion electrodes for the TurboV™ and IonDrive™ TurboV sources improve resolution.

Streamlined integration with microLC column

Eksigent microLC UHPLC columns are available in a wide range of particle sizes (3 and 5µm), pore sizes (100 Å and 300 Å) and surface chemistries including C18, C8, C4, CN, Phenyl, AQ, C18-superficially porous particles and Silane (SIL).

At the heart of precision

Proprietary Eksigent Microfluidic Flow Control technology delivers flow rate precision better than 0.5% RSD, making it ideal for small molecule and peptide analysis. Operating in a true microflow regime, the ekspert microLC 200 system is a UHPLC system that can accommodate sub 1mm ID columns without any hardware changes – and up to a 95% increase in mobile phase savings.

System specifications

Feature	Ekspert™ microLC 200
Dimensions (W x D x H)	25" x 20" x 28" / 63.5cm x 50.8cm x 71.1cm
Weight	55 lbs / 25 kgs
Power	100 – 240 VAC
Flow Rate Range	5-200 µL/min
Maximum Pressure	10,000 PSI
Gradient Delay Vol	< 1 - 3 µL
Flow Rate Precision	<0.5% RSD @ 150 µL/min
Flow Rate Accuracy	< 1%
Sample Capacity	6 trays, standard or deep 96-well 384-well microplates
Column Oven	+5 - 80 C
Injection Volume Range	15 nL - 10 µL (without changing loop)
Injection Volume Precision	<1% RSD (full loop) <2% RSD (partial loop)
Mobile Phase Consumption	typically < 10 mL/day
Carryover	less than 0.003% (30ppm)
Cycle Time	< 60 seconds

You invest in our technology. We invest in your success.

As a leader in mass spectrometry, AB SCIEX creates solutions that are backed by the industry's most extensive support organization. As part of AB SCIEX, Eksigent ekspert™ UHPLC systems receive that same level of support.

With a network of service professionals, experienced compliance specialists, and over 150 PhD application scientists worldwide, we are dedicated to supporting your technical needs and helping you get the most out of your Eksigent UHPLC systems.

Our service professionals are recognized as being highly qualified in the industry. They are certified on our instrument platforms through a rigorous 4-step certification program, with re-certification occurring every two years. This program helps to ensure that you receive the most efficient, highest-quality, and most up-to-date service available. Choose from flexible service plans and a variety of services for the right level of support for your laboratory's needs and budget.

Whether you access our service and support team by phone, email, on-site visits, or through our innovative remote monitoring technology you can be confident that our service and support organization will be there for you.

For more information, visit www.eksigent.com

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