![SCION INSTRUMENTS - A Techcomp Company]

TQ 8900

MASS SPECTROMETER

Welcome to the fastest GC-triple quadrupole on the market. Combining fast scan rates with an increased MRM rate and high sensitivity, the SCION 8900 TQMS is the instrument of choice for al your quantitative mass spectrometry needs.

TQMS Speed

THE SCION 8900 TQMS HAS A SMALL FOOTPRINT BUT DOES NOT COMPROMISE ON QUALITY.

Offering superior sensitivity and robustness based on innovative ion optics, and fast and easy method development.

Coupled to our outstanding GC instruments, the SCION 8900 TQMS system defines a new standard of usability for quantitative analysis.

Available in two models, the SCION 8900 TQMS offers a flexible solution for any laboratory:

Software

TQControl
- Equipped with the Compound Base Scanning (CBS) MRM library for data acquisition, with fully integrated TASQ data handling, and reporting
- Data processing is performed with Trace Analysis Screening and Quantification: TASQ

CompassTQ
- Control and TASQ post acquisition data processing for a unified software experience
- Optional Spectral Libraries: NIST, Wiley, and Pfleger/ Maurer/Weber (PMW) libraries with user customisable libraries and automatically searching of multiple libraries
- Autotune in all ionisation modes, special tunes for EPA methods (DFTPP/BFB)
- Software is Windows 10 compatible and upgradeable moving forward

8900 MODELS	FEATURES	BENEFITS/APPLICATIONS
EI	• EI Only • Active-Focusing q0 • Ultra-High Performance Split-flow • (300/400 L/s) Turbo Pump	• High-Sensitivity • Fast pump-down • Ultimate flexibility • Pos/Neg detector
EI/CI	• EI/CI • Maintains all other benefits from the EI only instrument	• Added flexibility • Easy interchange between EI and CI

SCION 8900 TQMS

Accelerate your Analysis

- The SCION 8900 TQMS delivers the fastest scan rates (30,000 Da/s) of any comparable system.
- Coupled to low dwell times of 0.5ms, the 8900 TQMS allows you to capture more data in your analysis.
- Improved MRM speed (1000 MRM/s) pushes the envelope on data capture to new levels
- Included is a high-performance turbo pump for rapid time to vacuum and worry-free operation
- Dual filament source increases uptime

Small but Powerful

- The smallest TQMS on the market without compromising on performance
- Best sensitivity in positive ion MRM mode (100 fg OFN for 272>222: S/N> 50.000:1)
- Six orders of magnitude dynamic range (EDR)
- Extensive mass range (1-1200)
- Mass resolution of **0.7-4Da** with mass stability of 0.1Da over 48h
- Innovative **lens-free** ion path delivers simplified tuning
- Off axis source and detector increase sensitivity

SCION 8900 TQMS Performance Specifications

MODE	TEST* (SSL INJECTOR IN HOT SPLITLESS MODE)	SPECIFICATION†
EI Full Scan	1pg Octafluoronapthalene (OFN) from m/z 50-300 for m/z 272	S/N ≥ 1,500:1
EI MRM	100fg Octafluoronapthalene (OFN) for m/z 272>222	S/N ≥ 50,000:1
EI MRM (IDL)	8 injections of 10fg Octafluoronapthalene	RSD < 3.7fg
PCI Full Scan	10 pg Benzophenone (BZP) (80-->230) for 183	S/N > 50:1
PCI MRM	100 fg BZP for 183>105	S/N > 150:1
NCI Full Scan	1 pg OFN (200-->300) for 272	S/N > 4,000:1
NCI MRM	10 fg OFN for 272	S/N > 400:1

* All tests performed with helium at carrier gas
† The Signal-to-Noise ratio S/N values are based on RMS

GC Compatibility

- The SCION 8900 TQMS interfaces seamlessly with SCION Gas Chromatograph (SCION 8300 and 8500 Model GC)
- Injectors: Split/Splitless (SSL), Programmable Temperature Vaporisation (PTV) and PTV with back-flush (PTV/BF), Cold On-Column (COC)
- Autosamplers: 8400 Pro; 8410 Pro; CTC PAL COMBI-xt
- GC Oven Temperature: Ambient +4°C to 450°C, -100°C to 450°C (with Liquid N_2 or Liquid CO_2)
- Temperature Ramps/Holds: 24/25
- Pneumatic: Electronic Flow Control (EFC) or Manual
- ChromatoProbe: Direct introduction of solids, liquids or slurries (requires PTV injector)

Dimensions (H x W x D) and Weight

- 45cm (18in) x 28cm (11in) x 57cm (22.5in)
- 40kg/88lb