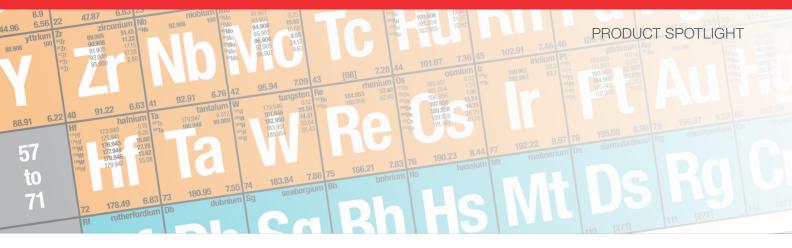# Thermo Scientific iCAP Qnova Series ICP-MS

Performance and flexibility with the iCAP Qnova Series ICP-MS Interface

The Thermo Scientific™ iCAP™ Qnova™ Series ICP-MS features a unique interface designed to simplify user maintenance and allow for customization to ensure maximum performance based on the sample type.

The drop-down door design allows access to both of the cones without removing the sample introduction system or disturbing the induction coil. This design also allows access to the extraction lens without venting the mass analyzer.
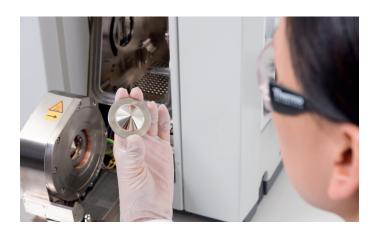
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Cones

The cones used in the iCAP Qnova Series ICP-MS instruments have evolved over years of experience in quadrupole based ICP mass spectrometry. Fully optimized nickel sampler and skimmer cones ensure the best transmission of ions from the plasma whilst maintaining a smooth transition to the high vacuum region with minimal dispersion. Platinum tipped cones are also available for high carbon content and hydrofluoric acid applications.

Cone inserts for increased flexibility

Performance of the iCAP Qnova Series ICP-MS can be adapted to the sample matrix by using skimmer cone inserts. These inserts control the transmission of ions from the plasma to the mass analyzer, minimizing drift or maximizing sensitivity when analyzing high matrix or ultra-trace samples respectively. The portfolio of inserts comprises a High Matrix, a High Sensitivity and a Robust insert.

The High Matrix insert is applicable to most samples encountered in the everyday running of the instrument and gives excellent performance on a day-to-day basis. The High Sensitivity insert maximizes ion transmission through the interface and is ideal to optimize sensitivity in ultra-trace applications where the lowest limits of detection are needed. The Robust insert allows analysis of the most challenging samples with reduced maintenance intervals by minimizing instrument drift.

Interface	When	Why	Who
High Matrix	Typical, everyday matrix types	Best balance for sensitivity and matrix tolerance	Food safety, clinical research and pharmaceutical analysis
High Sensitivity	Advanced applications; e.g. laser, nanoparticles	Best signal to noise ratio and lowest detection	Advanced materials, research and geoscience
Robust	Long-term analysis of dirty, high matrix samples	Minimal drift and reduced user maintenance	Environmental and routine industrial applications

- Easy maintenance to allow for maximum instrument running time

- Customize your instrument for matrix tolerance or superior limits of detection

- Get the best data for your samples

Find out more at **thermofisher.com/ICP-MS**

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