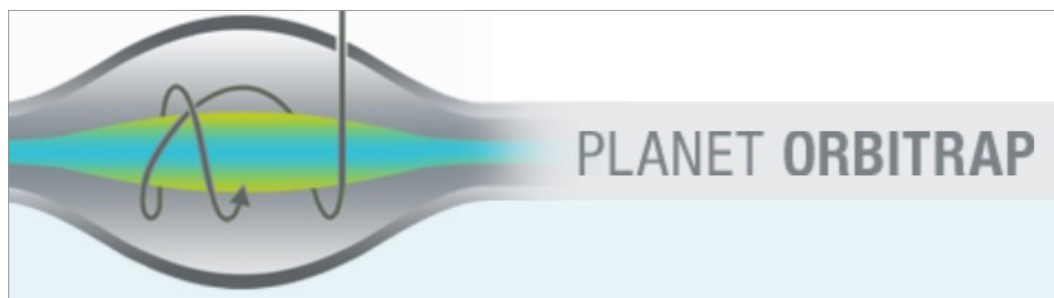


RELEASE



Planet Orbitrap is a science-based website focusing on Orbitrap mass spectrometers with workflows for proteomics, metabolomics, lipidomics, pharmaceuticals, biopharmaceuticals, sports doping, environmental, and food safety for life science and analytical researchers.

Orbitrap is an ion trap mass analyzer that consists of two outer electrodes and a central electrode, which enable it to act as both an analyzer and detector. Ions entering the Orbitrap are captured through “electrodynamic squeezing,” after which they oscillate around the central electrode and in between the two outer electrodes. Different ions oscillate at different frequencies, resulting in their separation. By measuring the oscillation frequencies induced by ions on the outer electrodes, the mass spectra of the ions are acquired using image current detection.

Key benefits of Orbitrap mass spectrometry

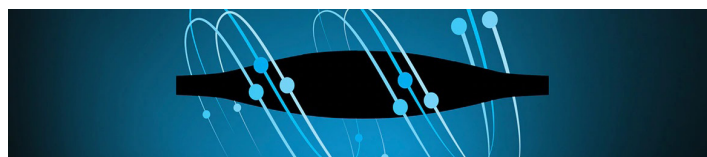
Unparalleled sensitivity, resolution, and accuracy

Orbitrap technology drives high-resolution, accurate-mass (HRAM) data, generating incredibly high resolution measurements of up to 500,000 FWHM (with the option of achieving up to 1,000,000 FWHM) at m/z 200.

Unprecedented qual/quan analysis means high selectivity and sensitivity

Because Orbitrap technology provides quantitative and qualitative HRAM analytical capability in a single platform and often in a single run, it has been increasingly applied towards a range of challenging applications requiring high selectivity and sensitivity.

Orbitrap systems connect to liquid and gas chromatography equipment to enhance separation of unknown and known compounds, offer the highest levels of accuracy and precision, and enable high-throughput workflows. Thermo Fisher Scientific offers a wide portfolio of Orbitrap-based MS systems, including systems combined with ion traps and quadrupole mass filters, to address all your analysis needs.



Visit planetorbitrap.com to access:

Orbitrap Science Library with peer-reviewed scientific papers, application notes, technical guides, specification sheets, scientific posters, brochures, product support bulletins, webinars, and much more.

Application Workflows from biopharma to sport doping, check out the application workflows spanning sample prep to data analysis with related resources

Latest Orbi-Tips Discover with tools & tips, protocols, methods, and training opportunities. Get the most from your system.



Go beyond today's discovery

Orbitrap Eclipse Tribrid mass spectrometer

Introducing the Thermo Scientific™ Orbitrap Eclipse™ Tribrid™ mass spectrometer, our newest generation instrument designed with your most difficult analytical challenges in mind. With enhanced performance and usability, the Orbitrap Eclipse Tribrid mass spectrometer makes it easy to produce the high-quality data required to drive the right decisions, while expanding the breadth of your work and pushing your science beyond today's discovery.

[VIDEO](#)[WEBSITE](#)