



**SCION TQ
GC-MS/MS**

- **The Gas Chromatographers' Triple Quadrupole Detector**

Introducing the SCION TQ™ GC-MS/MS System

The SCION triple quadrupole (TQ) detector is a comprehensive solution for your most demanding gas chromatography applications. It delivers unrivalled bench-space savings, the result of an innovative 'lens-free', elliptical ion-path design that delivers ultra-high sensitivity and chemical noise reduction - performance you would expect when innovation merges with a legacy of reliability.

If you are seeking new solutions and real innovation, we invite you to experience the revolutionary design of the SCION TQ GC-MS system. The SCION TQ delivers the performance you would expect from Bruker when true innovation is combined with an extensive legacy of reliability.

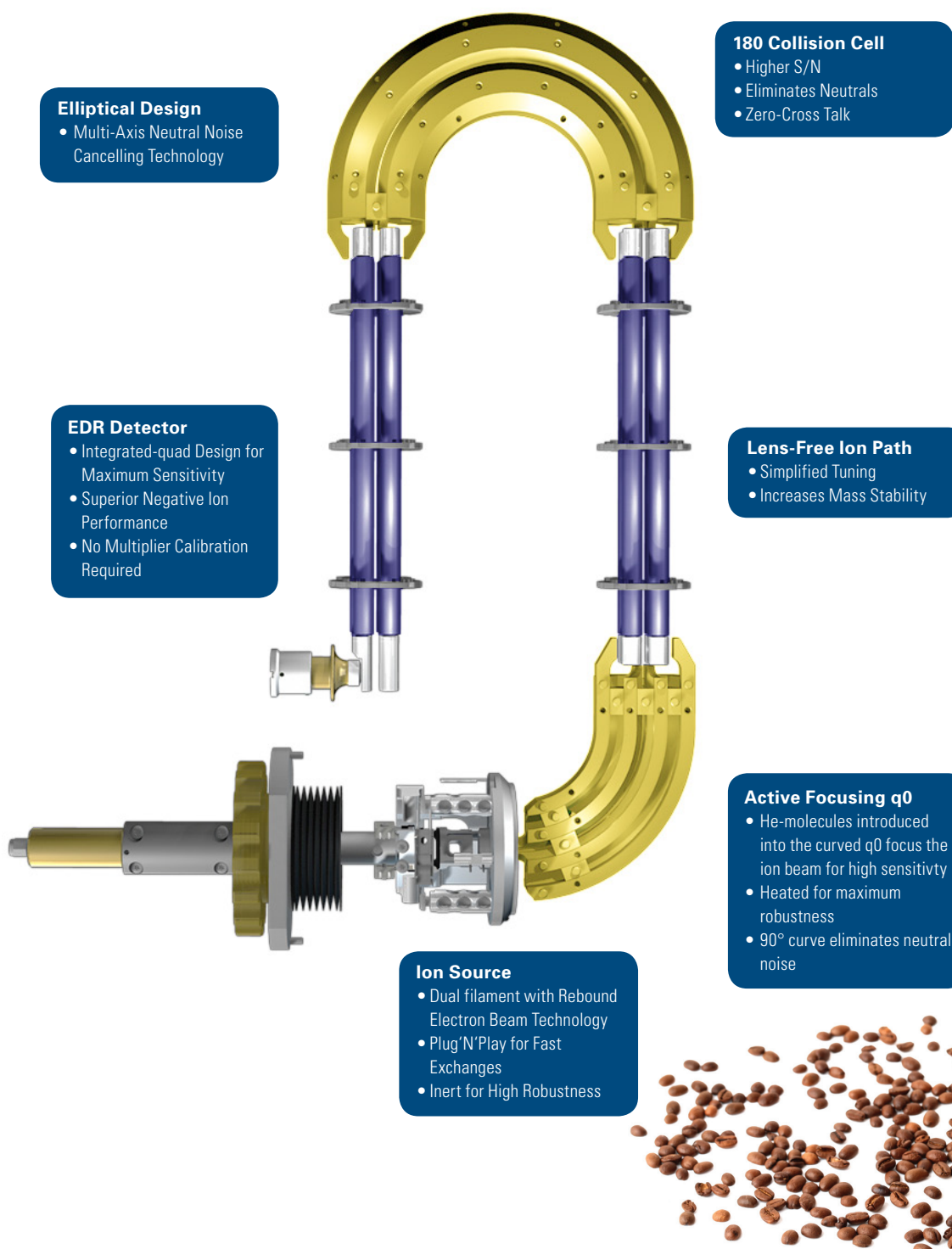
SCION TQ GC-MS/MS Features

- **Simple Tuning**
'Lens-Free' ion path for higher stability & sensitivity
- **More Sensitivity**
Active-Focusing q0 uses Helium molecules to increase ion transmission
- **Higher S/N**
Elliptical ion-path design that results in virtually zero neutral or chemical noise
- **Easy MRM Method-Set Up**
Simply type the name of the compound and the MRM information auto-fills
- **Unrivalled NCI Performance**
High capacity turbo-pump standard with every SCION TQ
- **Eliminate Re-Injections**
Extended Dynamic Range detector with unique Integrated-Quad design

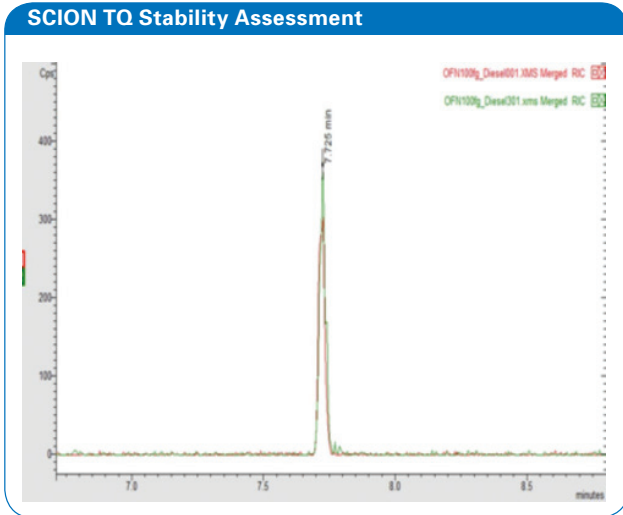


● Why Choose the SCION TQ GC-MS/MS System?

Benefit from the innovations provided by the SCION TQ and increase the confidence in your results while future-proofing your laboratory. The unique elliptical ion-path that is fundamental to the SCION TQ virtually eliminates neutral or chemical noise. Other innovations such as the 'lens-free' design and the active focusing q0 ion optics help make quantitative analysis of difficult samples routine.



Peace Of Mind, Delivered



Analytical laboratories may have different applications, but they share many of the same challenges. The SCION TQ is designed to effortlessly analyze thousands of samples from even the dirtiest of matrices such as sewer run-off, food homogenates, oil field sludge, whole blood and tissue. When your QuEChERS assay demands the utmost in reliability and robustness, or your steroid assay requires superior sensitivity, simply use the SCION TQ.

Industry leading robustness indicated by 300 consecutive injections of 1% Diesel Oil matrix containing 100 fg OFN over a one week period. The MRM (m/z 272>222) traces show injection No.1 and injection No. 301.

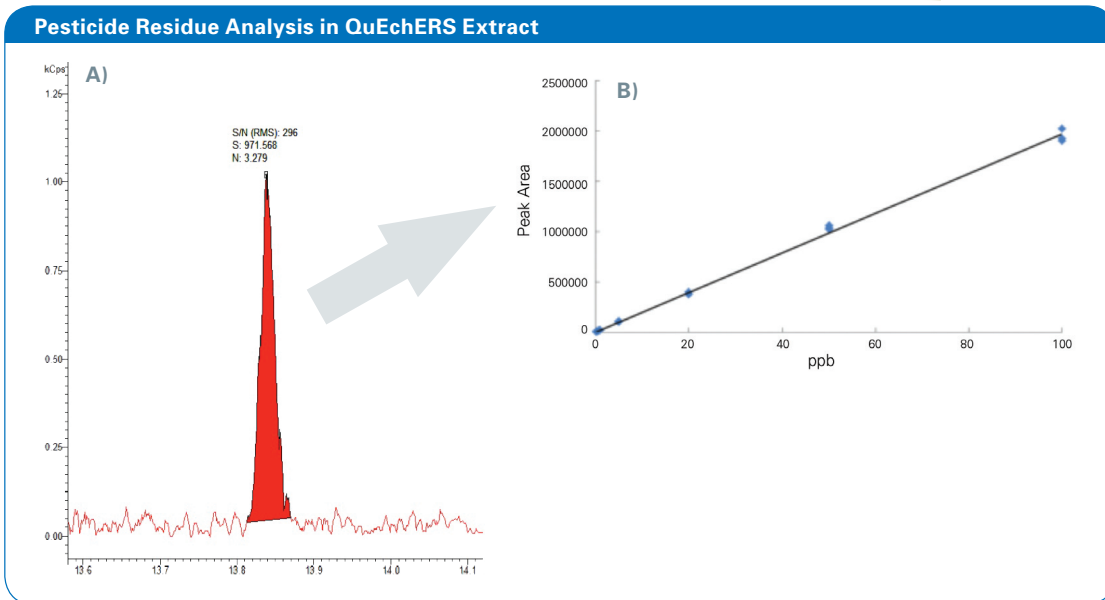


Figure A) 0.1 ppb Heptenophos in QuEChERS extract
Figure B) Routine dynamic range, sensitivity and precision of the SCION TQ GC-MS/MS as indicated by excellent linearity range of pesticide Heptenophos in QuEChERS extract matrix of mixed color peppers from 0.1 to 100 ppb. Note also the excellent precision down to the 0.1 ppb.



Gas Chromatographs

An Infusion of Innovation with a Legacy of Reliability

The GC is essential to the reliability, robustness, and sensitivity of any GC-MS analysis. Bruker's long history of innovation is highlighted by the introduction of two GC's purpose-built to support the ultra-sensitive SCION TQ: the compact 436 GC, and the versatile 451 GC, now available with backflush technology and ChromatoProbe.



436 Gas Chromatograph

Compact design for those focused on routine applications requiring maximum sample throughput utilizing Split/Split-less or PTV/BF injection.

- Select up to two 2 capillary inlets – Split/Splitless (SSL) or PTV
- Supports standard 9 inch capillary column
- Electronic Pressure Control
- Fully controlled through Data System
- Oven temperature up to 450°C
- Supports the ChromatoProbe for solid sample introduction
- Automate with Model 8400 /8410 or CTC liquid auto samplers



451 Gas Chromatograph

The 451 GC provides maximum versatility for your SCION TQ GC-MS/MS system. Additional inlets and GC detectors make the 451 GC a must-have for labs seeking maximum versatility in their applications and detectors.

- 3 inlets Options: SSL, PTV, Cold-on-Column, Purged Packed
- Add up-to 3 GC Detectors - FID, ECD, TCD, PFPD
- Electronic Pressure Control
- Fully controlled through Data System
- Oven temperature up to 450°C
- Supports the ChromatoProbe for solid sample introduction
- Automate with Model 8400/8410 or CTC liquid auto samplers

● Additions to Enhance System Capability and Performance

The perfect addition for the SCION TQ PTV inlet is the back flush option. Complex sample matrix can quickly ruin the chromatographic performance of your GC column. However, the PTV with Bruker's "backflush" technique can reliably divert the higher boiling sample matrix away from the column. The benefits of this accessory are many:

- Run more samples per day - decrease analysis times as the heavy components are quickly eliminated
- Save time by eliminating column bake out
- Preserve column performance for extended period of time

ChromatoProbe

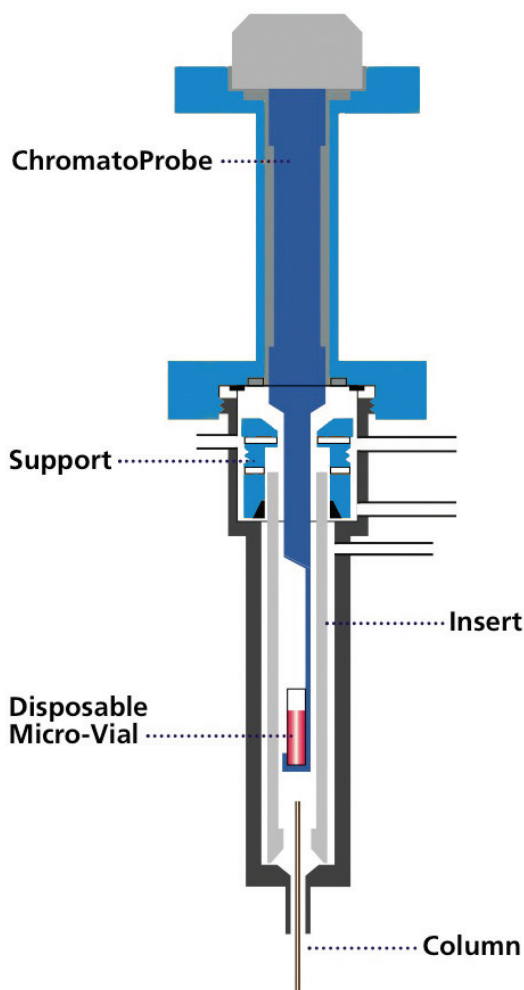
Added Versatility for Superior Analysis of Solids, Liquids, and Slurries

Compounds such as street drugs, industrial solids, synthetic organic products, and plant tissues that normally are not considered amenable to GC/MS analysis can be easily investigated with the ChromatoProbe.

Samples are introduced into the PTV injector via disposable micro-vials. Non-volatile or thermally degraded components from the sample remain in the micro-vial allowing the system to remain clean.

ChromatoProbe Benefits:

- Increase uptime
- Minimize system contamination with disposable micro-vials
- Directly desorb samples in the PTV injector without added hardware (unique Direct Sampling Capability)



For research use only. Not for use in diagnostic procedures.

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