



# Agilent 6545 Q-TOF Specification

## Data Sheet



Parameter	Measure	Specification
Sensitivity, MS mode, electrospray on-column, 400 $\mu\text{L}/\text{min}$ flow rate	1 pg LC/MS injection of reserpine. Signal-to-noise for the reserpine (M+H) <sup>+</sup> at $m/z$ 609.2807 while maintaining a resolution of 40,000 at $m/z$ 2,722 in 4 GHz mode	500:1 RMS
Sensitivity, MS/MS mode, electrospray on-column, 400 $\mu\text{L}/\text{min}$ flow rate	1 pg LC/MS injection of reserpine. Signal-to-noise for most intense product ions (174, 195, 397, and 448 $m/z$ ) while maintaining a resolution of 40,000 at $m/z$ 2,722 in 4 GHz mode	1,500:1 RMS
Mass resolving power	Measured at $m/z$ 2,722 after automatic tuning procedure	Greater than 45,000 FWHM at $m/z$ 2,722
Mass accuracy – MS mode, electrospray on-column, 400 $\mu\text{L}/\text{min}$	Measured at the (M+H) <sup>+</sup> ion of reserpine ( $m/z$ 609.2807) using an internal mass reference	Less than 0.8 ppm RMS as measured from 10 repeat injections
Mass accuracy – MS/MS mode, electrospray on-column, 400 $\mu\text{L}/\text{min}$	Product ion $m/z$ 397 for reserpine	Less than 2 ppm RMS on $m/z$ 397 as measured from 10 repeat injections
Mass accuracy temperature stability, MS mode	Temperature: 15 to 35 °C (59 to 95 °F) at constant temperature	Maintain 1 ppm mass accuracy (variations < 3 °C from calibration temperature)
Dynamic range	Intrascan dynamic range on coeluting components	Up to 5 decades
Mass range		$m/z$ 100–10,000 extended mass range $m/z$ 50–1,700 or 50–3,200 for both high resolution and extended dynamic range modes Quadrupole up to $m/z$ 4,000
Spectral acquisition rate, MS mode	$m/z$ 50 to 1,700 in MS mode while maintaining a resolution of 40,000 at $m/z$ 2,722 in 4 GHz mode	50 spectra/second
Spectral acquisition rate, MS/MS mode	$m/z$ 50 to 1,700 in MS/MS mode while maintaining a resolution of 40,000 at $m/z$ 2,722 in 4 GHz mode	30 MS/MS spectra/second
Positive to negative swithing	Complete cycle switching from positive to negative and positive modes allows for stabilization time	1.5 seconds

All specifications are achieved in manufacturing, and instrument performance data is supplied with shipment. All specification values are achieved after autotune, and do not require manual optimization. These specifications are not standard installation specifications for the Agilent Q-TOF. The Agilent high-resolution accurate mass Q-TOF instruments are tested and installed in accordance with standard performance tests as described in the Agilent installation manual.



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