



Performance Specifications

amaZon X Dual Funnel Ion Trap Mass Spectrometer System

BDAL #274445

Size	Benchtop: 89 cm x 76cm x 51 cm
Weight	~ 86 kg
Vacuum System	4 stages, 24 m ³ /h rough pump
Apollo II ion funnel electrospray source	Flow rate: 1 µL/min – 1 mL/min
Polarity switching	Zero Delay Alternating™: Polarity switching at 20 Hz MS acquisition rate
Stages of MS(n)	MS(n) for n = 1 through 11
Stages of AutoMS(n)	AutoMS(n) for n = 1 through 5
Mass accuracy in MS and MS/MS	+/- 0.15 u within the calibrated standard mass range at UltraScan resolution in full scan mode, with proper calibration, ICC target and ion statistics, and thermal equilibrium of electronics and ion source
Sensitivity Specification	The following system sensitivity specifications are only applicable when an Agilent 1200 Series HPLC system is purchased together with the amaZon X System and this LC system is installed in conjunction with the amaZon X System
Full scan sensitivity in MS	Reserpine 5 pg/µL @ S/N>10: 1 Signal-to-noise ratio of the extracted ion chromatogram of the protonated molecular ion (m/Z 609) as the result of an injection of 1 µL Reserpine (5 pg/µL), measured in positive ion mode, at a flow rate of 200 µL/min when the mass spectrometer is operated in full scan mode using the Enhanced Resolution Mode, scanning from m/z 250 to 750.
Full scan sensitivity in MS/MS	Reserpine 125 fg/µL @ S/N>500: 1 Signal-to-noise ratio of the extracted ion chromatogram of the transition of the protonated molecular ion (m/Z 609) to the most abundant product ion as the result of an injection of 2 µL Reserpine (125 fg/µL), measured in positive ion mode, at a flow rate of 200 µL/min when the mass spectrometer is operated in full scan MS/MS mode scanning the product ion spectrum from m/z 250 to 650 using the Enhanced Resolution Mode.

Scan Mode	Mass Range (m/z)	Resolution FWHM (u)	Scan Speed (u/sec)
XtremeScan	100-3000	0.58	52,000
UltraScan	70-3000	0.5	32,000
Enhanced Resolution Mode	50-3000	0.30	8,100
Maximum Resolution Mode	50-3000	0.1*	4,600
Extended Mass Range	200-6000	3	27,000

*achieved for multiply charged ions (z>2), shown on the mono isotopic masses of the PGRP-2 peptide (3⁺, 4⁺ and 5⁺).

Optional accessory

Bruker EASY-nLC	Split-free nano-flow HPLC system
APCI	Optional accessory
APPI	Optional accessory
On-/Off-Line Nanospray	Optional accessory
CE/MS interface	With grounded needle for easy CE-MS set-up (Optional accessory)