



Expression® CMS

High performance compact mass spectrometer

The family of **expression**® compact mass spectrometers (CMS) provides essential information quickly and improves the chemist's workflow. Modern organic labs have become automated, faster and more critical reactions require co-located versatile analytics - the **expression**® CMS solves this at an affordable price.

Specifications

m/z Range: expression S m/z 10 to 1,200
 expression L m/z 10 to 2,000
 Ion Source : ESI, APCI or APCI/ASAP
 Polarity: Positive & negative ion switching in a single analysis
 Flow Rate Range: ESI: 10 µL/min to 1 mL/min
 APCI: 10 µL/min to 2 mL/min
 Acquisition Speed: 10,000 m/z units/sec
 Sensitivity: (ESI) 10 pg reserpine (FIA - 5 µL injection at 100 µL/min) 100:1 S/N (RMS) with SIM of m/z 609.3.
 Accuracy: +/- 0.1 m/z units of the entire acquisition range
 Stability: 0.1 m/z u at m/z 1,200 over 12 h period at operating temperature of 20°C +/- 1°C
 Polarity Switching Speed: 50 ms
 Dynamic Range: 4.5 orders of magnitude

System/Space Requirements :

Gas Supply: 60 psi, >98% pure Nitrogen
 Gas Consumption: < 10 L/min
 Solvents: LC/MS-grade solvents
 Line Voltage: 100 - 240 VAC
 Line Frequency: 47 - 63 HZ
 Power Consumption: 915 VA (including PC)
 Temperature: 21°C +/- 3°C +/- 1°C for optimal performance
 Storage & Transport Temp: -20°C to +60°C

Software



Mass Express

A user-friendly, intuitive software platform for instrument control and data acquisition



Data Express

A full feature data processing package to interpret and present mass spectral and chromatographic information in the clearest form using the fewest possible steps.



CheMS

The CheMS user interface allows users to quickly select the workflow and type of compound they wish to analyze in just a few clicks of the mouse, automatically optimizing the ion source and data acquisition parameters.

Software

- Single click an instrument icon to set-up, and switch between, a range of sample introduction techniques
- Simplified interpretation of mass spectra with automatic identification of peaks related to your compound of interest
- Works alongside Mass Express for fully capable and versatile instrument control and data processing

Minimum Computer Specifications

Operating System : Windows 10 and 11 - 64 bit operating systems.

Processor : Intel i3 or greater Intel CPU or AMD equivalent

Memory : 8 GB

Hard Disk : >200 GB Hard Drive

Display : Minimum screen size of 1366 x 768 pixels

Ports : 4 USB 2.0 (USB Hub is acceptable) - RJ45 port for Ethernet (or additional USB to RJ45 converter)

Power supply

100 V or 220 V

Dimensions & Weight

Dimensions: (H x W x D) 26 x 11 x 22 in (66 x 28 x 56 cm)

Weight: 70 lb (32 kg)

