

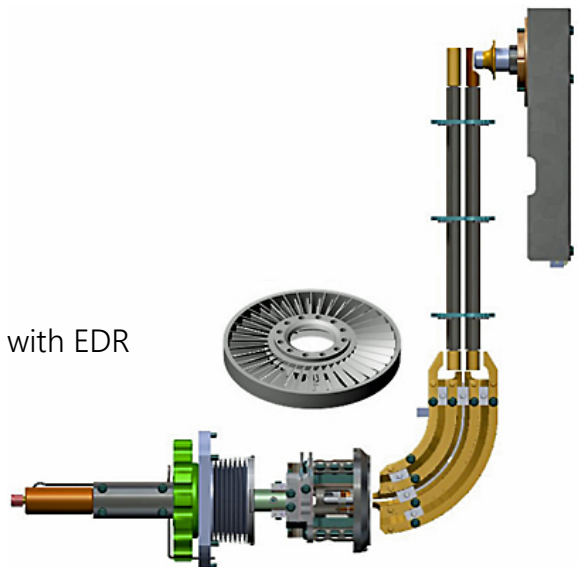
Scion Instruments Canada Limited

Single Quadrupole MS Hardware Overview

- Ion source – Fly-through source on-axis with column and constructed of inert material for tuning stability and less contamination resulting in significantly less cleaning.
- Q^0 ion guide – 90° curved RF-only (lens free) entrance– removes neutrals for lower noise. Decouples source from quadrupole (heat and pressure) to improve mass accuracy and robustness of quads. Active beam focusing and heating (premium model) for higher sensitivity.
- Mass filter – Quadrupole mass filter with patented pre/post-filter RF only zones, lens-less design for robust operation and high transmission efficiency.
- Off-axis electron multiplier – No dynode needed, but with 5kV post acceleration and patented on-the-fly multiplier gain optimization to prevent detector saturation and provide an extended dynamic range. Extends useful dynamic range up to 6 orders of magnitude.
- Highly sensitive – EI Full Scan specification: 1pg OFN 50 to 300 for m/z 272, S/N > 1500:1.
- Compatible with helium or hydrogen carrier gas.
- Scan rate up to 20,000 Da/sec for fast GC analysis.
- Dual stage turbo pump – 310/400 L/sec (premium model), air cooled for helium carrier gas flow up to 25ml/min for fast pump down and superior robustness. A five-year warranty on the turbo pump is included.
- Small footprint with Scion 436-GC – less than 24" wide (60cm).

Summary

1. Dual Off-Axis design
2. Axial Ion Source
3. Patented Lens-Free Optical Path
4. Auto-focusing Heated Curved Q^0
5. High-Capacity turbomolecular pump
6. High-Speed orthogonal integrated detector with EDR



If you have questions concerning this bulletin please do not hesitate to contact us:
support-can@scioninstruments.com