

ACQUITY QDa II Mass Detector

The ACQUITY™ QDa™ II Detector is a mass detector designed to be an integral part of a chromatographic separations system. It is purposefully designed for analytical scientists who need mass spectral data without the complexity of a mass spectrometer.

With the on/off simplicity that analytical scientists have long wanted from mass spectrometry, the ACQUITY QDa II Mass Detector eliminates the need for sample-specific adjustments, helping to provide certainty in sample results, from user to user and system to system.

With the robustness and reliability demanded for use in routine laboratories and an extended mass range enabling analysis of a wider range of molecules, the ACQUITY QDa II Mass Detector brings the power of high-quality mass spectral data expected from a traditional single quadrupole mass spectrometer in a mass detector no bigger than the familiar PDA detector.



SYSTEM HARDWARE CAPABILITIES

API Source and ionization modes	<ul style="list-style-type: none"> Adjustment-free high performance ZSpray™ dual-orthogonal atmospheric pressure ionization (API) electrospray (ES) interface for robustness and reliability Ion polarity switching for comprehensive compound coverage Integrated adjustment-free plug and play probe for reduced dispersion and improved repeatability De-clustering cone gas Improved cone design for easier maintenance and improved reliability Tool free access to customer serviceable elements Automated control of gas flows and heating elements
Ion source transfer optics	Dual off-axis ion guides for elimination of neutral noise with increased sensitivity and robustness. Includes high efficiency conjoined stacked ring ion guide and second stage quadrupole ion guide
Mass analyzer	<ul style="list-style-type: none"> Automated mass calibration and resolution verification for consistent data quality. Single high resolution quadrupole analyzer, plus pre-filter to maximize resolution and transmission while preventing contamination of the mass analyzer
Detector	Low noise, off axis, long life photomultiplier detector
Dimensions	<ul style="list-style-type: none"> Width: 35.3 cm (13.9 in) Height: 20.0 cm (7.9 in) Depth: 65.0 cm (25.6 in) Weight: 26.4 kg (58 lbs) MS unit without vacuum pump

Power supply	MS unit: 110-240 V ac 50/60 Hz, 541W maximum recorded power in Operate mode (including backing pump), average power consumption likely to be less, dependent on usage
Regulatory approvals/marks	CE, CB, NRTL (CAN/US), RCM
Environmental credentials	ACT Environmental Impact Factor Label from My Green Lab All current labels can be accessed at https://actdatabase.mygreenlab.org/

SYSTEM SOFTWARE CAPABILITIES

Software	Systems supported on Empower™ and MassLynx™ Empower systems are compatible with optional Empower Lab Management System (LMS) and waters_connect™ System Monitoring MassLynx controlled systems are compatible with OpenLynx Open Access for simplified login and automated analysis, FractionLynx for mass directed purification and TargetLynx™ XS for quantitation Automated mass calibration and mass resolution control and verification Automated diagnostics, checks, and alerts
Automated full scan MS acquisition	Automatically-optimized for enhanced data quality at required data rate as MS spectra per second (Hz), simplifying full scan MS acquisition
Automated SIR acquisition	Automatically-optimized for enhanced data quality at required data rate as MS data points per second (Hz), simplifying SIR acquisition. Automated scheduling of SIR acquisition windows for optimized data quality.

PERFORMANCE CAPABILITIES

Acquisition modes	Full scan MS Selected Ion Recording (SIR)
RADAR	SIR quantitative data with simultaneous MS scan acquisition for component confirmation and additional component detection without loss of MS response or data quality
MS ^E	Simultaneous precursor MS Scan and fragmentation MS Scan for component confirmation

For more detailed instrument performance specifications, please contact your local sales representative.

For patent information, please see www.waters.com/patents

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