



Agilent Technologies

Agilent 6100 Quadrupole LC/MS Systems

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High-performance design features	
<ul style="list-style-type: none">• Orthogonal-flow sprayer with pneumatic nebulizer – enhances sensitivity across a wide range of LC conditions and reduces maintenance requirements.• High-capacity solvent drying system – reduces chemical noise and permits the analysis of thermally-sensitive compounds through user control of gas flow rate and gas temperature.• Dielectric platinum-plated capillary – enhances sensitivity, permits independent optimization of the spray chamber and ion optics, and allows dynamic optimization of in-source fragmentation.• Air-cooled turbomolecular pump – provides fast startup and a small footprint, and eliminates the need for cooling water. Single, split-flow turbo pump enhances performance and increases reliability.• Fraction collection capability – can monitor and trigger the collection of fractions based on mass, an analog signal input, or time. For mass-based determination, up to 16 m/z values can be monitored. Requires optional I/O Accessory Module.	
Mass Range	6110 and 6120 Quad: m/z 10 - 1500 6130 Quad: m/z 2 - 3000 6140 Quad: m/z 10 - 1350
Mass Accuracy	± 0.13 u within the calibrated mass range in scan mode
Mass Axis Stability	The mass drift does not exceed the larger absolute value of ± 0.1 Da or ± 100 ppm of measured mass over a 12 hour period at constant temperature ± 3 degrees centigrade.
Scan Speed	6110 Quad: 2500 u/s 6120 Quad: 2500 u/s 6130 Quad: 2500 u/s standard mode, 5250 u/s fast scan mode 6140 Quad: 10,000 u/s in fast mode and 2500 u/s in normal mode

SIM Sensitivity	<ul style="list-style-type: none"> • ESI at 400 μ/min or APCI at 1000 μ/min • Selected ion monitoring of m/z 609.3 • Positive ionization
	<p>6110 and 6120 Quad: 10 pg reserpine, 100:1 RMS (20:1 peak-to-peak)</p> <p>6130 and 6140 Quad: 1 pg reserpine, 100:1 RMS (20:1 peak-to-peak)</p>
Scan Sensitivity*	<ul style="list-style-type: none"> • ESI at 400 μ/min or APCI at 1000 μ/min • Scan range m/z 100 - 650 • Scan speed 2500 u/s • Extracted ion at m/z 609.3 • Positive ionization
	<p>6130 and 6140 Quad: 50 pg reserpine, 100:1 RMS (20:1 peak-to-peak)</p> <p><i>* There is no scan specification for the 6110 and 6120 Quad models</i></p>
Flow Rate	<p>ESI: Up to 1.0 ml/min water without a flow splitter</p> <p>APCI: Up to 1.5 ml/min water without a flow splitter</p>
Multisignal acquisition (6120, 6130 and 6140 Quad only)	<p>Ability to cycle through four acquisition modes on a scan-by-scan basis within a single run. Up to four analysis modes can be viewed in the software window and can be linked together to facilitate processing and analysis. Modes of operation: positive/negative polarity switching, variable fragmentor voltage selection, and concurrent SIM/scan.</p>
Operating Conditions	<p>Temperature range: 15 °C to 35 °C (59 °F to 95 °F)</p> <p>Relative humidity: less than 95 % (non-condensing)</p>
Dimensions**	<p>Height: 65 cm (26 in)</p> <p>Width: 39 cm (15 in)</p> <p>Depth: 75 cm (29 in)</p> <p>Weight: 50 kg (110 pounds)</p> <p><i>**Approximate maximum cabinet dimensions with G1947A APCI source attached but without external mechanical pump. Height and width slightly less with G1948A ESI source.</i></p>