Waters Corporation Xevo G2-XS UPLC/Q-TOF Mass-spectrometer Specifications

Item	
Acquisition Modes	 MS scanning MS/MS product ion scanning UPLC®-FastDDA (rapid, automated MS to MS/MS scan function switching): UPLC-MSE Tof-MRM Ionization mode switching (ESCi) External contact start/stop/events Analogue channel acquisition via an e-SAT/IN module
Mass Range	 The TOF mass range is m/z 20 to 100,000 The quadrupole mass range is m/z 20 to 16,000 in non-resolving mode and m/z 20 to 4,000 in resolving mode A high mass quadrupole option is available with a mass range up to m/z 100,000 in non-resolving mode and m/z 32,000 in resolving mode
Mass Measurement Accuracy	The mass measurement accuracy of the instrument will be better than 1 ppm RMS, based on 10 consecutive repeat measurements of the [M + Na]+ ion of raffinose (m/z 527.1588), using a suitable choice of lock mass.
Dynamic Range	The dynamic range, defined as the range of peak intensities that will give better than 3 ppm RMS for 10 sec of data, is at least four orders of magnitude when measured on the m/z 556.2771 peak from leucine enkephalin. This can be increased with use of programmable dynamic range enhancement (pDRE) technology.
Mass Resolution	 Resolution mode: >40,000 FWHM measured on the (M + 6H)6+ isotope cluster from bovine insulin (m/z 956) at a data acquisition rate of 30 spectra per second. Sensitivity mode: >30,000 FWHM measured on the (M + 6H)6+ isotope cluster from bovine insulin (m/z 956) at a data acquisition rate of 30 spectra per second.
MS Sensitivity (ESI+)	The peak at m/z 556 from a solution of 50 pg/ μ L leucine enkephalin in 50/50 acetonitrile/water + 0.1% formic acid, will have an intensity of greater than 80,000 counts per sec. The instrument will be tuned to >30,000 FWHM resolution (as demonstrated on bovine insulin) and the mass range will be set to m/z 1200.
MS Sensitivity (ESI-)	The peak at m/z 503 from a solution of 500 pg/µL raffinose in 70/30 acetonitrile/water (no additives), will have an intensity of greater than 110,000 counts per second. The instrument will be tuned to >30,000 FWHM resolution (as

Waters Corporation Xevo G2-XS UPLC/Q-TOF Mass-spectrometer Specifications

	demonstrated on bovine insulin), and the mass range will be set to m/z 1200.
MS/MS Sensitivity	Using a [Glu1] -Fibrinopeptide B solution of 100 fmol/ μ L with the instrument tuned for >30,000 resolution (as demonstrated on bovine insulin), the intensity of the most intense y" sequence ion from the MS/MS spectrum of the doubly charged precursor ion (m/z 785.8) will be greater than 7,500 counts per second.