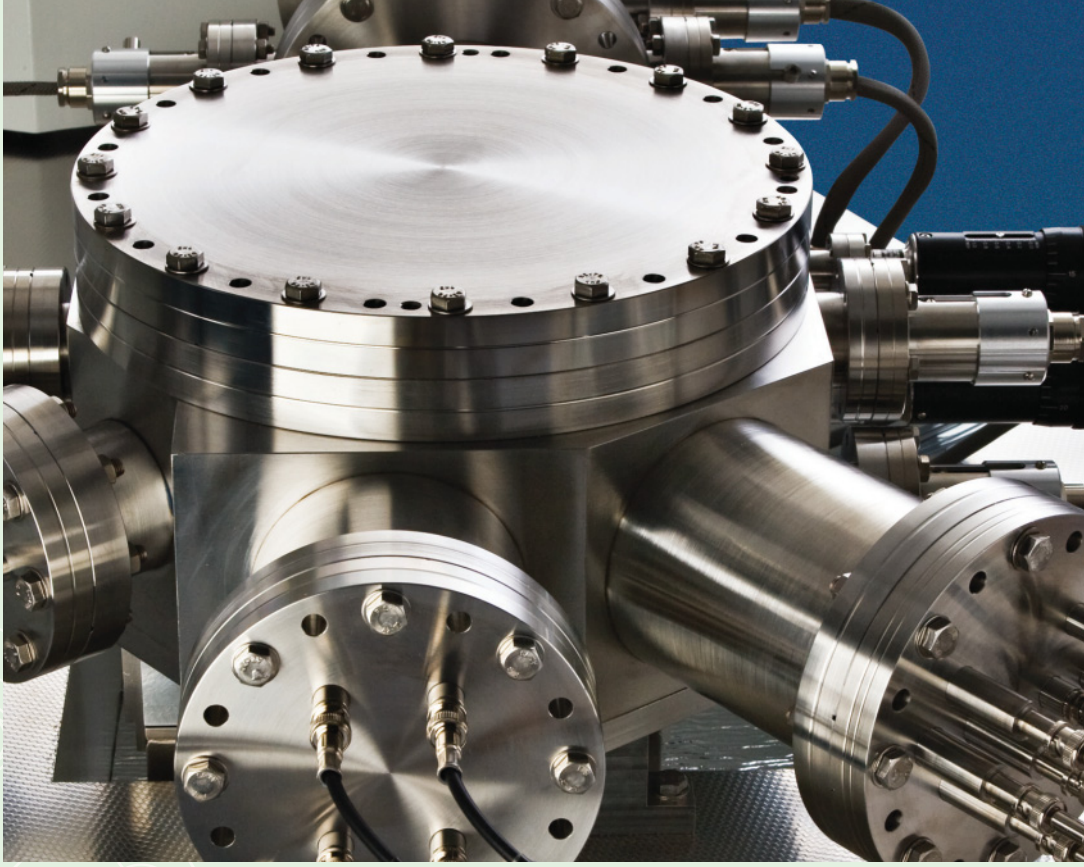


nu instruments

Instruments that work

nu plasma II

MULTI-COLLECTOR ICP-MS

nu plasma II

MULTI-COLLECTOR ICP-MS

The Nu Plasma II is the latest generation plasma source multi-collector mass spectrometer from Nu Instruments Ltd. The Nu Plasma II incorporates many new features and enhancements whilst maintaining the robustness, reliability and ease-of use of previous generation Nu Plasma instruments.

Following on from the Nu Plasma HR, the no-compromise design philosophy has resulted in the production of a double focusing instrument that provides the best in high precision and accurate isotope ratio measurements.

Features

Double-focusing mass spectrometer
Variable dispersion ion optics (patented) in combination with a multiple collector system with no moving parts

High resolution and pseudo high resolution capability
Separation and partial separation of polyatomic interferences

State-of-the-art ceramic Faraday detectors
Sixteen Faraday detectors with long-term field proven active inner surfaces

Discrete dynode Ion counting multipliers
Up to five multipliers with optional configurations

Optional multiple high abundance deceleration filters
Can be fitted in front of any multiplier providing ultra-high abundance sensitivity

Unique pumping configuration
Providing maximum protection of vacuum integrity and pump lifetime. Optimised pumping for argon, producing an improved analyser vacuum for high abundance sensitivity applications

Ground potential operation
Providing easy access for service and maintenance procedures

High ionisation efficiency ICP source
Combined with a supersonic beam-sample interface fitted with an enhanced interface pumping configuration as standard

Laminated magnet
High precision 24-bit and temperature compensated Hall probe control

State-of-the-art electronics
Purpose designed and built, with full monitoring of all instrument parameters and power supply status

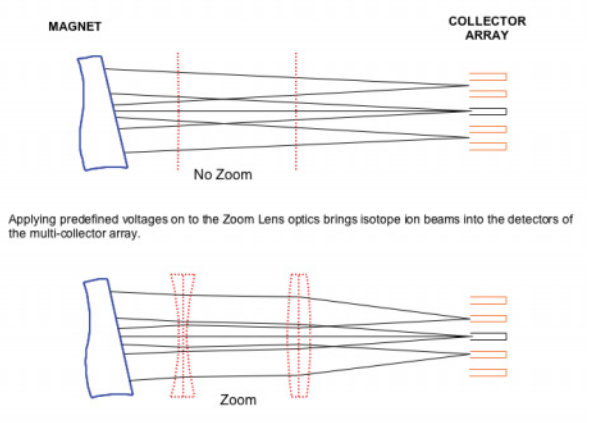
Open access software policy
Intuitive and comprehensive operating software with free upgrades for the lifetime of the instrument

Small instrument footprint

Compatible with third party accessories
Including laser ablation systems, autosamplers and other sample preparation devices

Variable Dispersion Ion Optics

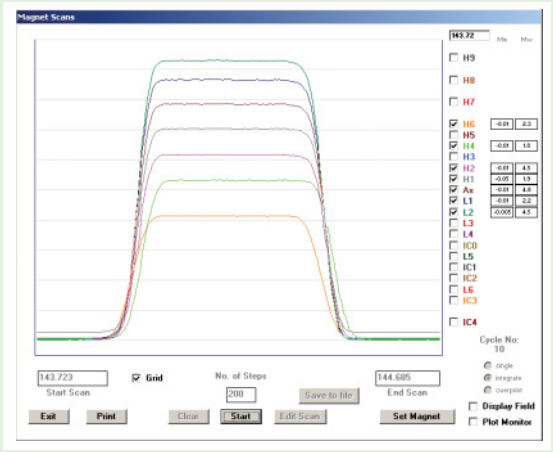
The Nu Plasma II utilises an enhanced version of previously used Zoom Optics. The Nu Instruments unique patented Zoom Optics removes the necessity for employing adjustable collectors. This greatly increases the reliability of the collector array and allows instantaneous switching between collector configurations.



Collector System

Sixteen Faraday detectors are fitted as standard. Each with an independent high performance, low noise amplifier system incorporating an extended dynamic range of 55V (when fitted with $10^{11}\Omega$ resistors).

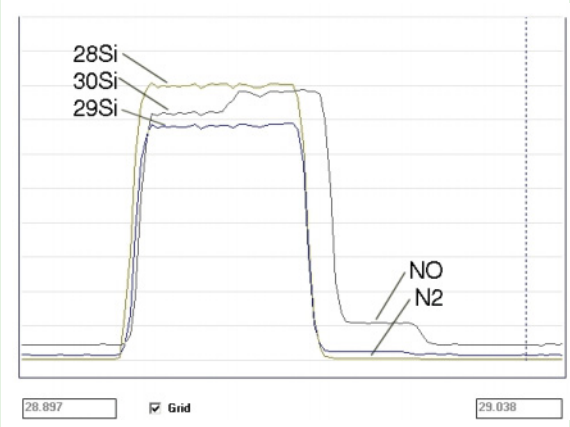
Due to the unique fixed collector design, up to five full-size discrete dynode ion-counting multipliers can be incorporated benefiting from their superior performance and life span. Optional deceleration filters can be fitted in front of any multiplier producing ultra-high abundance sensitivity.



Neodymium isotope alignment on the Nu Plasma II collector array

High Resolution

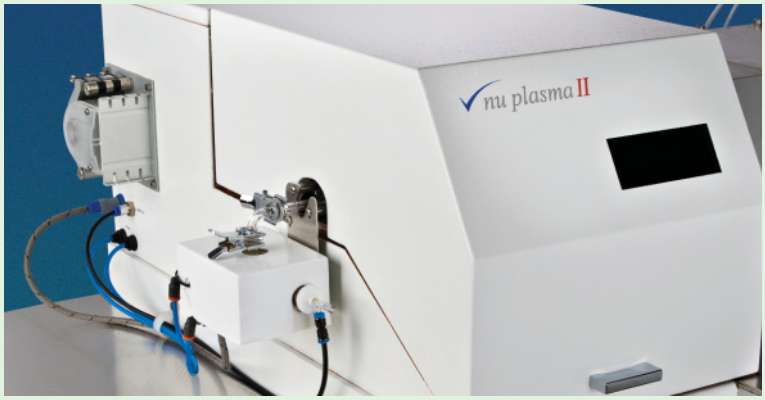
The improved High Resolution feature of the Nu Plasma II achieves high mass resolving power across the entire multi-collector array. This high resolving power results in the separation of analyte peaks from polyatomic interferences, providing a large, interference free, flat-top peak area for precise and accurate isotopic measurements.

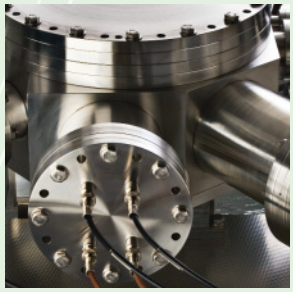
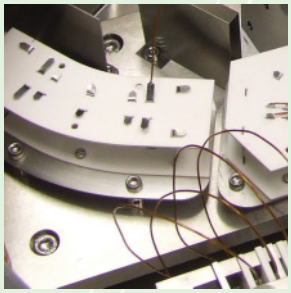
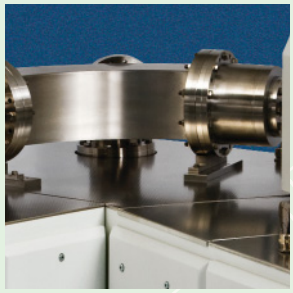


Pseudo Resolution of Si Isotopes from Interferences

Source Enclosure

The Nu Plasma II incorporates a new compact torch box and source enclosure design. Connection of sample introduction systems are made externally to the source enclosure, improving flexibility and ease of use.



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