

Agilent 7800 Quadrupole ICP-MS

Agilent's quadrupole ICP-MS instruments have led the way in performance and technical innovation since the launch of the 4500 Series in 1994. The 7500 and 7700 Series instruments that followed also set new standards for performance and robustness, cementing Agilent's position as the worldwide market leader in quadrupole ICP-MS.

Continuous development and refinement of the technologies that lie behind this extraordinary success have now led to the Agilent 7800. The 7800 replaces the 7700x; offering the security of a proven mainframe design, combined with improved performance from the latest hardware developments, and an innovative new MassHunter software platform.

Key technology and performance of the 7800 includes:

- High Matrix Introduction (HMI) capability as standard, tolerates matrix levels up to 3% dissolved solids
- Redesigned ion lens gives higher sensitivity and lower background
- 4th generation Octopole Reaction System (ORS⁴), for unmatched control of polyatomic interferences in helium mode
- New, orthogonal detector with 10 orders dynamic range (10 times greater dynamic range that the 7700, and 100 times greater than the 7500!)
- 30% smaller footprint than the 7500 Series; weight of only 100 kg (15% lighter than the 7700).

Robust plasma and high matrix introduction (HMI) technology, delivers superior matrix tolerance and minimal suppression, allowing higher matrix and more variable sample types to be run against simple aqueous calibrations

Automation and productivity tools, provide fast, consistent setup and high sample throughput, maximizing return on investment without compromising data quality



Helium mode collision/reaction cell, ensures effective removal of polyatomic interferences under a single cell mode, simplifying methodology and ensuring fast sample turnaround times

Wide dynamic range detector, simplifies sample preparation and calibration/QC strategy, and improves productivity by minimizing reruns due to over-range results

Agilent 7800 ICP-MS with Optional Integrated Sample Introduction System in detail



The Solution-Ready 7800 redefines ease-of-use in ICP-MS. Engineered for simple setup, automated optimization, and easy method development, each 7800 ships with a set of standard operating procedures (SOPs) and predefined method and report templates, enabling new users to quickly and easily setup their laboratory procedures for many common, routine applications and regulated methods.

The 7800 also sets new standards for simplicity of routine maintenance, with easy access to the interface and ion lens, without needing to switch off the high vacuum pump. Early Maintenance Feedback (EMF) and comprehensive maintenance video tutorials help ensure that maintenance tasks are easily completed when needed.

The latest revision of ICP-MS MassHunter simplifies ICP-MS operation, speeding up implementation and streamlining routine workflows:

- Easy, automated routine method setup and new method development with Pre-set Methods and Method Wizard
- Startup, comprehensive autotune functionality, and scheduled Performance Report ensure that performance is optimized and recorded under uniform conditions, regardless of operator
- "Hands on" demo mode and user tutorials support new user and refresher training



Solution-Ready ICP-MS The 7800 ICP-MS includes SOPs for common applications, including drinking water, environmental waste analysis, and Elemental Impurities in pharmaceutical products

Combined with Agilent's optional Integrated Sample Introduction System (ISIS) and SPS 4 autosampler, the 7800 ICP-MS is the ideal solution for rapid, accurate, reliable multi-element analysis across most common applications including environmental monitoring, pharmaceutical manufacturing, food safety, occupational exposure and many more.

Backed by Agilent's renowned support organization, and with consumables and supplies manufactured to Agilent's strict quality standards, your 7800 instrument is sure to deliver a long and productive lifetime.

For more information contact your local Agilent representative or visit: www.agilent.com/chem/icpms

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