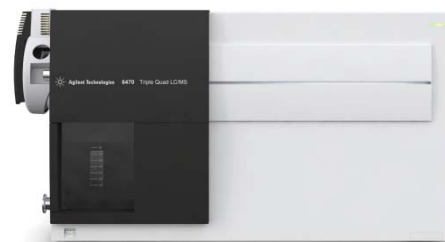


Agilent 6470 Triple Quadrupole LC/MS System with Agilent JetStream Technology

Data Sheet



The Agilent 6470 Triple Quadrupole LC/MS delivers superior sensitivity for trace level analysis with performance specifications in signal-to-noise (S/N) and instrument detection limit (IDL). IDL is a rigorous, statistically based metric that indicates practical sensitivity performance of your quantitative assays. The 6470 Triple Quadrupole LC/MS achieves sensitivity and resolution specifications with autotune.

Parameter	Measure	Specification
MRM sensitivity Signal-to-Noise ratio (S/N) ESI positive	1 pg of reserpine injected on column, quantifying on the transition m/z 609 to 195	S/N > 75,000:1 Noise 1 \times RMS
MRM sensitivity Signal-to-Noise ratio (S/N) ESI Negative	1 pg of chloramphenicol injected on column, quantifying on the transition m/z 321 to 152	S/N > 30,000:1 Noise 1 \times RMS
MRM sensitivity Instrument Detection Limit (IDL) ESI positive	10 fg of reserpine injected on column, quantifying on the transition m/z 609 to 195	IDL < 4.0 fg
MRM sensitivity Instrument Detection Limit (IDL) ESI Negative	10 fg of chloramphenicol injected on column, quantifying on the transition m/z 321 to 152	IDL < 4.0 fg
Mass range		m/z 5–3,000
Polarity switching		25 ms
Mass resolution (autotune)	Full width at half maximum	0.7 Da
Mass resolution (manual tune)	Full width at half maximum	0.5 Da
Mass accuracy		0.14 Da for m/z 5–999 0.20 Da for m/z 1,000–1,999 0.30 Da for m/z 2,000–3,000
Mass stability		\leq 0.1 Da in 24 hours
Dynamic range		$> 6.0 \times 10^6$
Scan modes		MRM, SIM, MS scan, product ion scan, neutral loss/gain scan, and precursor ion scan
MRM transitions		450 per time segment Up to 13,500 MRM transitions per method
Dynamic MRM transitions		Up to 4,000 dynamic MRM transitions per method
Triggered MRM transitions		Up to 10 MRM transitions (primary and secondary) per analyte for library search and compound confirmation
Maximum scan rate		17,000 Da/s
Maximum MRM acquisition rate		500 MRMs/s
Minimum MRM dwell time		0.5 ms



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General system specifications

Parameter	Specification
Single point of control	Single-point data system method capability with full control of Agilent 1200 Series LC systems and 6470A Triple Quadrupole LC/MS/MS System
Time programming	<ul style="list-style-type: none">• Polarity change in time segment• Scan and SIM or MRM (plus other modes of data collection)• Dynamic and triggered MRM aligns MRMs with compound retention time• Solvent divert through calibrant delivery system valve
Wide range of orthogonal ionization sources	<ul style="list-style-type: none">• Electrospray (ESI)• APCI source (Atmospheric Pressure Chemical Ionization)• Multimode source (simultaneous ESI and APCI)• APPI Source (Atmospheric Pressure Photo Ionization)
Autotune	Automated optimization of ion optics and mass axis calibration in positive and negative ion modes using a proprietary tune solution
Solvent declustering	Countercurrent drying gas, sheath gas (AJS)
Detector	±20 kV high-energy conversion dynode (HED) and high-gain electron multiplier horn
Vacuum system	Two turbomolecular pumps with one mechanical pump

Ordering Information

G6470AA: 6470 Triple Quadrupole LC/MS System

Includes the Agilent 6470 Triple Quadrupole Mass Spectrometry, MassHunter Workstation Software with both compliance and method optimization software, a PC, a monitor, and service installation of the system.

The above are not standard installation specifications for the 6470 Triple Quad. Performance specifications in this document are reviewed for accuracy, but they do not represent the tests and procedures performed at installation, which are described in the Agilent 6400 Series Triple Quad LC/MS System Installation Manual, document G3335-90170 or subsequent version number. See Site Preparation Guide and Service Notes for additional product and specification information.

For More Information

These data represent typical results. For more information on our products and services, visit our Web site at www.agilent.com/chem.

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