

Press Release

A-GB-14005

analytica

The world's fastest triple quadrupole mass spectrometer

**LCMS-8050 is perfect for trace analysis /
Flagship product with best-in-class sensitivity /
Lower cost of ownership**

Shimadzu, one of the world leaders in analytical instrumentation, provides the high-performance LCMS-8050, a triple quadrupole LCMS/MS system that features high sensitivity, high data quality and the world's fastest data acquisition rates. As the flagship model of Shimadzu's UFMS (Ultra-Fast Mass Spectrometry) product line, the LCMS-8050 incorporates proprietary ultrafast technologies as well as a newly developed ion source and collision cell technology. The LCMS-8050 meets the growing demand for trace-level quantitation in clinical research and other markets.

Highest sensitivity for trace level analysis

Delivering attogram-level (10^{-18} grams) sensitivity and possessing unsurpassed ruggedness, the LCMS-8050 achieves its improved sensitivity through two important technologies:

1. Newly designed Heated ESI source improves desolvation and enhances ionization efficiency with the addition of a heated gas used in combination with the nebulizer gas
2. UFsweeper[®] III collision cell enhances CID efficiency by optimizing the collision cell pressure.

The world's fastest data acquisition rates

The newly engineered high voltage power supply enables a maximum scan rate of 30,000 u/sec and a 5 msec polarity switching time, making the LCMS-8050 combined with *Nexera* UHPLC the ideal platform for laboratory productivity. It is now possible to include 1,000 events with up to 32 channels per event for a maximum of 32,000 MRMs per analysis.

User-friendly operation and easy maintenance

- The new ion source enables easy changing from ESI to APCI or to dual ionization mode (DUIS). The source housing is cable-free and tubeless, integrating the gas and electrical connections for convenience and simplicity
- Seamless integration of HPLC and MS control software:
LabSolutions LCMS Version 5.60 provides easy-to-use operation. It fully integrates operation of Shimadzu's LC product lines (*Nexera* and *prominence*). An automated MRM optimization routine allows unattended optimization of multiple compounds. Key MS voltages, critical to high-sensitivity analysis, are automatically adjusted and evaluated for each compound without user intervention.
- Reduced instrument downtime and easy maintenance procedures:
The desolvation capillary, which functions as the inlet to the mass spectrometer, can be replaced quickly without breaking vacuum, saving the user hours of recovery time. Probe maintenance is quick and easy, with readily accessible consumable components. Even more advanced maintenance is made simple; ion guides can be removed without tools and cleaned without extensive disassembly.



Figure 1: The LCMS-8050 as the new flagship of Shimadzu's UFMS series provides world's fastest data acquisition rates, best-in-class sensitivity and lower cost-of-ownership

For further editorial questions, please contact:
Uta Steeger, Shimadzu Europa GmbH, Albert-Hahn-Str. 6-10, 47269 Duisburg
Tel.: +49 (0) 203-7687-410, e-mail: us@shimadzu.eu

Additional information is available on Shimadzu's website: www.shimadzu.eu

Download is possible via www.shimadzu.eu/press-information-2014

Follow us on twitter: [@ShimadzuEurope](https://twitter.com/ShimadzuEurope)