



# Agilent 6410 Triple Quadrupole LC/MS

## Data Sheet



**The 6410 Triple Quadrupole LC/MS achieves sensitivity and resolution specifications after autotune without manual user intervention.**

Parameter	Measure	Specification
MS/MS sensitivity and repeatability	0.5 pg of reserpine injected on column, ESI source, three concurrent MRM acquisitions, quantifying on the transition $m/z$ 609 to 195.	Signal-to-noise ratio >20:1, where noise = 5x RMS
Mass resolution		Three settings (FWHM) Unit: 0.7 u; Wide: 1.2 u; Widest: 2.5 u
Mass accuracy		0.1 u across the mass range
Mass stability		<0.1 u in 24 h
Dynamic range		>6.5 × 10 <sup>6</sup>
Mass range		$m/z$ 15–1,650
Scan rate		5,200 u/sec
Scan modes		MS scan, MS/MS product ion scan, MRM, MS/MS neutral loss/gain scan and precursor ion scan, SIM
Minimum MRM dwell time		5 ms with 10 MRMs
MRM transitions		99 per time segment, thousands possible with multiple segments
Positive/negative polarity switching	Time segment dependent	Inter-segment delay of 1.5 sec
Collision cell		High-pressure, hexapole with linear acceleration
Cross-talk		None detectable



## General System Specifications

Parameter	Measure
Single point of control	Single-point data system method capability with full control of Agilent 1100 and 1200 Series HPLC systems and 6410 Triple Quadrupole LC/MS
Time programming	<ul style="list-style-type: none"><li>• Positive/negative polarity switching in a time segment</li><li>• Scan and SIM or MRM (plus other modes of data collection)</li><li>• Solvent divert through calibrant delivery system valve</li><li>• Possible 99-time segments with potential 99 MRMs per-time window</li></ul>
Wide range of ionization sources	<ul style="list-style-type: none"><li>• Electrospray (ESI)</li><li>• Nanospray with HPLC-Chip Cube MS interface</li><li>• Atmospheric pressure chemical ionization (APCI)</li><li>• Multimode source (simultaneous ESI and APCI)</li></ul>
Autotune	Automated optimization of ion optics and mass axis calibration
Solvent declustering	Countercurrent gas
Detector	High-energy conversion dynode and removable electron multiplier horn
Vacuum system	One triple-stage turbomolecular pump with one mechanical pump
Warranty	First year expanded warranty to include all labor, parts, and travel expenses. Includes preventive maintenance and certain consumables.

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Printed in the USA  
November 23, 2006  
5989-5072EN