



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Request for Quotation

RFO NUMBER
LBS11009

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
ROBERTA WAGNER
304-558-0067

*709001009 800-252-4752
 WATERS CORPORATION
 34 MAPLE STREET
 MILFORD MA 01757

VENDOR

SHIP TO
 HEALTH AND HUMAN RESOURCES
 ENVIRONMENTAL CHEMISTRY LAB
 4710 CHIMNEY DRIVE
 CHARLESTON, WV 25302
 304-558-3530

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS		
06/10/2010						
BID OPENING DATE: 07/15/2010		BID OPENING TIME 01:30PM				
LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	EA		490-55	243,715.51	243,715.51
LIQUID CHROMATOGRAPH/MASS SPECTROMETER/MASS SPECTROMETER (LC/MS/MS) INSTRUMENT TO MEET THE REQUIREMENTS OF THE PUBLIC HEALTH EMERGENCY PREPAREDNESS COOPERATIVE AGREEMENT WITH THE CENTER FOR DISEASE CONTROL AND PREVENTION (CDC). THE TECHNOLOGY OF THE LC/MS/MS MUST BE CONFIGURED SPECIFICALLY FOR THE STATE DEPARTMENT OF HEALTH LABORATORIES WHO ARE MEMBER OF THE US CENTERS FOR DISEASE CONTROL LRN-C PROGRAM.. THE RESOLUTION AND SENSITIVITY CAPABILITY MUST BE ABLE TO MEET OR EXCEED THE LIMITS OF DETECTION AND MINIMUM REPORTING LEVELS REQUIRED FOR THESE AGENTS AS STIPULATED UNDER THE CENTER FOR DISEASE CONTROL OFFICE OF QUALITY CONTROL, QUALITY ASSURANCE PROGRAM, VALIDATION GUIDELINES. THIS INSTRUMENT IS TO BE INSTALLED FOR USE BY THE OFFICE OF LABORATORY SERVICES, CHEMICAL THREAT LABORATORY AT 4710 CHIMNEY DRIVE, SUITE G, CHARLESTON, WV 25302, PER THE ATTACHED DETAILED SPECIFICATIONS.						
>> PLEASE SEE ATTACHED SPECIFICATIONS/COST SHEET. <<						
CANCELLATION: THE DIRECTOR OF PURCHASING RESERVES THE RIGHT TO CANCEL THIS CONTRACT IMMEDIATELY UPON WRITTEN NOTICE TO THE VENDOR IF THE COMMODITIES AND/OR SERVICES SUPPLIED ARE OF AN INFERIOR QUALITY OR DO NOT CONFORM TO THE SPECIFICATIONS OF THE BID AND CONTRACT HEREIN.						

RECEIVED

2010 JUL 12 AM 10:17

WV PURCHASING DIVISION

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>Michael Bunch</i>	TELEPHONE 800-252-4752	DATE 7/6/2010
TITLE Bid Specialist	FEIN 04-3234558	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

GENERAL TERMS & CONDITIONS REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

1. Awards will be made in the best interest of the State of West Virginia.
2. The State may accept or reject in part, or in whole, any bid.
3. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125 fee.
4. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods this Purchase Order/Contract becomes void and of no effect after June 30.
5. Payment may only be made after the delivery and acceptance of goods or services.
6. Interest may be paid for late payment in accordance with the *West Virginia Code*.
7. Vendor preference will be granted upon written request in accordance with the *West Virginia Code*.
8. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
9. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
10. The laws of the State of West Virginia and the *Legislative Rules* of the Purchasing Division shall govern the purchasing process.
11. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
12. **BANKRUPTCY:** In the event the vendor/contractor files for bankruptcy protection, the State may deem this contract null and void, and terminate such contract without further order.
13. **HIPAA BUSINESS ASSOCIATE ADDENDUM:** The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, is available online at www.state.wv.us/admin/purchase/vrc/hipaa.htm and is hereby made part of the agreement. Provided that the Agency meets the definition of a Cover Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.
14. **CONFIDENTIALITY:** The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/noticeConfidentiality.pdf>.
15. **LICENSING:** Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, and the West Virginia Insurance Commission. The vendor must provide all necessary releases to obtain information to enable the director or spending unit to verify that the vendor is licensed and in good standing with the above entities.
16. **ANTITRUST:** In submitting a bid to any agency for the State of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the State of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, or person or entity submitting a bid for the same material, supplies, equipment or services and is in all respects fair and without collusion or fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

INSTRUCTIONS TO BIDDERS

1. Use the quotation forms provided by the Purchasing Division. Complete all sections of the quotation form.
2. Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as **EQUAL** to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.
3. Unit prices shall prevail in case of discrepancy. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
4. All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications: Department of Administration, Purchasing Division, 2019 Washington Street East, P.O. Box 50130, Charleston, WV 25305-0130
5. Communication during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited (W.Va. C.S.R. §148-1-6.6).



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 ENVIRONMENTAL CHEMISTRY LAB
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BID OPENING DATE: 07/15/2010 BID OPENING TIME 01:30PM				

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<p>BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THE STATE MAY DEEM THE CONTRACT NULL AND VOID AND TERMINATE SUCH CONTRACT WITHOUT FURTHER ORDER.</p> <p>INQUIRIES: WRITTEN QUESTIONS SHALL BE ACCEPTED THROUGH CLOSE OF BUSINESS ON 6/29/2010. QUESTIONS MAY BE SENT VIA USPS, FAX, COURIER OR E-MAIL. IN ORDER TO ASSURE NO VENDOR RECEIVES AN UNFAIR ADVANTAGE, NO SUBSTANTIVE QUESTIONS WILL BE ANSWERED ORALLY. IF POSSIBLE, E-MAIL QUESTIONS ARE PREFERRED. ADDRESS INQUIRIES TO:</p> <p>ROBERTA WAGNER DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION 2019 WASHINGTON STREET, EAST CHARLESTON, WV 25311</p> <p>FAX: 304-558-4115 E-MAIL: ROBERTA.A.WAGNER@WV.GOV</p> <p>THE MODEL/BRAND/SPECIFICATIONS NAMED HEREIN ESTABLISH THE ACCEPTABLE LEVEL OF QUALITY ONLY AND ARE NOT INTENDED TO REFLECT A PREFERENCE OR FAVOR ANY PARTICULAR BRAND OR VENDOR. VENDORS WHO ARE BIDDING ALTERNATES SHOULD SO STATE AND INCLUDE PERTINENT LITERATURE AND SPECIFICATIONS. FAILURE TO PROVIDE INFORMATION FOR ANY ALTERNATES MAY BE GROUNDS FOR REJECTION OF THE BID. THE STATE RESERVES THE RIGHT TO WAIVE MINOR IRREGULARITIES IN BIDS OR SPECIFICATION</p>						

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<p>IN ACCORDANCE WITH SECTION 148-1-4(F) OF THE WEST VIRGINIA LEGISLATIVE RULES AND REGULATIONS. VENDOR PREFERENCE CERTIFICATE</p> <p>THIS TEAM EXHIBIT HAS BEEN REPLACED BY THE ONLINE VERSION WHICH IS AVAILABLE HERE: HTTP://WWW.STATE.WV.US/ADMIN/PURCHASE/VRC/VENPREF.PDF</p> <p>NOTICE</p> <p>A SIGNED BID MUST BE SUBMITTED TO:</p> <p>DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION BUILDING 15 2019 WASHINGTON STREET, EAST CHARLESTON, WV 25305-0130</p> <p>PLEASE NOTE: A CONVENIENCE COPY WOULD BE APPRECIATED.</p> <p>THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:</p> <p>SEALED BID</p> <p>BUYER:-----RW/FILE 22-----</p> <p>RFQ. NO.:-----LBS11009-----</p> <p>BID OPENING DATE:---7/15/2010-----</p> <p>BID OPENING TIME:---1:30 PM-----</p>						

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BID OPENING DATE: 07/15/2010 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR BID: 508-482-8532 ----- CONTACT PERSON (PLEASE PRINT CLEARLY): Mike Brunelle ----- ***** THIS IS THE END OF RFQ LBS11009 ***** TOTAL: 243,715.51						

SIGNATURE _____ SEE REVERSE SIDE FOR TERMS AND CONDITIONS TELEPHONE _____ DATE _____

TITLE _____ FEIN _____ ADDRESS CHANGES TO BE NOTED ABOVE

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SPECIFICATIONS AND REQUIREMENTS

The Threat Preparedness and Response Section, Chemical Threats, of the Office of Laboratory Services (CT) is requesting to purchase a Liquid Chromatograph/Mass Spectrometer/Mass Spectrometer (LC/MS/MS).

1. A LC/MS/MS instrument is needed by CT to meet the requirements of the Public Health Emergency Preparedness cooperative agreement with the Center for Disease Control and Prevention (CDC), Atlanta, Georgia.
2. The technology of this LC/MS/MS instrument must be configured specifically for the State Department of Health laboratories who are members of the US Centers for Disease Control LRN-C Program (Laboratory Response Network – Chemical). The resolution and sensitivity capability must be able to meet or exceed the limits of detection and minimum reporting levels required for these agents as stipulated under the Center for Disease Control Office of Quality Control, Quality Assurance Program, Validation Guidelines.
3. The LC/MS/MS instrument must come equipped with a triple quadrupole mass spectrometer, workstation PC and printer, software with 2 data analysis licenses, installation, and familiarization training.
4. The LC/MS/MS instrument must have an atmospheric pressure chemical ionization (APCI) source with spray chamber, corona discharge needle, nebulizer, APCI vaporizer, and test calibration kit.
5. The LC/MS/MS instrument must come equipped with LC/MS rough pumps compatible with BOC Edwards pumps, or equivalent.
6. The LC/MS/MS instrument must have a nitrogen gas generator and a maintenance kit.
7. The LC/MS/MS instrument must have a binary pump system with solvent cabinet, 2 solvent bottles, connecting capillaries, and CAN cable (cable wire that connects the pump system to the computer). It must also contain a maintenance kit, active seal option, and solvent selection valve option.

8. The LC/MS/MS instrument system package must have a micro degasser which includes a 4-channel micro-vacuum, degasser, remote control cable, and connecting tubing.
9. The LC/MS/MS instrument must be fully compatible with a system controlled auto sampler with a 100uL injection loop, tray for two well plates, 10x 2mL vials, 2x54- vial plates, Rheodyne injection valve (600 bar), and 05 m CAN cable.
10. The LC/MS/MS instrument system must have a Peltier (generic term for any device that uses the Peltier effect to heat or cool materials) type device to control the temperature of the auto samplers/fraction collectors.
11. For rapid resolution LC, the column compartment temperature must maximize to 100°C and pressures up to 600 bar.
12. The LC/MS/MS instrument must come with a high pressure liquid chromatography (HPLC) column oven with a temperature tolerance of +/- 2°C.
13. The LC/MS/MS instrument must come with a column Atlantis HILIC Silica, 2.1 x 50 mm 3µm particles, or equivalent for the Ortho-Phosphate Nerve Agents (OPNA) method.
14. The LC/MS/MS instrument system must include a diode array detector with radio-frequency identification (RFID) tracking technology for flow cells and ultra violet (UV) lamp with one standard flow cell.
15. The LC/MS/MS instrument system must contain a SB-C18, 2.1x100mm, 1.8µm, 600 bar, or equivalent column.
16. Consumables to be included with the LC/MS/MS instrument: finger tight polyketone fittings 1/16" in a 10 pack with the maximum pressure capability of 600 bar, rapid resolution liquid chromatography (RRLC) in-line filter, 2 mm, 0.2 um filter with the maximum 600 bar with 3 frits and 70x0.12 mm connecting capillary, and replacement frits, 2mm, 0.2um in a 10 pack what are stainless steel, PEEK encapsulated for use with RRLC in-line filter.
17. The LC/MS/MS instrument must be fully automated for analysis with a system controller that is loaded with the necessary software. System

controller software must be able to export data to the existing Laboratory Information Management System (LIMS), STARLIMS Sunrise version 9, resides on a Microsoft Windows Server 2003 file server. The ability for the equipment to place a results data file into a shared folder on the LIMS server in a format that can be imported is required.

18. The LC/MS/MS instrument system controller software must be able to fulfill all of the analytical and quality control requirements stated in the CDC Office of Quality Control, Quality Assurance Program, Validation Guidelines. The LRN-C validation guidelines as published by the CDC on the LRN-C, the information is not for public distribution and is considered "sensitive" to the point that we are forbidden to pass on uncontrolled copies.

Installation Requirements:

1. Vendor must install the LC/MS/MS instrument system in the Threat Preparedness Laboratory in the Elk Office Center building at 4710 Chimney Drive, Suite G, Charleston, WV, 25302.
2. Vendor must provide to the Threat Preparedness (TP) Program Manager all relevant information concerning the installation in a documented form at least 2 weeks prior to the scheduled installation.
3. At the time of the LC/MS/MS instrument installation, Vendor must provide to the TP Program Manager: All relevant system manuals for hardware components: system and application software documentation: and a parts, supplies, and accessories catalog.
4. Vendor must include all necessary cables and fittings and other costs for installation in the submitted bid price.
5. Installation and on-site training must be completed within 90 days of delivery date.

Training Requirements

1. Vendor must provide, upon completion of installation, two days of on-site training for the Threat Preparedness personnel on the operation and user maintenance requirements of the LC/MS/MS instrument system.



2. All costs incurred by the Vendor including travel, lodging, and living expenses necessary to provide this basic training shall be included in the bid price.

Warranty Requirements

1. Vendor must include in the total price of the equipment at least a one-year factory warranty covering all system components.
2. Software support must be included as part of the one-year warranty.
3. Warranty must include on-site service including labor, travel time, and expenses with a 72-hour on-site response time at no extra cost to maintain the specifications listed in the bid and the Vendor's product specifications. (Vendor should include a copy of the warranty).
4. Warranty must begin upon acceptance of the completed installation and training.

Delivery Requirements

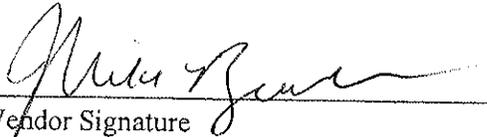
1. The LC/MS/MS instrument and its components must be shipped for "inside delivery" by a freight delivery company and must be delivered within 90 days of receipt of order.
2. The LC/MS/MS instrument and its components must be shipped "F.O.B. Destination" unless otherwise stated in quote by Vendor. Any shipping and handling requirements must be stated in Vendor's quote.

RFQ COST SHEET

Bidders shall provide a cost for the following:

Liquid Chromatograph/Mass Spectrometer/Mass Spectrometer (LC/MS/MS)	\$ <u>240,915.51</u>
On-Site User Training (at installation of equipment)	\$ <u>Included Above</u>
Freight/Shipping Charge	\$ <u>2,800.00</u>
Total Cost	\$ <u>243,715.51</u>

The award will be made to the vendor with the lowest overall total cost of the equipment which meets all requested specifications and requirements. Payment will be made in ~~advance~~ 30 Days ARO


Vendor Signature

7/6/2010
Date

RFQ No. LBS11009

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

West Virginia Code §5A-3-10a states: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

EXCEPTION: The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

Under penalty of law for false swearing (*West Virginia Code §61-5-3*), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

WITNESS THE FOLLOWING SIGNATURE

Vendor's Name: Waters Corporation

Authorized Signature: *[Signature]* Date: 7/6/2010

State of MA

County of Worcester, to-wit:

Taken, subscribed, and sworn to before me this 6th day of July, 2010.

My Commission expires Jan 7, 2013

AFFIX SEAL HERE

NOTARY PUBLIC

[Signature: Gloria S. Ayatto]



State of West Virginia
VENDOR PREFERENCE CERTIFICATE

Certification and application* is hereby made for Preference in accordance with *West Virginia Code*, §5A-3-37. (Does not apply to construction contracts). *West Virginia Code*, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the *West Virginia Code*. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable.

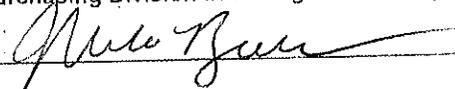
1. **Application is made for 2.5% resident vendor preference for the reason checked:**
 Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; or,
 Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or,
 Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; or,
2. **Application is made for 2.5% resident vendor preference for the reason checked:**
 Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
3. **Application is made for 2.5% resident vendor preference for the reason checked:**
 Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
4. **Application is made for 5% resident vendor preference for the reason checked:**
 Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; or,
5. **Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:**
 Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; or,
6. **Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:**
 Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Under penalty of law for false swearing (*West Virginia Code*, §61-5-3), Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: Waters Corporation

Signed: 

Date: 7/6/2010

Title: Bid Specialist

*Check any combination of preference consideration(s) indicated above, which you are entitled to receive.

AGREEMENT ADDENDUM

This Addendum, by and between Waters Technologies Corporation d/b/a/ Waters Corporation and the State of West Virginia, specifically alters, amends, and revises the Waters Sales Quotation Terms and Conditions of Sale and Waters Software End User License Agreement for the products identified in Quotation Number _____ . The Waters Sales Quotation Terms and Conditions of Sale and Waters Software End User License Agreement, except as herein amended, are hereby reaffirmed and republished as if set forth herein.

1. **DISPUTES** - Any references in the agreement to arbitration or to the jurisdiction of any court are hereby deleted. Disputes arising out of the agreement shall be presented to the West Virginia Court of Claims
2. **HOLD HARMLESS** - Any clause requiring the Agency to indemnify or hold harmless any party is hereby deleted in its entirety.
3. **GOVERNING LAW** - The agreement shall be governed by the laws of the State of West Virginia. This provision replaces any references to any other State's governing law.
4. **TAXES** - Provisions in the agreement requiring the Agency to pay taxes are deleted. As a State entity, the Agency is exempt from Federal, State, and local taxes and will not pay taxes for any Vendor including individuals, nor will the Agency file any tax returns or reports on behalf of Vendor or any other party.
5. **PAYMENT** - Any references to prepayment are deleted. Payment will be in arrears.
6. **INTEREST** - Should the agreement include a provision for interest on late payments, the Agency agrees to pay the maximum legal rate under West Virginia law. All other references to interest or late charges are deleted.
7. **RECOUPMENT** - Any language in the agreement waiving the Agency's right to set-off, counterclaim, recoupment, or other defense is hereby deleted.
8. **FISCAL YEAR FUNDING** - Service performed under the agreement may be continued in succeeding fiscal years for the term of the agreement, contingent upon funds being appropriated by the Legislature or otherwise being available for this service. In the event funds are not appropriated or otherwise available for this service, the agreement shall terminate without penalty on June 30. After that date, the agreement becomes of no effect and is null and void. However, the Agency agrees to use its best efforts to have the amounts contemplated under the agreement included in its budget. Non-appropriation or non-funding shall not be considered an event of default.
9. **STATUTE OF LIMITATION** - Any clauses limiting the time in which the Agency may bring suit against the Vendor, lessor, individual, or any other party are deleted.
10. **SIMILAR SERVICES** - Any provisions limiting the Agency's right to obtain similar services or equipment in the event of default or non-funding during the term of the agreement are hereby deleted.
11. **ATTORNEY FEES** - The Agency recognizes an obligation to pay attorney's fees or costs only when assessed by a court of competent jurisdiction. Any other provision is invalid and considered null and void.
12. **ASSIGNMENT** - Notwithstanding any clause to the contrary, the Agency reserves the right to assign the agreement to another State of West Virginia agency, board or commission upon thirty (30) days written notice to the Vendor and Vendor shall obtain the written consent of Agency prior to assigning the agreement.
13. **LIMITATION OF LIABILITY** - The Agency, as a State entity, cannot agree to assume the potential liability of a Vendor. Accordingly, any provision limiting the Vendor's liability for direct damages to a certain dollar amount or to the amount of the agreement is hereby deleted. Limitations on special, incidental or consequential damages are acceptable. In addition, *to the extent required by the West Virginia State Constitution*, any limitation is null and void to the extent that it precludes any action for injury to persons or for damages to personal property.
14. **RIGHT TO TERMINATE** - Agency shall have the right to terminate the agreement upon thirty (30) days written notice to Vendor. Agency agrees to pay Vendor for services rendered or goods received prior to the effective date of termination.
15. **TERMINATION CHARGES** - Any provision requiring the Agency to pay a fixed amount or liquidated damages upon termination of the agreement is hereby deleted. The Agency may only agree to reimburse a Vendor for actual costs incurred or losses sustained during the current fiscal year due to wrongful termination by the Agency prior to the end of any current agreement term.
16. **RENEWAL** - Any reference to automatic renewal is hereby deleted. The agreement may be renewed only upon mutual written agreement of the parties.
17. **INSURANCE** - Any provision requiring the Agency to insure equipment or property of any kind and name the Vendor as beneficiary or as an additional insured is hereby deleted.
18. **RIGHT TO NOTICE** - Any provision for repossession of equipment without notice is hereby deleted. However, the Agency does recognize a right of repossession with notice.
19. **ACCELERATION** - Any reference to acceleration of payments in the event of default or non-funding is hereby deleted
20. **CONFIDENTIALITY** - Any provision regarding confidentiality of the terms and conditions of the agreement is hereby deleted. State contracts are public records under the West Virginia Freedom of Information Act.
21. **AMENDMENTS** - All amendments, modifications, alterations or changes to the agreement shall be in writing and signed by both parties. No amendment, modification, alteration or change may be made to this addendum without the express written approval of the Purchasing Division and the Attorney General.

STATE OF WEST VIRGINIA

WATERS TECHNOLOGIES CORPORATION
d/b/a/ WATERS CORPORATION

Agency: _____

Signed: _____

Signed: _____

Title: _____

Title: _____

Date: _____

Date: _____

Approved as to form prior to signature this 27th day of April, 2009, by

Lawrence Wayfield

, Deputy Attorney General

Please note a WV-96 similar to the one attached can be negotiated/ executed at the time of bid award.

TQ DETECTOR

The Waters® TQ detector is a compact, benchtop, tandem quadrupole mass spectrometer designed for UPLC®/MS/MS when configured as an ACQUITY™ TQD system. The TQ detector provides a simple, robust platform for quantitative LC/MS/MS enabled by hi-speed MRM (Multiple Reaction Monitoring) and ESCi® multimode ionization. The system also incorporates IntelliStart™ technology for automated system optimization and status monitoring. This ensures high quality data is routinely available to all levels of operators. The system is available on either MassLynx™ or Empower™ 2 software.

SYSTEM SPECIFICATIONS

IntelliStart technology	<ul style="list-style-type: none"> System parameter checking and alerts Integrated sample/calibrant delivery system & programmable divert valve Automated mass calibration Automated sample tuning Automated SIR and MRM method development LC/MS System Check – automated on-column performance test
API source	<ul style="list-style-type: none"> ZSpray™ dual-orthogonal source for robust sampling Vacuum isolation valve Tool-free sampling cone removal Plug and play probes De-clustering cone gas Software control of all gas flows
Ionization modes	<ul style="list-style-type: none"> Electrospray – included as standard ESCI multimode ionization – included as standard IonSABRE™ APCI – option Dual APCI/APPI – option
Ion source transfer optics	High efficiency hexapole ion guide
Mass analyzer	Two high resolution quadrupole analyzers (MS1/MS2), plus pre-filters to maximize resolution and transmission while preventing contamination of the main analyzers.
Collision cell	T-Wave™ collision cell for optimum ion transfer and confinement, allowing fast MS/MS acquisition. Software programmable gas flow.
Detector	<ul style="list-style-type: none"> Low noise, off axis, long life photomultiplier detector Digital dynamic range up to 4×10^6
Vacuum system	Single, split flow air-cooled Pfeiffer Vacuum turbomolecular pump evacuating the source and analyzer. One Leybold Sogevac SV40BI rotary backing pump.
Software	Systems are supported on both Empower 2 and MassLynx 4.1 software or later. MassLynx includes OpenLynx™ and QuanLynx™ Application Managers as standard.
Dimensions	<ul style="list-style-type: none"> Width: 35.6 cm (14.0 in.) Height: 53.3 cm (21.0 in.) Depth: 84.8 cm (33.5 in.)
Regulatory approvals	IVD, NRTL, and CE

[INSTRUMENT SPECIFICATIONS]

PERFORMANCE SPECIFICATIONS

Acquisition modes	Full scan MS (MS1 or MS2) Selected ion recording (SIR) Product ion scan Precursor ion scan Constant neutral loss/gain Multiple reaction monitoring (MRM)
Mass range	2 to 2000 m/z
Scan speed	Up to 10,000 Da/s
Mass stability	<0.1Da over 8 hr
Linearity of response	The linearity of response relative to sample concentration, for a specified compound, is five orders of magnitude from the limit of detection.
Polarity switching	20 ms
MRM acquisition cycle time	Minimum dwell time of 5 ms per channel. Minimum inter-channel and inter-scan delays of 5 ms. Functions can be configured in retention windows, including mixed mode and overlapping, to optimize cycle time for each analyte.
Inter-channel cross talk	The inter-channel cross talk between two MRM transitions, acquired using an MRM dwell time of 10 ms and an inter-channel delay time of 10 ms, will be fewer than 0.02%.
Mass resolution	Tunable manually or automatically (IntelliStart) to desired resolution. The valley between the 2034.63 Da and 2035.63 Da peaks is <12% of the average height of the two peaks.
MRM sensitivity (ESI+)	For a direct loop injection of reserpine (5 pg) at a flow rate of 200 μ L/min the chromatographic signal to noise for the transition 609>195 m/z will be greater than 1000:1.
MRM sensitivity (ESI-)	For a direct loop injection of chloramphenicol (5 pg) at a flow rate of 200 μ L/min the chromatographic signal to noise for the transition 609>195 m/z will be greater than 180:1.
MRM sensitivity (APCI+)	For a direct loop injection of 17- α -hydroxyprogesterone (100 pg) at a flow rate of 1 mL/min the chromatographic signal to noise for the transition 609>195 m/z will be greater than 150:1.
MRM Signal to noise definition	Signal is defined as the height of the chromatographic peak of interest and noise is defined as the RMS of a continuous section of the mass chromatogram.

It should be noted that the above are not standard installation specifications. All TQ detector instruments will be installed and tested in accordance with standard performance tests as detailed in Waters document 715001460. Test criteria are routinely reviewed to ensure quality is maintained and are therefore subject to change without notice. See Site Preparation guide and Product Release Notes for additional product and specification information.

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www.waters.com



[ACQUITY TOD WITH THE TO DETECTOR]

NEXT-GENERATION
LC/MS/MS FOR
UNPRECEDENTED
PRODUCTIVITY
AND EASE.



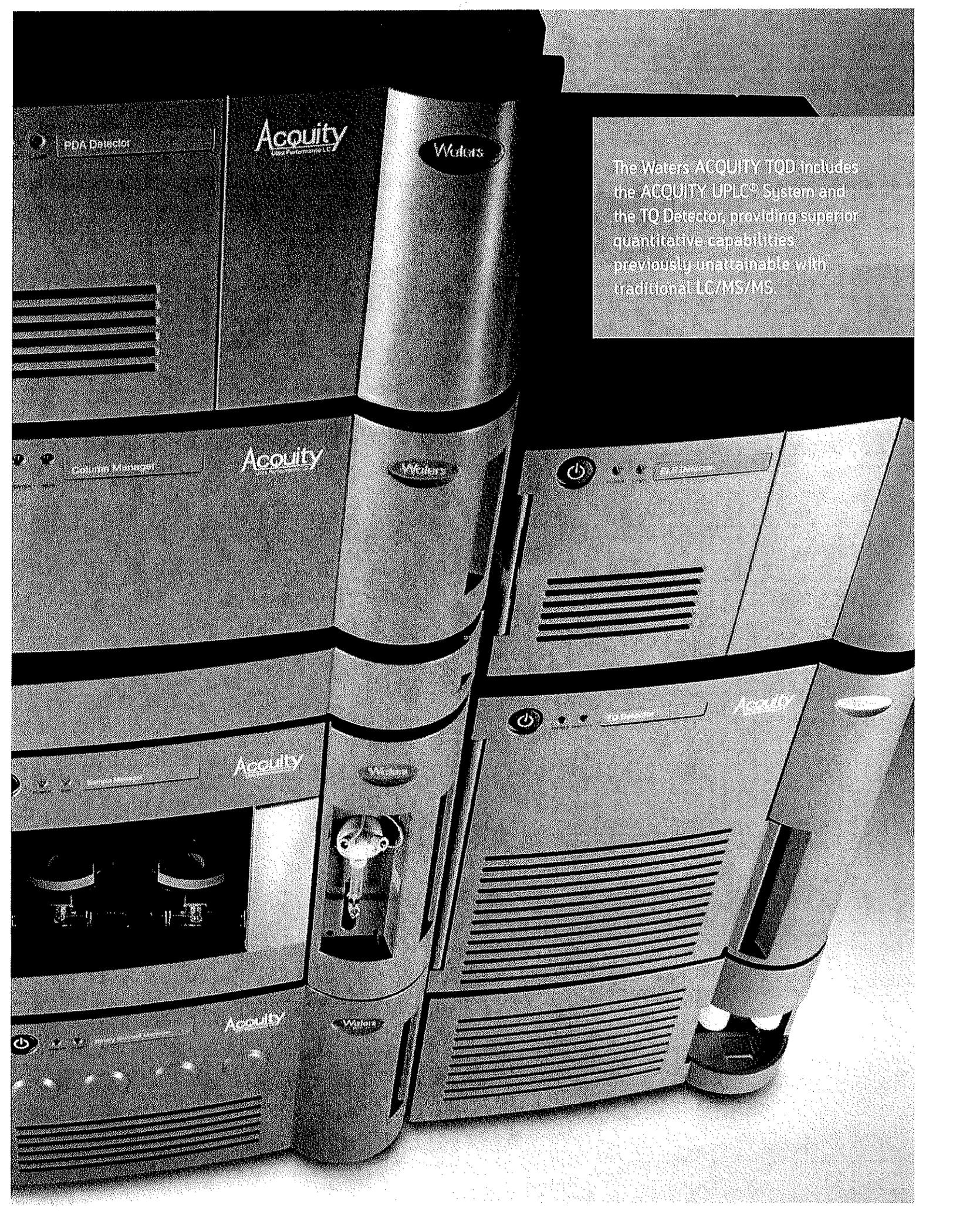
Waters

THE SCIENCE OF WHAT'S POSSIBLE.™

RAPID QUANTITATION WITH UPLC/MS/MS.

Maximize throughput and minimize downtime with the ACQUITY TQD.

At Waters, the leader in innovations for chromatography and mass spectrometry, we know you are challenged every day to get more information from your analytical data; to maximize throughput and minimize downtime. ■ Our next generation of ACQUITY® mass spectrometric detection leverages the power of UltraPerformance LC® to give you the high-quality analytical information you need – without complicated operation, time-consuming troubleshooting and upkeep, or bulky instrumentation. ■ The Waters® ACQUITY TQD offers a simple LC/MS/MS system solution for fast-paced, multi-user laboratory environments. ■ You can rely on robust and reliable performance as well as walk-up operation for any level of expertise. ■ You get superior quantitative results, quickly and easily, every time. ■ All from the solutions provider you know and trust.



PDA Detector

Acquity
Ultra Performance LC

Waters

The Waters ACQUITY TOD includes the ACQUITY UPLC® System and the TO Detector, providing superior quantitative capabilities previously unattainable with traditional LC/MS/MS.

Column Manager

Acquity

Waters

TO Detector

Acquity

Binary Manager

Acquity

Waters

TO Detector

Acquity

Binary Mobile Phase Manager

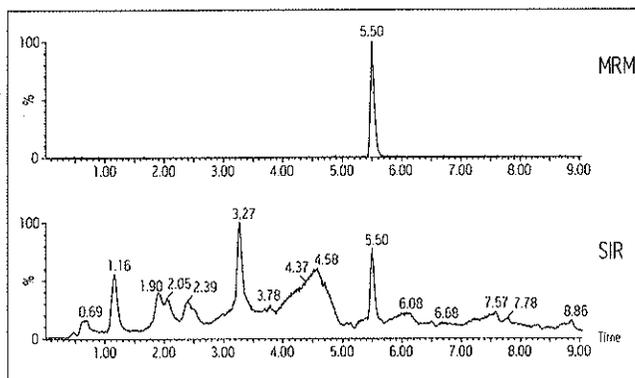
Acquity

Waters

MS/MS FOR THE MASSES

As analyzing pharmaceutical, food, clinical, chemical, and environmental samples becomes more challenging, matrices become more complex. Concentration levels widen and high throughput becomes the norm; LC/MS detection techniques are becoming increasingly inefficient.

Liquid chromatography, when combined with tandem quadrupole mass spectrometry (LC/MS/MS), allows you to obtain accurate quantitative information that increases confidence in your results. With the ACQUITY TQD, you can vastly expand the scope of your analytical capabilities—all with enhanced selectivity, sensitivity, and linearity. With the power of analytical information, you are able to quickly and easily quantify and confirm trace components in complex matrices with speed and accuracy.

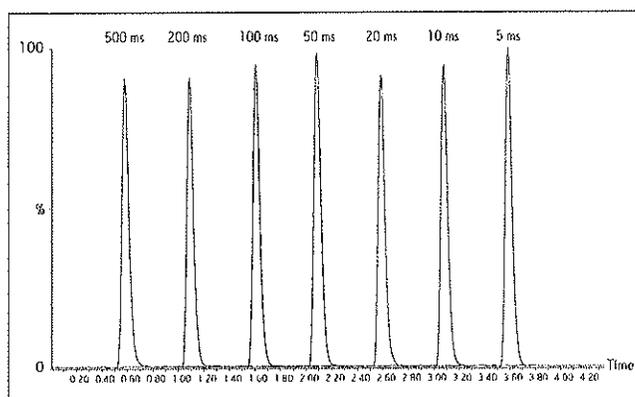


Multiple Reaction Monitoring (MRM) with the ACQUITY TQD adds selectivity to quantitative analyses in complex matrices, lowering LoQs.

UPLC/MS/MS – MAXIMIZE PRODUCTIVITY

The ACQUITY TQD delivers comprehensive, system-level productivity. The TQ Detector's fast acquisition capabilities are complemented by a full suite of ACQUITY UPLC technologies – hardware, software, columns, and chemistries – designed to work together to give you more than you've ever experienced from traditional LC/MS/MS systems. UPLC® employs novel small column particles, very low system volumes, and greater throughput to detect more peaks in faster runs – adding significant value to the power of the high-speed TQ Detector.

The results are narrow UPLC peaks and superb spectral quality for easy identification of all of the compounds in your sample. The detector is additionally able to cycle through ESCi®-enabled multiple ionization modes (ESI and APCI) and any combination of full scan, MRM, polarity switching, and T-Wave™ enabled high-speed MS/MS. With these all occurring within rapid UPLC run-time windows, the ACQUITY TQD is a highly efficient UPLC/MS/MS platform that is adaptable to a variety of applications. Your lab benefits with the ultimate in productivity and flexibility.

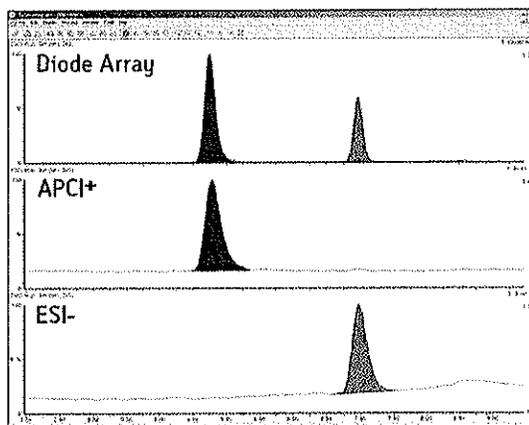


High-Speed Quantitation

Accurate quantitation of the narrow peak widths typical of UPLC (two to three seconds) demands fast acquisition speeds to provide sufficient data points per peak. The use of a T-Wave collision cell provides maximum signal in MRM mode, even at dwell times as short as five milliseconds.

Multi-Mode Ionization

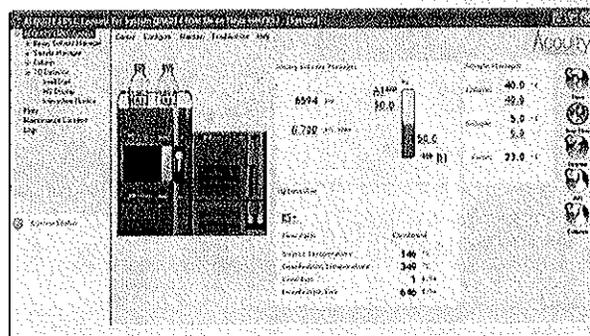
Collect APCI and ESI data in the same run using the ESCi multi-mode ionization source. Rapid polarity switching further enhances your system's versatility. Discrete data channels are recorded for each mode, enabling optimized method development and screening of multiple compound classes.



ROBUST PRODUCTIVITY

- **IntelliStart Technology** – automated system set-up, with integrated fluidics device, gives the user the green light
- **ZSpray™ Interface** – industry-leading, dual-orthogonal LC/MS interface
- **T-Wave collision cell** – for UPLC compatibility
- **High-Speed MS/MS** – fastest MRM capability for rapid, accurate quantitation
- **ESCI Multi-Mode Ionization Source** – ESI and APCI in the same run
- **IonSABRE™ APCI source and APPI probe** – high performance probe options for chemical and photo ionization
- **Rapid polarity switch** – double productivity by acquiring both modes in the same run
- **Empower™ or MassLynx™ Software** – flexible software solutions to suit your environment
- **System integration** – fully designed as an integral component of the ACQUITY UPLC System solution
- **Connections INSIGHT® Intelligent Services** – proactive online service support

FLEXIBILITY: YOUR LABORATORY, YOUR CHOICE



ACQUITY TQD system console

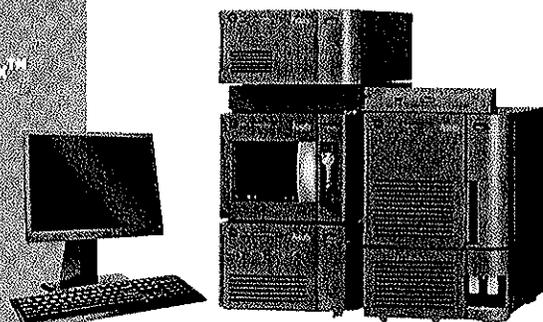
- Simple plug-in to Empower or MassLynx Software
- IntelliStart system set-up
- MRM method developer
- Connections INSIGHT
- System diagnostics
- System service history

MassLynx Software

- Flexible and sophisticated instrument control and data acquisition
- Batch quantification, QC checking, and rapid results review with dedicated Application Managers
- Automated system performance check and reporting
- Automated batch method development and analysis with QuanOptimize™ Application Manager
- Walk-up quantitation with the open access Application Manager for UPLC/MS/MS

Empower 2 Software

- Quick and easy storage and retrieval of UPLC/MS/MS data using an embedded relational database
- Scalable, modular architecture easily converts from a single workstation environment to an enterprise-wide system
- Built-in support for a data-secured regulatory laboratory environment
- Full system suitability reporting
- Method Validation Manager (MVM) for automation of the entire chromatographic method validation process, from planning experiments to generating final reports



WALK-UP MS/MS

IntelliStart Technology makes it easy to acquire UPLC/MS/MS data with confidence. For those wanting to go a step further, complete open access MS and MS/MS quantitation are available. Develop methods for new compounds using the simple MRM method developer, or select a method for a known compound from the method library.

Open access quantitation uses the OpenLynx™ Application Manager sample login feature to enable chemists to simply walk up to the system and submit their compounds for analysis. Results are processed in QuanLynx™ Application Manager and can be emailed directly to the chemist, exported to LIMS, or presented as a printed report.

MassLynx Software

The ability to accurately and rapidly reduce raw data to useful information is as important as the analytical technology employed. MassLynx Software is available with a range of application-specific data processing tools to simplify raw data analysis.

■ QuanLynx Application Manager

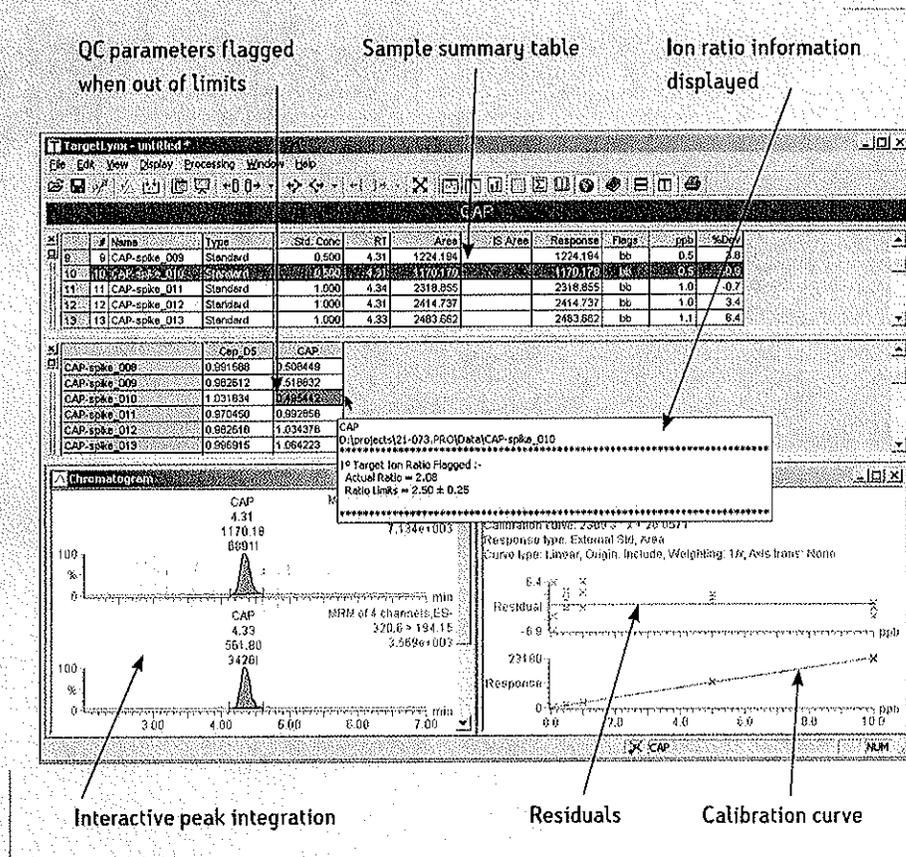
provides accurate quantitative results from LC/MS/MS data and is a standard feature of MassLynx Software

■ TargetLynx™ Application Manager

offers advanced quantitation of target compounds, featuring automated QC checks and confirmatory ion measurements

■ QuanOptimize Application Manager

is a software plug-in that enables high-throughput LC/MS/MS method development and quantitation



In TargetLynx, automated QC checks flag results that are outside defined tolerances.

Laboratory informatics

Waters is committed to providing powerful software solutions for scientific data management, network integration, compliance management, and laboratory productivity.

■ NuGenesis® SDMS — information management that stores and manages all scientific information

■ Analytical Workflow Manager software — tracks all analytical lab tasks while providing fast and secure data handling



Connections INSIGHT is revolutionizing the way laboratory instruments are serviced, by using Intelligent Device Management technology to provide diagnostic information for the ACQUITY TQD. Through a secure internet connection, Connections INSIGHT creates a virtual and proactive support presence in your lab. It monitors your ACQUITY TQD's key performance parameters, enabling predictive system maintenance and helping you achieve greater productivity.

Connections INSIGHT is available at no additional cost for all UPLC systems covered under a Waters Total Assurance Warranty or Support Plan.

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References

1. The traveling wave device described here is similar to that described by Kirchner in US Patent 5,206,506 (1993).

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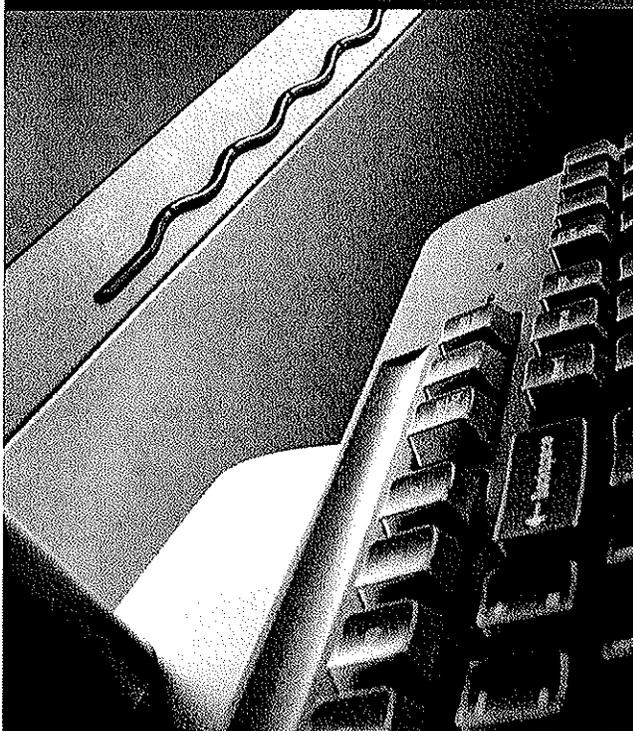
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July 2007 720001767EN LB-CP



[MASSLYNX 4.1 SOFTWARE]

HAVE MORE CONFIDENCE IN YOUR
MASS SPECTROMETRY DATA

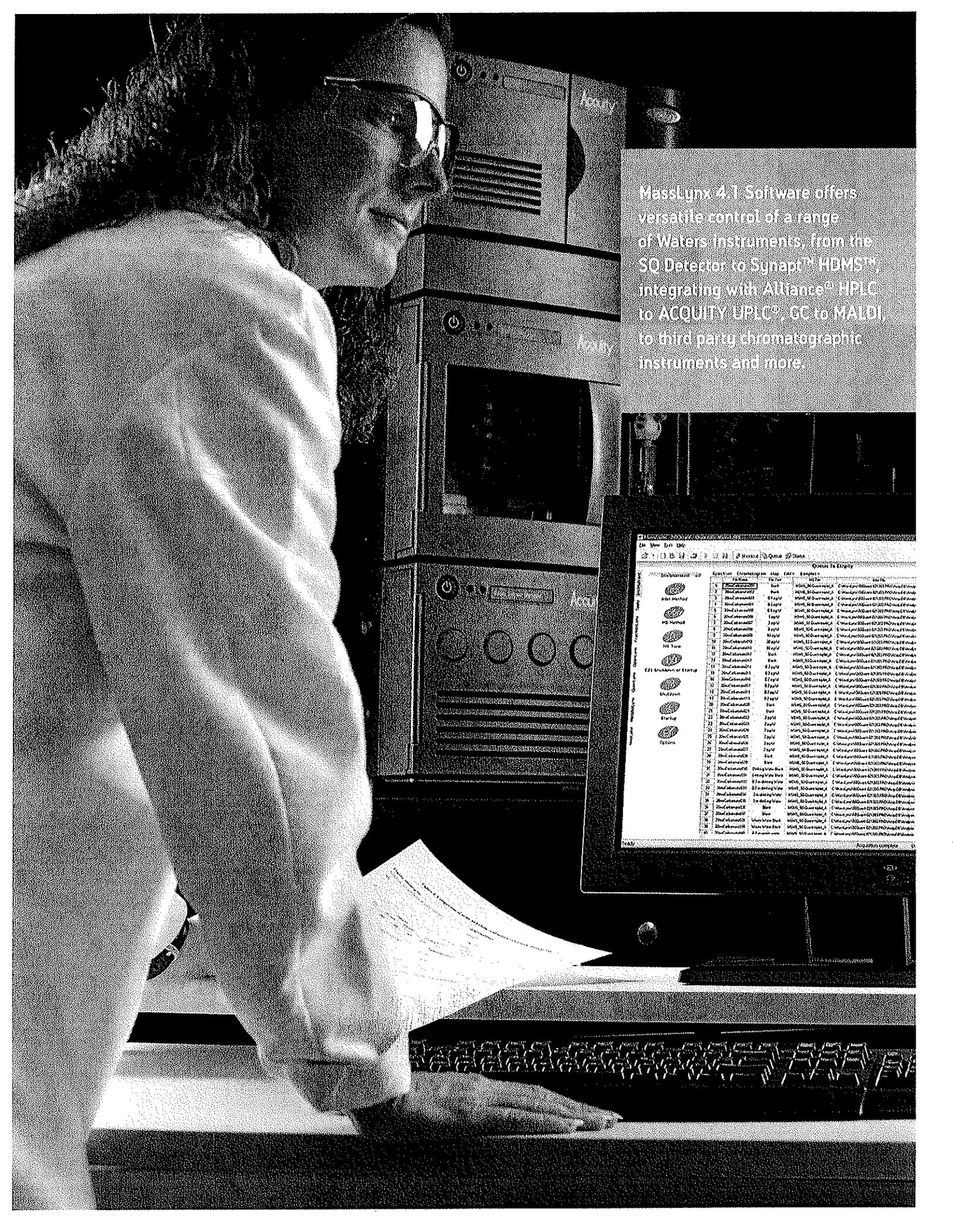


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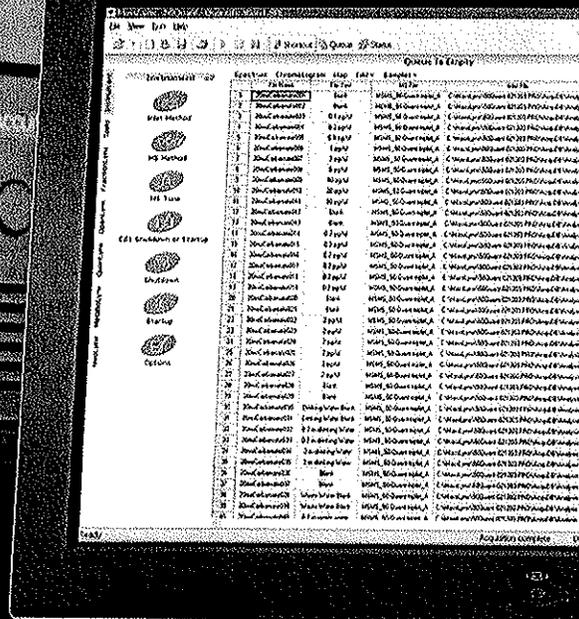
MASS SPECTROMETRY LABS
ARE DRIVEN BY ANSWERS.

MASSLYNX 4.1 SOFTWARE
PUTS YOUR ANSWERS AHEAD.

Sample analysis is all about questions. ■ Waters® MassLynx™ 4.1 Software is mass spectrometry software that answers those questions, helping your entire laboratory advance further. ■ Productivity increases and training costs are lower with our easy-to-use software that runs on all our mass spectrometers. ■ Run more samples faster with intelligent instrument control. ■ Enhance confidence in your results with dedicated Application Managers that quantitate, identify, and confirm. ■ Maintain compliance with integrated security features.



Masslynx 4.1 Software offers versatile control of a range of Waters Instruments, from the SQ Detector to Synapt™ HDMS™, integrating with Alliance® HPLC to ACQUITY UPLC®, GC to MALDI, to third party chromatographic instruments and more.



Run	Method	Sample	Data
1	Method 1	Sample 1	1.000
2	Method 2	Sample 2	2.000
3	Method 3	Sample 3	3.000
4	Method 4	Sample 4	4.000
5	Method 5	Sample 5	5.000
6	Method 6	Sample 6	6.000
7	Method 7	Sample 7	7.000
8	Method 8	Sample 8	8.000
9	Method 9	Sample 9	9.000
10	Method 10	Sample 10	10.000
11	Method 11	Sample 11	11.000
12	Method 12	Sample 12	12.000
13	Method 13	Sample 13	13.000
14	Method 14	Sample 14	14.000
15	Method 15	Sample 15	15.000
16	Method 16	Sample 16	16.000
17	Method 17	Sample 17	17.000
18	Method 18	Sample 18	18.000
19	Method 19	Sample 19	19.000
20	Method 20	Sample 20	20.000
21	Method 21	Sample 21	21.000
22	Method 22	Sample 22	22.000
23	Method 23	Sample 23	23.000
24	Method 24	Sample 24	24.000
25	Method 25	Sample 25	25.000
26	Method 26	Sample 26	26.000
27	Method 27	Sample 27	27.000
28	Method 28	Sample 28	28.000
29	Method 29	Sample 29	29.000
30	Method 30	Sample 30	30.000
31	Method 31	Sample 31	31.000
32	Method 32	Sample 32	32.000
33	Method 33	Sample 33	33.000
34	Method 34	Sample 34	34.000
35	Method 35	Sample 35	35.000
36	Method 36	Sample 36	36.000
37	Method 37	Sample 37	37.000
38	Method 38	Sample 38	38.000
39	Method 39	Sample 39	39.000
40	Method 40	Sample 40	40.000
41	Method 41	Sample 41	41.000
42	Method 42	Sample 42	42.000
43	Method 43	Sample 43	43.000
44	Method 44	Sample 44	44.000
45	Method 45	Sample 45	45.000
46	Method 46	Sample 46	46.000
47	Method 47	Sample 47	47.000
48	Method 48	Sample 48	48.000
49	Method 49	Sample 49	49.000
50	Method 50	Sample 50	50.000

INSTRUMENT CONTROL WITH THE SAMPLE LIST

- Launch inlet and MS method editors.
- Run step-by-step wizards to configure and optimize your instrument system.
- Specify instrument methods for individual samples or sets of samples.
- Start, stop, and monitor the progress of your experiments.
- View the status of system components, such as the inlet and mass spectrometer.

TAKE CONTROL OF MASS SPECTROMETRY ANALYSES

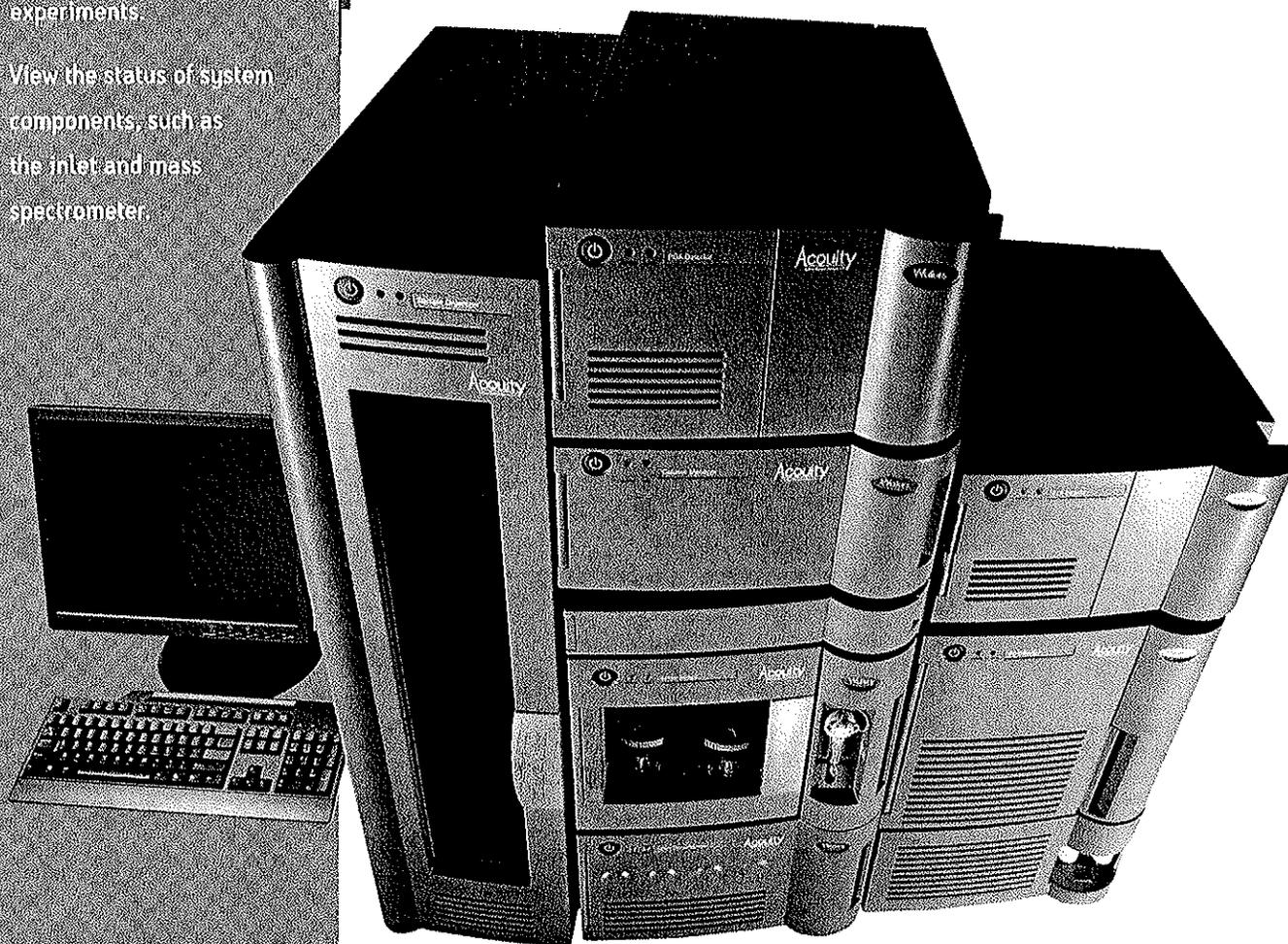
With today's complex instrumentation configurations, sophisticated data acquisition capabilities, and detailed data processing requirements for mass spectrometry (MS) analysis, it is easy to be overwhelmed when adding or upgrading MS instrumentation.

In the laboratory, the challenges of MS and MS/MS analyses are often compounded by the use of several types of analytical instruments and high personnel turnover.

To maintain—and even increase—laboratory productivity, you can turn to Waters software to simplify interaction with your MS system and retain the ability to perform advanced experiments.

Waters MassLynx 4.1 Software improves your MS system with its intuitive interface, intelligent instrument control, and software features built around the focus of your analysis: the sample. With much of its development driven by input from our extensive user base, MassLynx has evolved into a powerful software package that reflects the versatility and flexibility you require.

Balancing simplicity and sophistication, MassLynx Software makes MS and MS/MS techniques available to users of any skill level, from technicians to experienced mass spectrometrists.



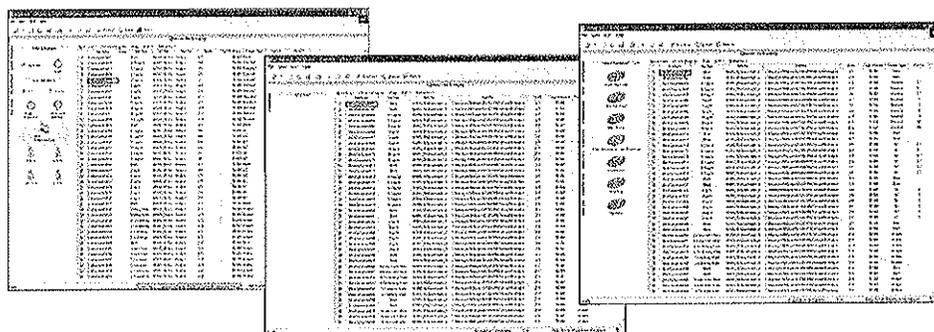
SAMPLE CENTRIC SIMPLICITY

Everything about your sample in one place

The challenge facing many laboratory analysts is not the speed of data acquisition, but the rate at which samples are converted into useful information.

MassLynx Software starts by giving you complete control of your analytical system within one interface: you will acquire, process data, and review results more productively than ever before. By using the individually designed and optimized data processing tools of MassLynx Software's Application Managers, such as OpenLynx™ for processing batches of qualitative analyses and QuanLynx™ for quantification, samples are seamlessly converted into chemically meaningful information—without manual data review. OpenLynx and QuanLynx are bundled with MassLynx 4.1 Software.

At the core of MassLynx Software is the Sample List; the single location for initiating all activities related to your sample. By presenting all the relevant sample information in one window, MassLynx's Sample Centric™ approach simplifies your interaction with your mass spectrometry system and increases the speed at which you convert samples into valuable knowledge.



The sample centric approach of MassLynx Software's Sample List allows users to easily access instrument control, queue information, and system status, while viewing detailed sample information. In this example, parameters in the Sample List are set for a quantitative analysis using the TargetLynx Application Manager with ACQUITY UPLC and ACQUITY TQD.

USABILITY

Work intuitively with mass spectrometry

MassLynx Software's user interface ensures direct, intuitive access to the functionality that you use most. The result is a user-friendly and fully comprehensive solution that will increase your lab's productivity.

MassLynx Software's toolbar, displayed alongside the Sample List, provides access at the click of a mouse to instrument status, sample queue information and Application Managers. You can easily switch from viewing the queue to viewing instrument status, or use the tabs to move between general and application-specific tools.

The ability to access basic sample information and system functionality through the MassLynx toolbar allows a novice user to successfully operate the system with a minimal learning curve. This straightforward interface also gives the experienced user fast access to the advanced features MassLynx offers for sophisticated experiments.

DATA MANAGEMENT WITH THE SAMPLE LIST:

- Enter or import sample information in a versatile spreadsheet-style format
- Directly access spectra and chromatograms.
- Initiate automated data processing and review with OpenLynx or QuanLynx.
- Access advanced application-specific tools.

GET THE MOST FROM YOUR HARDWARE, WITH SEAMLESS SOLUTIONS FOR ADVANCED APPLICATIONS

- Collect nominal or exact mass MS and MS/MS data.
- Streamline data acquisition and processing.
- Acquire both low- and elevated-energy mass spectra with MS^E.
- Real-time Data Directed Analysis (DDA™) allows you to automatically switch from MS to MS/MS acquisition when a compound of interest is detected.
- On-the-fly, automated exact mass measurement using the internal reference standards from the LockSpray™ Source for TOF-MS systems.
- i-FIT™ algorithm for the Elemental Composition Calculator enables you to shorten predicted formulae lists for structural prediction in exact mass measurements.
- Control ionization sources including ESI, APCI, IonSABRE™ APCI, ESCI® Multi-Mode Ionization, APPI/APCI Dual Ionization, LockSpray, NanoLockSpray™, MUX-technology™, EI/GI, direct probes, and MALDI.
- Supports Waters and third-party inlets, autosamplers, and detectors.

VERSATILITY

Complete system solutions for sophisticated MS analysis

Waters creates end-to-end solutions for sophisticated mass spectrometry analysis. We combine the ground-breaking chromatographic advances of Waters ACQUITY Ultra Performance LC® (UPLC®) System with our MS technologies, market-leading software, chemistries, and comprehensive services and support.

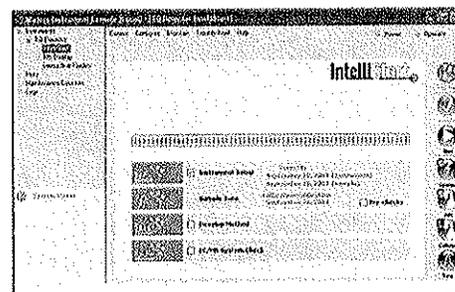
Together, our instruments and software bring you a truly integrated system that yields high resolution, high sensitivity, maximized instrument uptime, and versatility for rapid analysis of a wide range of compound classes.

Improved system interaction

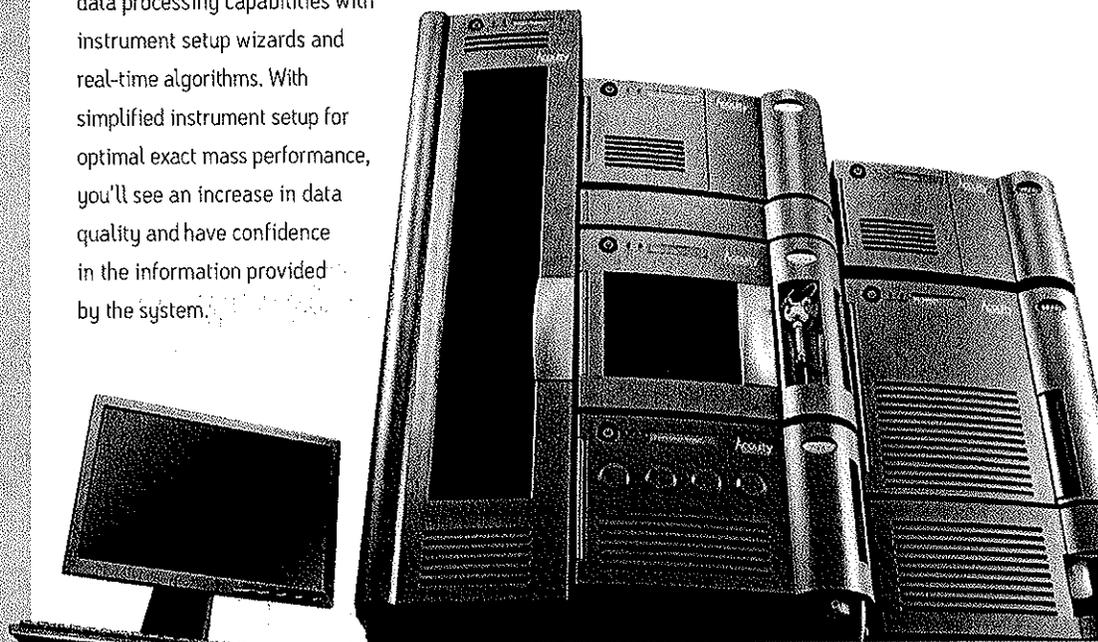
The real power of MassLynx Software lies in its ability to intelligently control an entire Waters mass spectrometry system – from the sample and solvent management components to the mass spectrometer and auxiliary detectors. With an embedded PC acquisition system (EPCAS™), MassLynx puts intelligence and real-time functionality inside every mass spectrometer.

MassLynx 4.1 Software features IntelliStart™ for Waters ACQUITY® SQ and TQ Detectors. IntelliStart integrates internal calibration fluidics and advanced diagnostics software, allowing the system to automatically tune, calibrate, and conduct full UPLC/MS/MS performance checks.

MassLynx Software also eliminates the need for complex, time-consuming manual data review. For high-performance time-of-flight (TOF) MS with the LCT Premier™ XE and Q-ToF Premier™ Mass Spectrometers, MassLynx enhances your data processing capabilities with instrument setup wizards and real-time algorithms. With simplified instrument setup for optimal exact mass performance, you'll see an increase in data quality and have confidence in the information provided by the system.



MassLynx Software's IntelliStart user interface integrates fluidics management with diagnostics software, allowing the system to automatically tune, calibrate, and conduct full UPLC/MS/MS performance checks. All you need to do is run your sample.



INTEGRATION WITH INFORMATICS SOLUTIONS

MassLynx 4.1 Software is part of the Waters Laboratory Informatics suite, which offers complete solutions that can improve your laboratory's ability to capture data, secure information, and share knowledge. MassLynx 4.1 offers tight, automated integration with our Laboratory Informatics solutions, including Waters NuGenesis® Scientific Data Management System (SDMS) – products that can enhance your ability work with large data sets and to make better decisions in any analytical laboratory process.

COMPLIANCE

Maintaining security in a regulated environment

Strictly regulated laboratory environments place significant demands on LC/MS, LC/MS/MS, and GC/MS systems to maximize performance while also maintaining the security of data.

MassLynx 4.1 Software's security system provides compliance-ready tools to meet GxP and 21 CFR Part 11 regulations. It is built on the latest file encryption, audit log, and secure archival/retrieval technology, and has been optimized for convenience and ease-of-use. The flexibility of the security system allows you to tailor and deploy security policies that meet the requirements of your laboratory.

■ MassLynx Security Manager

Allows you to configure access privileges for each user, enabling you to easily deploy operator, administrator, and maintenance policies to meet your existing security protocols. Multiple user groups with access to alternative project areas are permitted fully-secured operation when required, and operation in less restrictive projects with less restrictive privileges when appropriate.

■ Secure file encryption

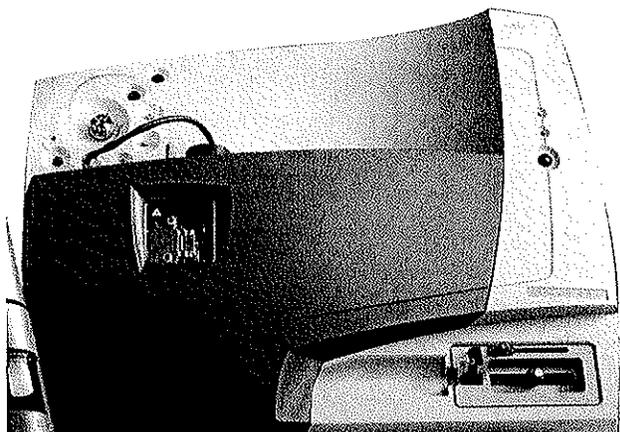
Employs the latest encryption and checksum technologies to prevent accidental or deliberate tampering with files. An optional component of the secure file system is the addition of electronic signatures.

■ Audit log

Provides an un-editable, hidden, encrypted file that automatically records all log-on and log-off events, security policy changes, MassLynx program module activity, and all events which relate to file generation or manipulation. This log file can be viewed and searched using LogLynx™. In addition to the audit log provided by the MassLynx security system, the QuanLynx Application Manager has a detailed audit log that records the specifics of quantitative data processing.

■ Secure archival and retrieval

Provides the ability to archive and then restore secure data without compromising date and file integrity.



MassLynx Software is the pivotal piece for integrating a complete Waters system, such as this benchtop system that pairs the LCT Premier XE Mass Spectrometer with LockSpray and the ACQUITY UPLC System for exact mass LC/MS. Through MassLynx, you have complete control of the system itself, as well as the data processing tools you need to efficiently work with results.

ADVANCED DATA MANAGEMENT

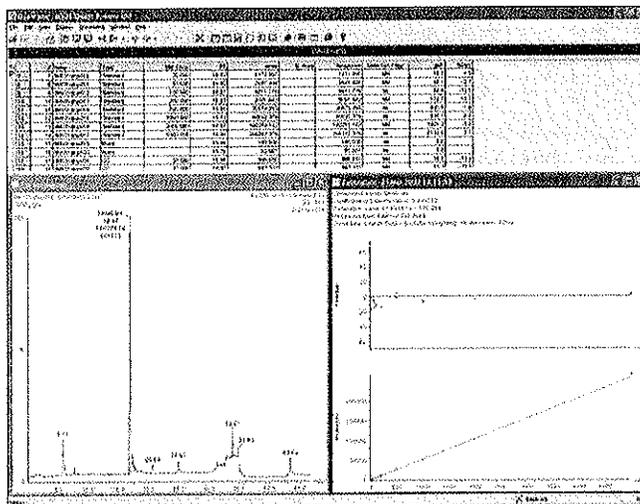
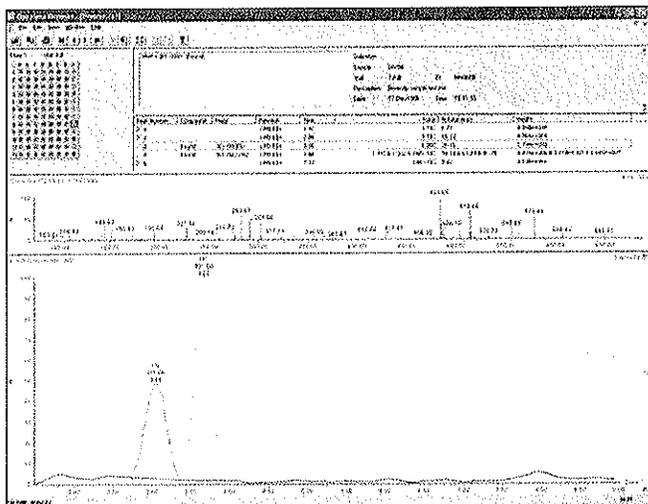
OpenLynx and QuanLynx Application Managers

OpenLynx and QuanLynx Application Managers are included with MassLynx 4.1 Software. The OpenLynx Application Manager allows for customizable batch processing of qualitative MS information. OpenLynx includes quality control capabilities to ensure satisfactory system operation. The OpenLynx browser window facilitates review of large quantities of data; with its convenient plate viewer you can see at a glance whether individual wells contain the target analyte.

The QuanLynx Application Manager enables you to perform batch quantification, relying on our ApexTrack™ peak detection algorithm for optimized peak detection and integration. The QuanLynx browser contains all information required to review integration, calibration, and quantitation results. You may manually modify integration, enable and disable calibration points as needed, and recalculate the results following review. The internal audit log with configurable reasons for change and electronic signatures supports compliance with applicable regulations.

The comprehensive compliance tools allow for file generation, processing, reporting, archival, retrieval, and audit trails, with the ability to handle electronic signatures.

Data portability



*OpenLynx and QuanLynx reports are self-contained and may be automatically e-mailed when created using OpenLynx Open Access Software. The convenient browser software enables reports to be reviewed on any PC. QuanLynx reports permit interactive review, reintegration, and recalculation of results without MassLynx and access to the original raw data files. Multiple export formats, including *.txt, *.csv and *.xml, enable convenient data transfer to other software applications.*



MassLynx Software offers Application Managers with specialized data processing functions that allow you to eliminate complex, time consuming manual data review.

FOR TARGETED ANALYSES

TargetLynx

Quantifying and confirming, TargetLynx™ delivers the information necessary for regulatory compliance. With a full range of automatic quality control checks for flagging out-of-range data, TargetLynx lets you identify at a glance samples that fall outside user-specified or regulatory thresholds.

QuanOptimize

Automating MS and MS/MS method development, QuanOptimize™ delivers high performance, high throughput quantification. Automated instrument optimization doesn't stop at cone voltage, collision energy and MRM transition selection – QuanOptimize also identifies the best ionization method for each compound (ESI or APCI, positive or negative) and automatically quantitates and reports your batch.

OpenLynx Open Access (OA) Login

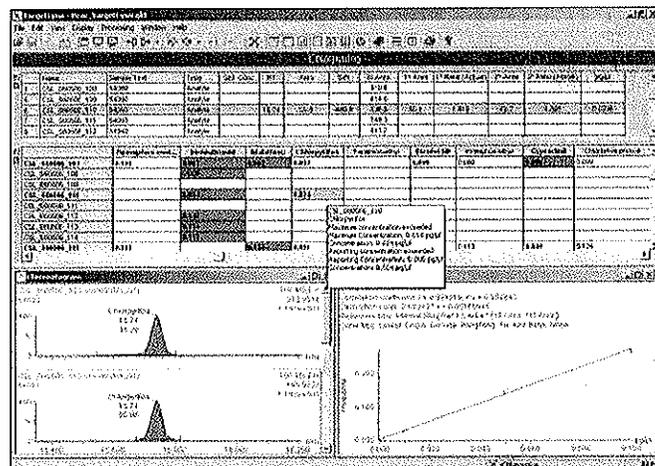
For walk-up analysis, OpenLynx Open Access (OA) Login offers multi-user and unsupervised sample login, backed by centralized system management. For LC/UV, LC/MS, LC/MS/MS, and GC/MS sample runs, from data acquisition to batch processing for qualitative and quantitative analysis, use OpenLynx to fully automate all stages in LC/MS quantification.

ProfileLynx

For physicochemical property analyses for lead optimization, ProfileLynx™ automates data calculations and streamlines data review.

FractionLynx

Automating compound isolation and purification, FractionLynx™ controls fraction collection while tracking sample, fractions, and associated data. All possible through integrating versatile control of purification systems with an extensive and flexible set of compound detection, fraction triggering, and collection capabilities.



Example of TargetLynx browser showing processed data.

FOCUS THE POWER OF MS ON YOUR APPLICATION

The rate-determining step in many analyses is not data acquisition, but the speed your data can be converted into useful information.

To assist with both application-specific data acquisition and the transformation of data into usable results, MassLynx Software offers Application Managers with specialized data processing functionalities that allow you to eliminate complex, time-consuming manual data review. Focus the power of MS on your laboratory tasks and increase your productivity.

The functionality of MassLynx Application Managers was guided by recommendations from our customers. We worked closely with labs like yours to better understand unique MS data processing challenges. We developed these software extensions to improve your ability to control, collect, and process MS data for specific laboratory needs. The OpenLynx and QuanLynx Application Managers are included with each MassLynx 4.1 Software installation.

FOR IDENTIFICATION

ChromaLynx

Simplifying complex mixture analysis, ChromaLynx™ excels at semi-quantitative detection, identification and determination of components. Detecting and locating the maximum number of real components in a mixture, ChromaLynx also provides comparisons between a real sample and a blank to help determine common and unique components.

MetaboLynx

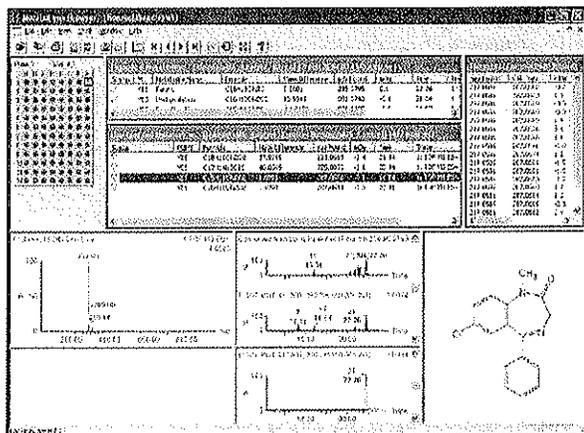
Automating metabolite identification, MetaboLynx™ leverages advanced comparison with control samples. You'll miss fewer metabolites and accelerate your data interpretation. Advanced mass defect filters (MDF) let you concentrate on unexpected metabolites while the structural elucidation capabilities of MassFragment™ delivers the information you need to resolve metabolic pathways.

MassFragment

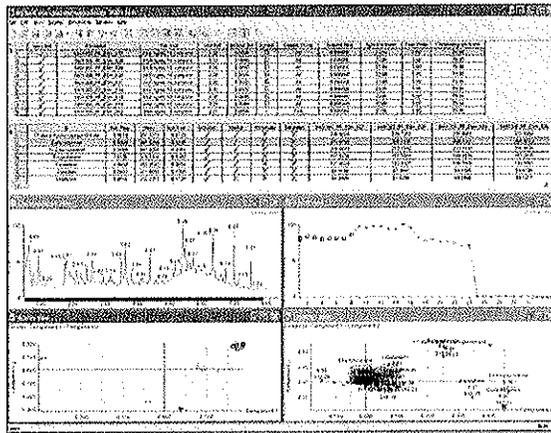
Automatically assigning collisionally activated dissociation mass spectra, MassFragment employs a novel systematic bond dissociation approach, rather than the traditional rule-based and rule-limited approach, delivering confident structural elucidation of your compounds.

MarkerLynx db

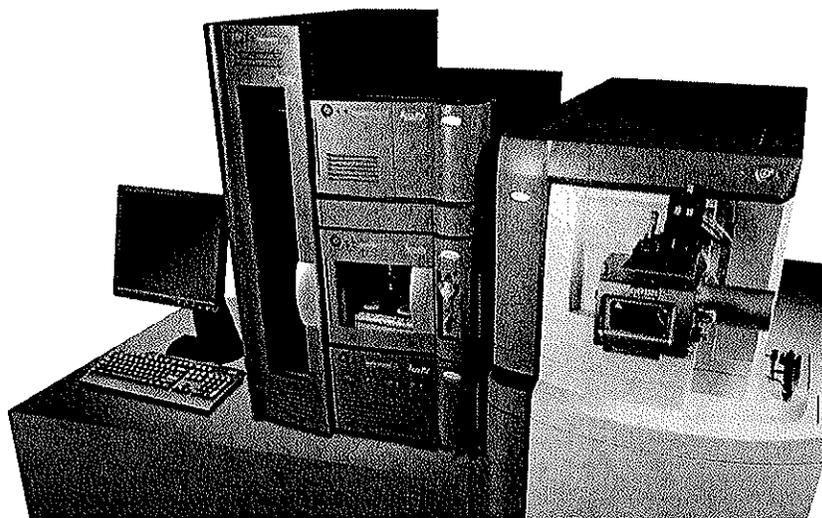
Extracting relevant biomarker information, MarkerLynx™ db processes complex multivariate data from LC/MS or GC/MS analyses for your metabolomic or metabolomic experiments. Via an interactive browser, you can perform data reduction and statistical analyses and even query the internet for potential biomarker identification using the dynamic database search function.



MetaboLynx automates data processing for rapid metabolite identification. The unique structural elucidation capabilities of MassFragment for MetaboLynx interpret the enhanced fragment information from the Synapt HDMS for the most advanced characterization capabilities in small molecule profiling.



The MarkerLynx db Application Manager browser.



ACQUITY UPLC System with the Synapt HDMS.

FOR PROTEIN IDENTIFICATION AND CHARACTERIZATION

ProteinLynx Global Server

A key enabling technology of Waters Identity^E High Definition Proteomics™ System, delivering more peptides, more proteins, more coverage, and more rigor. ProteinLynx Global Server™ (PLGS) provides integrated tools for proteomics project management as well as relative protein quantification, identification, and characterization.

BiopharmaLynx

Developed with biopharmaceutical thought leaders for confident characterization and optimized workflow, BiopharmaLynx™ leverages Waters' leading protein informatics expertise. Determine the identity, purity, and stability of biopharmaceuticals, working with either peptide maps or intact proteins.

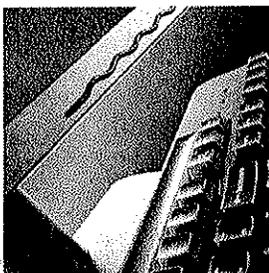
WATERS GLOBAL SERVICES

Be assured. Choose Waters Global Services.

For 50 years, Waters Global Services has focused on optimizing Waters products with superior service, support, training, and Waters Quality Parts®.

Only the Waters service team has the most in-depth and up-to-date knowledge of the advanced science and technologies that provide the foundation for Waters systems. This enables Waters to help you maximize system uptime, increase laboratory productivity, and meet compliance requirements.

With more than 94 offices in 50 countries, Waters maintains a strong global presence. Whether your company is a single-location lab or a large multinational organization, Waters offers support whenever and wherever you need it.



Waters Global Services creates programs that will optimize your entire laboratory and information management processes.

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Finland 358 9 5659 6288

France 33 1 30 48 72 00

Germany 49 6196 400 600

Hong Kong 852 2964 1800

Hungary 36 1 350 5086

India 91 80 2837 1900

Ireland 353 1 448 1500

Italy 39 02 265 0983

Japan 81 3 3471 7191

Korea 82 2 820 2700

Mexico 52 55 52 00 1860

The Netherlands 31 76 508 7200

Norway 47 6 384 6050

Poland 48 22 833 4400

Puerto Rico 787 747 8445

Russia/CIS 495 727 4490 / 290 9737

Singapore 65 6273 1221

Spain 34 93 600 9300

Sweden 46 8 555 115 00

Switzerland 41 62 889 2030

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Waters

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September 2007 720001408EN LB-AP



ACQUITY UPLC SYSTEM†

The Waters® ACQUITY UPLC® System provides an integrated configuration for solvent and XYZZ sample management designed for use with ACQUITY UPLC chemistries. The core ACQUITY UPLC System comprises a Binary Solvent Manager, a Sample Manager with integral Column Heater, and a Solvents Tray. The optional Sample Organizer is available for expanded sample capacity. The full line of Waters MS Technologies products, from single quadrupole to hybrid quadrupole time-of-flight (Q-ToF™) are also available.

ACQUITY UPLC BINARY SOLVENT MANAGER

Number of solvents	Up to four: in any combination of two: A1 or A2 and B1 or B2
Solvent storage	Solvents Tray accommodates up to four chromatographic solvents, two Sample Manager wash solvents and one Binary Solvent Manager seal wash solvent
Solvent conditioning	Vacuum degassing (six-channel): one channel per solvent, and two channels for Sample Manager wash solvents
Operating flow rate range	0.010 to 2.000 mL/min, in 0.001 mL increments
Compressibility compensation	Automatic and continuous
Effective system delay volume	< 120 μ L, independent of system backpressure (with standard 50- μ L mixer installed)
Plunger seal wash	Integral, active, programmable
Gradient profiles	Eleven gradient curves [including linear, step (2), concave (4), and convex (4)]
Wet prime	Automatic
Maximum operating pressure	15,000 psi up to 1 mL/min, 9,000 psi up to 2 mL/min per pump, not more than 15,000 psi total
Composition accuracy	\pm 0.5% absolute (full scale) from 5 to 95% of flow rates from 0.5 to 2.0 mL/min (Contact Waters for conditions used)
Composition precision	0.15% RSD or \pm 0.04 min SD, whichever is greater, based on retention time
Flow precision	0.075% RSD or \pm 0.02 min SD, six replicates, based on retention time or volumetric measures (0.500 to 2.000 mL/min)
Flow accuracy	\pm 1.0% at 0.5 mL/min with degassed methanol, per Waters AQT/SystemsQT protocol
Primary wetted materials	316 stainless steel, UHMWPE, sapphire, ruby, FEP, PTFE, ETFE, diamond-like coating, PEEK and PEEK alloys, titanium alloys
Unattended operation	Leak sensors, full diagnostic data captured through console software

[INSTRUMENT SPECIFICATIONS]

ACQUITY UPLC SAMPLE MANAGER

Number of sample plates	Total of two plates, expandable to up to 22 plates with optional Sample Organizer (see below): <ul style="list-style-type: none">• 96 and 384 microtiter plates• 48 position 2.00-mL vial plates• 48 position 0.65-mL micro-centrifuge tube plates• 24 position 1.50-mL micro-centrifuge tube plates
Maximum sample capacity	768 in two 384-well plates; expandable to up to 8,448 samples with optional Sample Organizer (see below)
Number of sample injections	1 to 99 injections per sample
Injection volume range	0.1 to 50.0 μ L, in 0.1 μ L increments, partial or full loop mode, 10- μ L loop is standard; 1, 2, 5, 20, and 50- μ L loops also available
Sample delivery precision (full loop injection mode)	< 0.3% RSD, full loop, standard 10- μ L loop (default wash/purge conditions), per Waters AQT/SystemsQT protocol
Sample delivery precision (PLNO injection mode)	< 1% RSD within 20% to 75% of loop volume for 1, 2, 5, 10, 20, and 50- μ L loops, UV detection
Injector linearity	> 0.999 coefficient of deviation (from 20% to 75%, partial loop overflow mode (PLNO injection mode), per Waters' AQT/SystemsQT protocol
Sample temperature control	4.0 to 40.0 $^{\circ}$ C, settable in 0.1 $^{\circ}$ C increments (assumes an ambient temperature of 25.0 $^{\circ}$ C). At an ambient temperature of 21.0 $^{\circ}$ C or lower the sample manager will maintain the temperature of the sample compartment down to 4.0 $^{\circ}$ C with a tolerance of -2.0/+6.0 $^{\circ}$ C, when configured with the maximum number of vials and/or plates
Injection cycle time	< 15 sec between multiple injections with "load ahead" enabled 30 sec with single weak wash, 10- μ L loop, pressure assist mode
Sample probe	XYZZ based needle-in-needle design
Minimum sample required	5 μ L residual, using maximum recovery 2-mL vials (zero offset)
Wash solvents	Two degassed: strong solvent and weak wash solvent, programmable to suit application
Sample carryover	< 0.005% or < 2.000 nL, whichever is greater
Advanced operations	Loop off-line mode, load ahead
Unattended operation	Leak sensors, full diagnostic data control captured through console software
Primary wetted materials	Titanium alloy, 316 stainless steel, fluoropolymer, fluoroelastomer, PPS alloy, PEEK alloy, PPS, PEEK, DLC coating, gold

[INSTRUMENT SPECIFICATIONS]

ACQUITY UPLC COLUMN MANAGEMENT

Column heater	Accommodates one column, 20 to 150 mm length x 1.0 to 4.6 mm internal diameter (I.D.), pivots out for use with optional MS detector
Column temperature control	5.0 °C above ambient to 90.0 °C settable in 0.1 °C increments
Column tracking	eCord™ Technology column information management tracks and archives usage history
Compartment temperature measurement accuracy	±1.0 °C
Compartment heating rate	Less than 15 min. 5.0 °C above ambient to 40.0 °C

ACQUITY UPLC INSTRUMENTAL CONTROL

External communications	Ethernet interfacing via RJ45 connection to host PC
Event inputs/outputs	Rear panel contact closure and/or TTL inputs/outputs
External control	Empower™ 1154 or 2154; or MassLynx™ Software or Empower network or standalone through console software
User diagnostics	Available through software on host PC; system control via console software
Connections INSIGHT®	Provides real-time monitoring and automatic notification of instrument performance and diagnostic information allowing for quicker problem resolution
ACQUITY UPLC Local Console Controller (LCC)	This controller mounts to the Sample Manager and communicates directly with the ACQUITY UPLC Console software application. The LCC monitors system and module functions can set initial conditions and run selected diagnostics. The LCC cannot create or edit instrument methods or acquire data.

ENVIRONMENTAL

Acoustic noise	< 65 dBA
Operating temperature range	4.0 to 40.0 °C (39.2 to 104.0 °F)
Operating humidity range	20% to 50%, non-condensing

POWER REQUIREMENTS

Voltage range	90 to 264 Vac
Frequency	47 to 63 Hz

PHYSICAL DIMENSIONS

Core ACQUITY UPLC System:	Width: 34.3 cm (13.5 in.)
Binary Solvent Manager, Sample Manager	Height: 67.2 cm (26.5 in.)
with Column Heater, and Solvents Tray	Depth: 71.1 cm (28.0 in.)

[INSTRUMENT SPECIFICATIONS]

High capacity ACQUITY UPLC System: Width: 58.40 cm (23.00 in.)
Binary Solvent Manager, Sample Manager Height: 92.70 cm (36.50 in.)
with Column Heater, Solvents Tray, and Sample Organizer Depth: 71.10 cm (28.00 in.)

ACQUITY UPLC SAMPLE ORGANIZER (OPTIONAL)

Number of sample plates	Total of up to: <ul style="list-style-type: none">• 21 standard microtiter plates• 11 intermediate height plates• 7 deep-well (or 2-mL vial) plates• Combinations thereof
Maximum sample capacity	Total of up to 8,448 samples: in 22 384-well plates, or seven 336 2-mL vials
Temperature control	4 to 40 °C, settable in 1 °C increments
Plate exchange	< 15 sec (retrieval and replace time)
Sample temperature control	At ambient temperature of 21 °C or lower, the sample organizer will maintain the temperature of the sample compartment down to 4 °C with a tolerance of -2/+6 °C, when configured with the maximum number of vials and/or plates; for ambient temperatures above 21 °C, there is a delta of 17 °C from actual ambient temperature
Racks	10 storage shelf assemblies supplied standard

ORDERING INFORMATION	PART NUMBER
ACQUITY UPLC System (core)	176015000
ACQUITY UPLC Sample Organizer	186015020
ACQUITY UPLC Sample Organizer shelf	700002730
ACQUITY UPLC FlexCart	205015015

**Contact Waters Customer Service to obtain the specific conditions used to demonstrate these performance specifications.*

Waters

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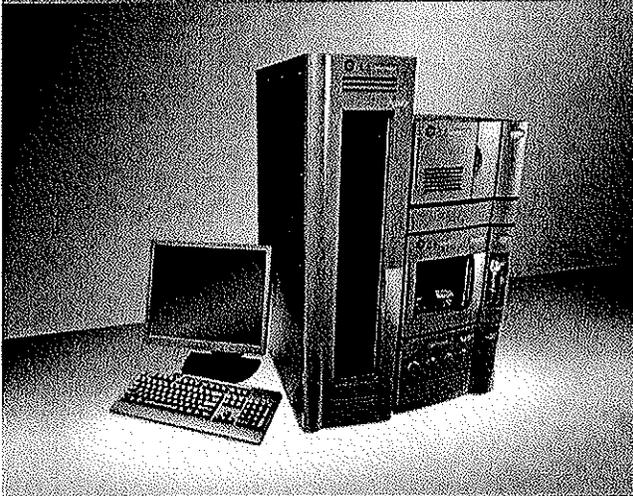
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[ACQUITY UPLC SYSTEM]

OVERCOME THE CHALLENGES
OF ANALYTICAL LABORATORIES.

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Waters

THE SCIENCE OF WHAT'S POSSIBLE.™

ACHIEVE MORE WITH PROVEN TECHNOLOGY.

The proven design of the Waters® ACQUITY UPLC® system, used in laboratories for business-critical applications worldwide, ensures that you will simultaneously gain higher quality information from your samples and optimize laboratory productivity. ■ ACQUITY UPLC systems are holistically designed to match the performance needs of extremely small and efficient particles of UPLC® column chemistries with robust instrumentation and easy-to-use software. ■ And we continue to extend our products and services – to provide your lab with more ways to capture the full advantage of UPLC's dramatic improvements in resolution, sensitivity, and speed of analysis.



Since its launch, the ACCUITY UPLC system has convinced scientists in major laboratories around the world that UPLC redefines chromatographic technology, while demonstrating that Waters is a driving force in laboratory innovation.

**MEASURABLE
BENEFITS
THROUGHOUT
YOUR ORGANIZATION**

Companies like yours seek opportunities in every corner of their organization to create competitive advantages that can increase revenues. UPLC is one such strategic technology that can simultaneously increase your laboratory productivity, decrease operational costs, and facilitate faster product development.

Not only does UPLC make good scientific sense – it also makes good financial sense. Whether you work in the laboratory, manage laboratory activities and resources, manage finances, or are responsible for overall strategic direction, the tangible benefits of UPLC are clear.

- Improved chromatographic performance
- More accurate results that are available to customers earlier
- Reduced costs and increased productivity for each individual in your decision process
- Faster time to market

WORK SMARTER

We're proud to see the benefits of UPLC paying off for our customers. The award-winning ACQUITY UPLC system has revolutionized LC and LC/MS analyses in laboratories around the world – proof positive that today's leading scientists have made the switch to UPLC and aren't looking back.

They need to get the job done quickly and efficiently, just like you. And now with UPLC, they're able to realize unprecedented levels of analytical performance in resolution, sensitivity, and speed.

Consider the amount of work that you need to accomplish today. How can you afford not to use the ACQUITY UPLC system?

How do chromatographic technologies compare?

TECHNOLOGY	RESOLUTION	SENSITIVITY	SPEED	SCALABILITY PREP-SCALE HPLC	COMPATIBILITY WITH MS
Waters ACQUITY UPLC	☆	☆	☆	☆	☆
Conventional HPLC	▲	▲	▼	☆	▲
"Ultra-fast high-flow" HPLC	▼	▼	■	▲	●
"High-temperature high-flow" HPLC	■	▲	☆	▲	●
Monolith HPLC	▲	▼	☆	▼	●

☆ EXCELLENT ■ VERY GOOD ▲ GOOD ▼ FAIR ● POOR



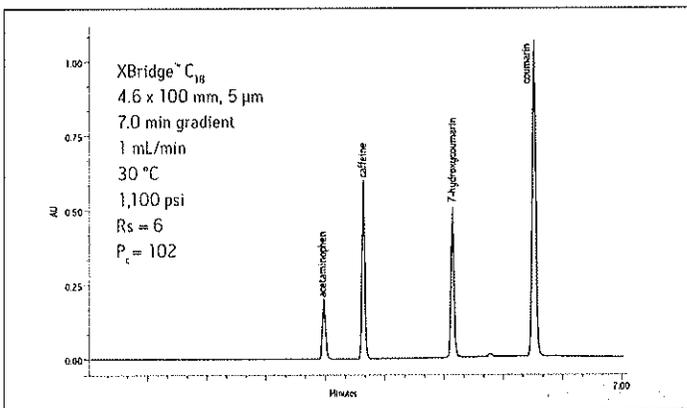
"ACQUITY UPLC concentrates all the analytes into a smaller volume so that the peaks are narrower and taller. Now chemists can try things they never could before due to time constraints and the cost of compounds. With ACQUITY UPLC, you get all sorts of good things."

Art Coddington, Ph.D.
Research Fellow (retired)
Merck Research Laboratories

HPLC DOESN'T COME CLOSE

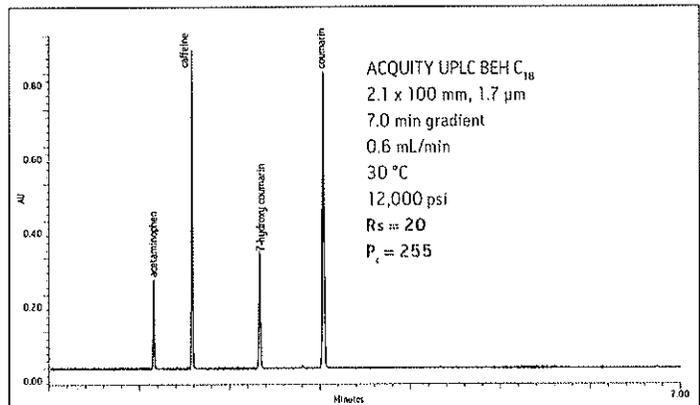
Waters was the first to challenge the established paradigm of liquid chromatography performance by designing a system with next-generation performance that drives separation science capabilities far beyond traditional benchmarks.

At Waters, we understand that you cannot simply modify an LC column or instrument to push its capacity to the next level. Our cutting-edge UltraPerformance LC® technology, based on known chromatographic principles, simply outperforms HPLC in every aspect.



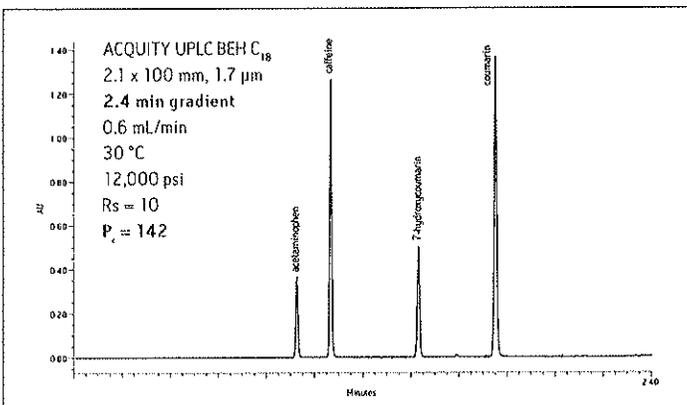
HPLC

Optimized HPLC separation of acetaminophen, caffeine, 7-hydroxycoumarin and coumarin. USP resolution determined from acetaminophen and caffeine peaks.



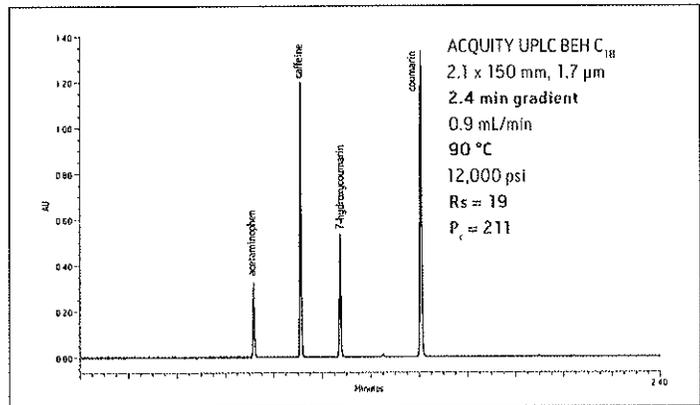
UPLC resolution

ACQUITY UPLC provides more resolution, while maintaining throughput.



UPLC speed and sensitivity

ACQUITY UPLC provides increased throughput and sensitivity, while maintaining resolution.



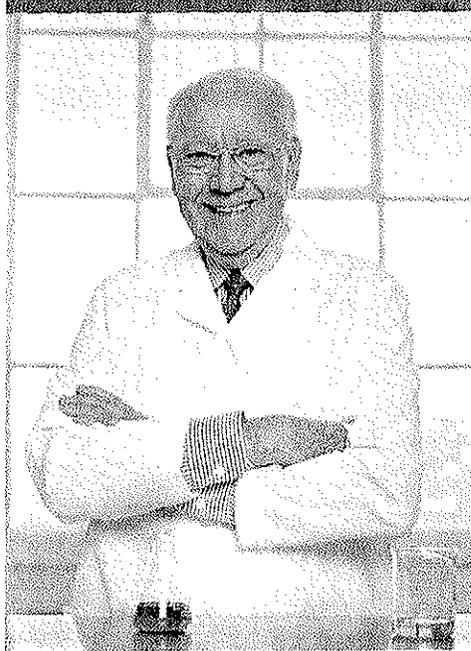
UPLC resolution, speed, and sensitivity

ACQUITY UPLC provides more resolution and sensitivity, while increasing throughput with optional elevated temperatures.

Take the ACQUITY UPLC challenge!

See for yourself the measurable performance improvements possible with UPLC at www.waters.com/calc

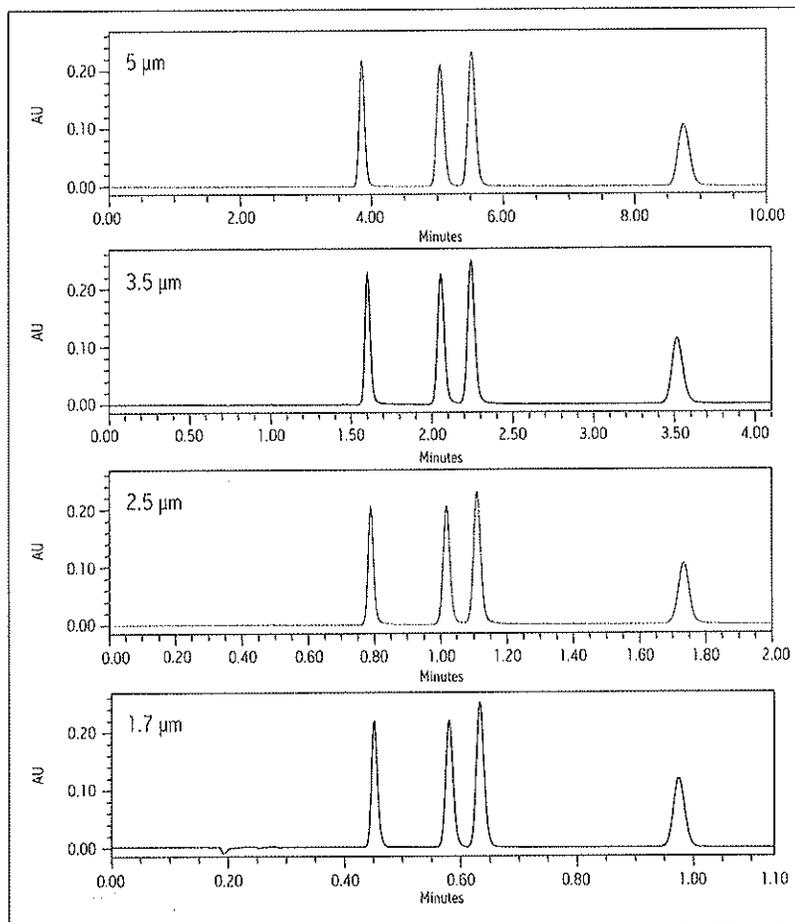




One laboratory has realized an estimated 74 percent cost reduction per sample by migrating from HPLC to UPLC.

ENGINEERED FOR DEMANDING LABORATORIES

At Waters, we're serious about our customers' success. Once we unveiled the true potential of UPLC chemistries, we built a system that would stand up to the demands of your rigorous day-to-day requirements.



BEH particle technology allows you to maintain chromatographic selectivity and resolution, regardless of the scale of your separation.

System hallmarks

The ACQUITY UPLC system's hallmark innovations include tightly integrated high-pressure fluidics, new techniques for sample handling, versatile sample capacity, minimal system volumes, intuitive integrated software and diagnostics, and an array of fast-response detectors.

The system's unique, pressure-tolerant sub-2 μm ACQUITY UPLC columns have a state-of-the-art particle design and quality control standards to provide unparalleled performance and reproducibility. The columns are stable across a wide pH and temperature range

and are available in a variety of chemistries, making the ACQUITY UPLC system flexible enough to meet any lab's requirements for high efficiency separations with reduced cycle times and improved resolution and sensitivity.

For mass spectrometry, the superior separations provided by the ACQUITY UPLC system produce spectra of the highest quality and sensitivity, making the Waters system the best inlet available – without flow splitting – for MS and MS/MS analyses.

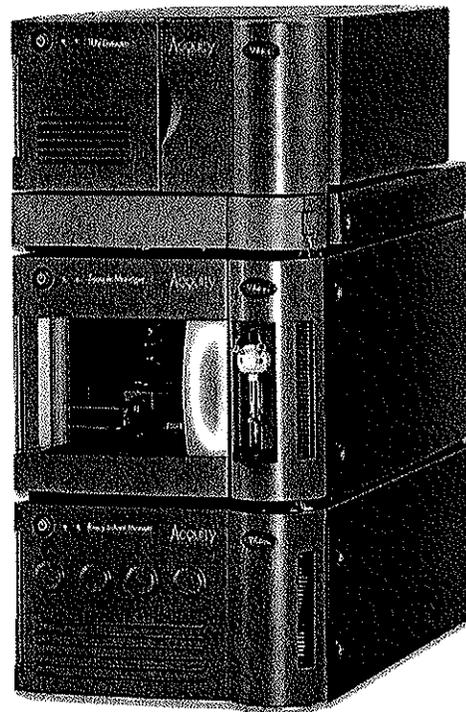
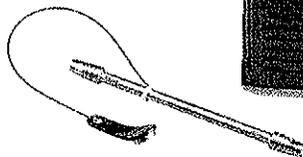
Performance

Our engineers designed the ACQUITY UPLC system from the ground up. We addressed in concert the interdependencies of the column, the instrumentation, the software and console that you use to operate the system, as well as the services and training you rely on to maintain a productive and efficient lab.

Ultimate laboratory productivity

Waters has partnered with collaborators around the world to confirm that our revolutionary UPLC technology addresses the needs of diverse laboratory environments. We did this to ensure that the ACQUITY UPLC system is rugged, easy-to-use, and provides second-to-none chromatographic performance.

Whether you're a chromatographer, mass spectrometrist, researcher, or methods developer, you don't have to choose between resolution, sensitivity, or speed.



The ACQUITY UPLC system and column.

With UPLC, you get it all – ultimate performance, without compromise.



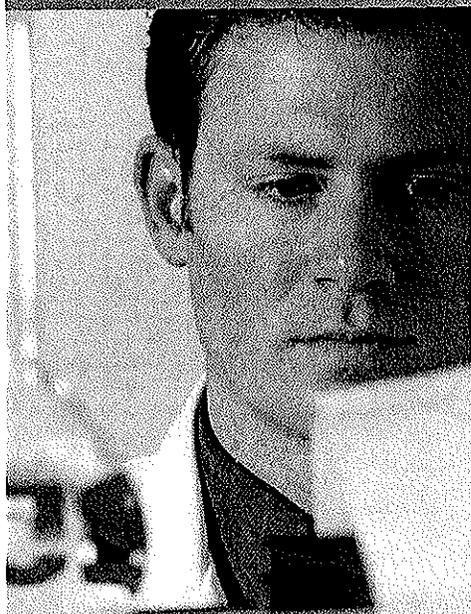
SPECIALIZED APPLICATIONS FOR UPLC

The ACQUITY UPLC system is also offered in unique end-to-end solutions for peptide mapping and amino acid analysis. These configurations include the chemistry, instrumentation, methodology, documentation, and application support needed for high-quality analyses. An array of specialized system solutions are also available for ADME screening, food safety, bioanalysis, clinical, metabolite identification, metabonomics, method development, and open access applications.

Specifically designed for the extreme demands of peptide mapping applications, the UPLC Peptide Analysis Solution, with new

Peptide Separation Technology Columns, combines ease of use with unmatched performance in separating complex protein digests, superior glycopeptide resolution, and peak shape for analytical confidence.

The UPLC Amino Acid Analysis Solution, based on Waters AccQ•Tag™ Ultra Chemistry, is optimized for accurate, reliable, and reproducible analyses of amino acids in a fraction of the time needed for typical HPLC separations.



Lab managers find that methods development is much more rapid with UPLC than with traditional HPLC.

"The ACQUITY UPLC and Quattro micro™ are absolutely magnificent for what we do. Now we can separate, identify, and quantify 38 estrogen derivatives at femtomolar amounts in less than 12 minutes."

Prof. Ercole Cavalieri
Center for Environmental Toxicology
University of Nebraska

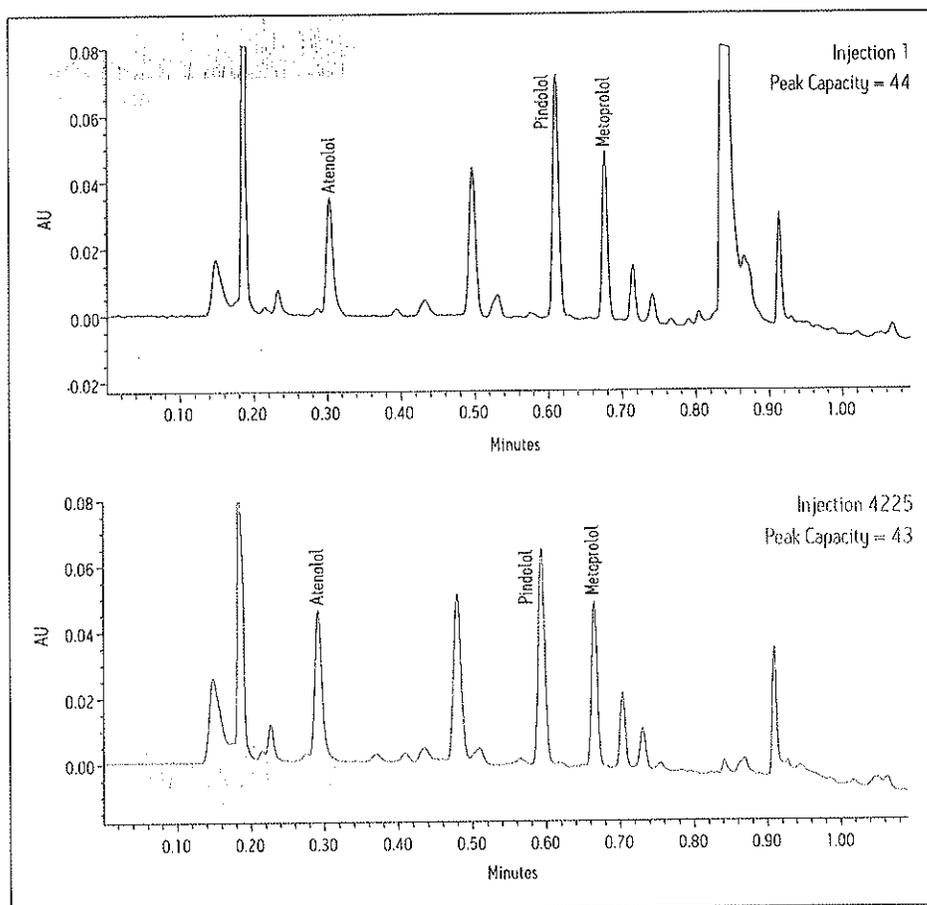
FROM HPLC TO UPLC TO PREP: THE POWER OF BEH AND HSS TECHNOLOGY

Columns built for high efficiency

Using unique 1.7 μm BEH and 1.8 μm HSS material, we created scalable, pure particle columns with superior mechanical strength over wide temperature and pH ranges specifically for the high-efficiency separations of UPLC. With BEH and HSS particle technology, ACQUITY UPLC columns exhibit improved efficiency, strength, temperature, and pH range – the hallmarks of UPLC separations.

Stability and robustness

Waters sets the standard for column-to-column and batch-to-batch reproducibility for guaranteed performance over the life of the column, every time.



Thousands of protein-precipitated plasma injections illustrate the long, reproducible ACQUITY UPLC BEH column lifetimes.

Transferability

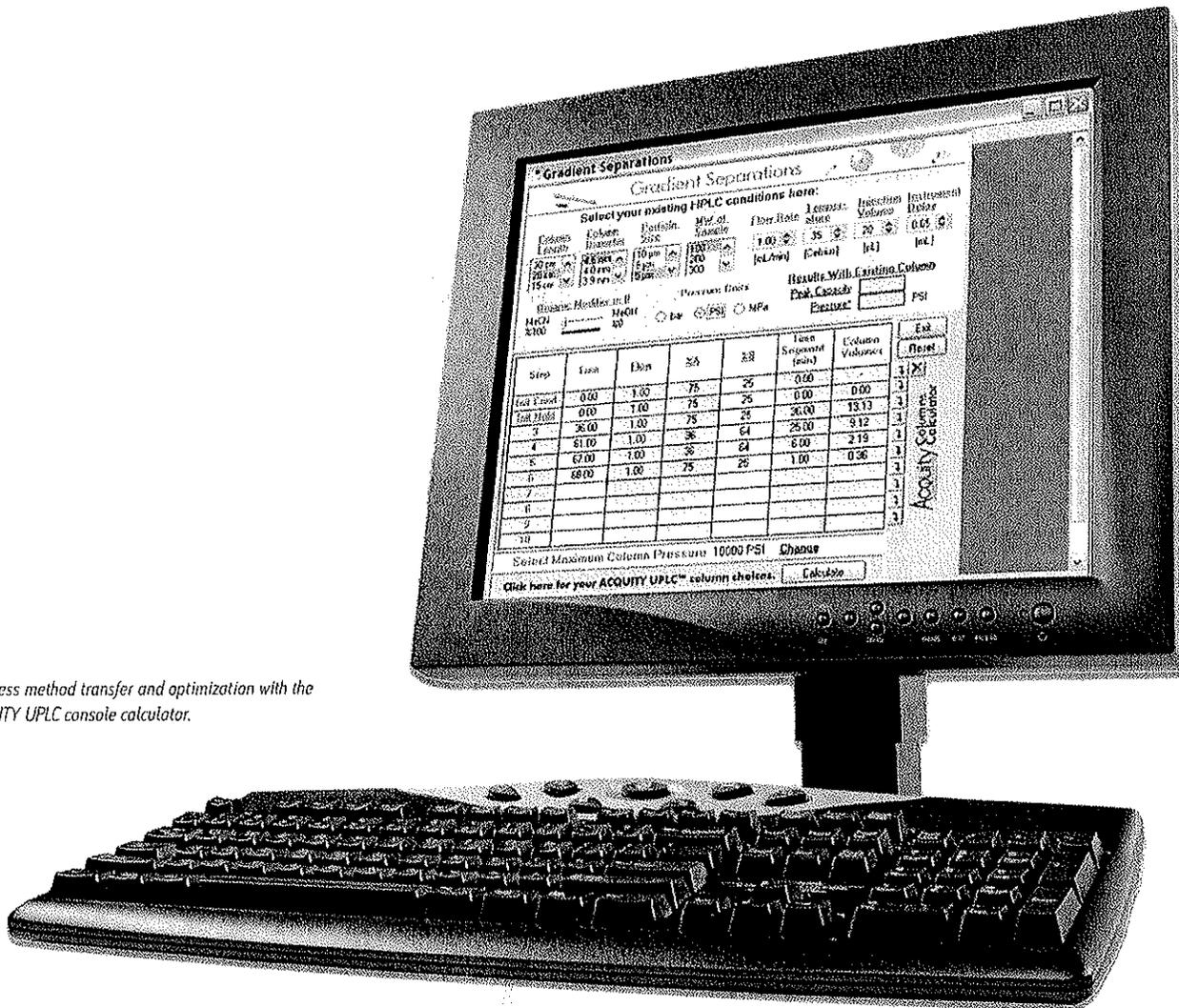
ACQUITY UPLC BEH columns offer a wide range of complementary chemistries, including C₁₈, C₈, Shield RP₁₈, Phenyl, and HILIC. With ACQUITY UPLC BEH and ACQUITY UPLC HSS T3 columns, method development and transfer from HPLC to UPLC couldn't be easier. Using the ACQUITY UPLC console calculator, simply input your current HPLC conditions for full transfer parameters.

Direct scalability

Waters XBridge and Atlantis® T3 HPLC columns extend the power of BEH and HSS technology to larger particle sizes for superior HPLC separations and hassle-free scale-up and optimization.

Traceability

The ACQUITY UPLC columns also feature eCord™ technology that electronically stores all of the information you need to track your experiments: the certificate of analysis, dates of installation and usage, number of injections, number of sample sets, maximum temperature and pressure.



Effortless method transfer and optimization with the ACQUITY UPLC console calculator.

THE PERFORMANCE YOU WANT, IN THE CONFIGURATION YOU NEED

The ACQUITY UPLC system provides our customers with a comprehensive set of system components that address a range of analytical challenges, from the simplest to the most complex. We configured the system for flexibility, to enable laboratories to select the most appropriate components that meet your application needs. With this modular design, you can add-on features as necessary to build a system that addresses your evolving goals for analytical productivity and efficiency.

Our ACQUITY UPLC systems come complete with the instrumentation, chemistry, documentation, methodology, application support, accessories, support services, and training you need to perform trouble-free UPLC analyses.

Versatility

Column and sample format options enable you to meet your lab's throughput needs.

- Sample Organizer
- ACQUITY UPLC BEH column chemistries: C₁₈, C₈, Shield RP₁₈, Phenyl, HILIC, and ACQUITY UPLC HSS T3
- ACQUITY UPLC VanGuard pre-columns
- Handles multiple sample formats: plates, vials, tubes
- Quick Connect fittings

Performance

Sensitivity to meet multiple detection requirements.

- Binary Solvent Manager
- Sample Manger
- Evaporative Light Scattering detector
- Fluorescence detector
- Photodiode Array detector
- Tunable UV detector
- SQ detector
- TQ detector

Flexibility

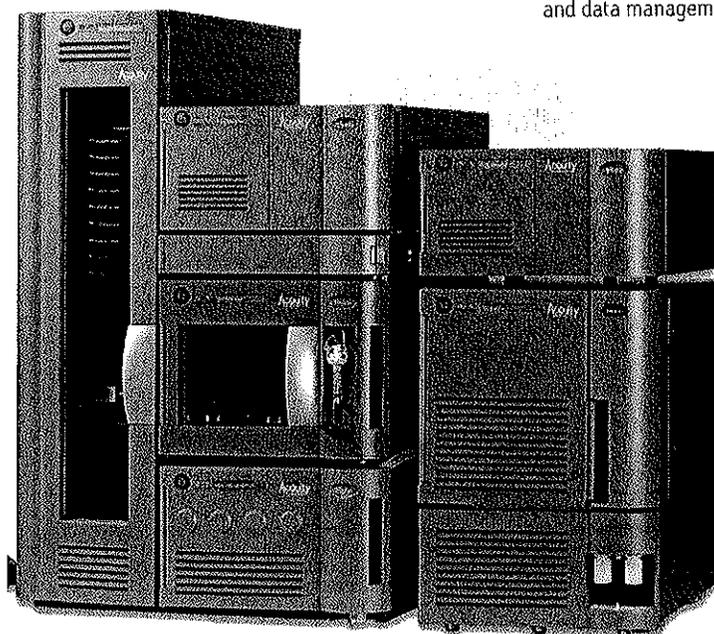
System configurations can be easily modified to match your methodology.

- Column Manager with heating/cooling for low dispersion control and precise temperature management
- Optional automated column switching among multiple columns and a bypass channel
- Optional Sample Organizer for high capacity processing
- Adjustable FlexCart for convenient installation and easy movement between workstations
- Third-party vendor mass spectrometer adaptability

Intelligence

Software, services, and tools to help you optimize system performance.

- ACQUITY UPLC console with calculator for method conversion
- Connections INSIGHT[®] remote intelligent services for predictive system support
- IVDD Certification
- Empower[™] or MassLynx[™] software for control and data management



The ACQUITY[®] SQD for UPLC/MS.

DO MORE WITH YOUR RESULTS

Waters software solutions enable you to capitalize on the results generated by the ACQUITY UPLC system. The Waters Laboratory Informatics Suite includes proven information management solutions that integrate all your lab resources in a consistent, scalable, and seamless application environment.

Empower software provides control of the ACQUITY UPLC system, including data acquisition, management, processing, and reporting, all in the market-leading chromatography data software (CDS) platform. Empower is scalable from a single workstation to an enterprise-wide CDS solution, and offers advanced features for method development, reporting, and custom calculations, as well as Enterprise Options for advanced data management and automated method validation management.

MassLynx software, for advanced mass spectrometry applications, enables researchers to acquire, analyze, manage, and distribute

information. MassLynx offers flexible control over complex instrument configurations, and Application Managers that are tailored for specific MS analyses.

NuGenesis® SDMS is a customizable scientific information management platform that automatically captures and stores data in a centralized data warehouse. SDMS makes information easier to save, secure, process, report, search, and access; facilitates regulatory compliance; and aids in the administration of intellectual property. SDMS converts scientific results into accessible and valuable corporate knowledge.

MAXIMIZE SYSTEM UPTIME WITH INTELLIGENT SERVICES

Connections INSIGHT remote intelligent services provide secure, web-based system monitoring, instant alert notification, and a direct link to Waters technical experts. These services help you maximize ACQUITY UPLC system uptime, increase laboratory productivity, and allow Waters to continually monitor your system's performance to anticipate potential performance issues.

In the event system issues occur, the service automatically alerts Waters and provides information for analysis. This can be accomplished by granting Waters temporary system access for real-time problem resolution.

Connections INSIGHT remote intelligent services also provide monthly performance status reports that summarize overall system operation and use of consumables, enabling you to better manage your laboratory resources.



One scientist has been amazed by their ability to separate a set of nutrients in nine minutes, when, not long ago, it took several hours.

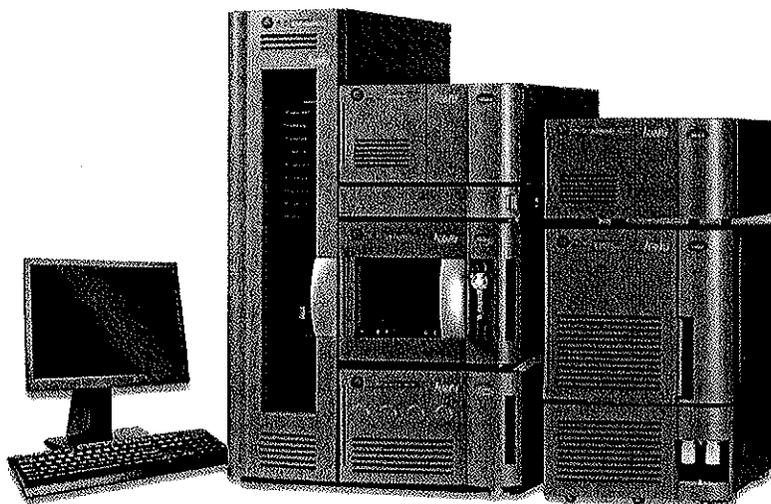


MAXIMIZE LC/MS PERFORMANCE AND PRODUCTIVITY

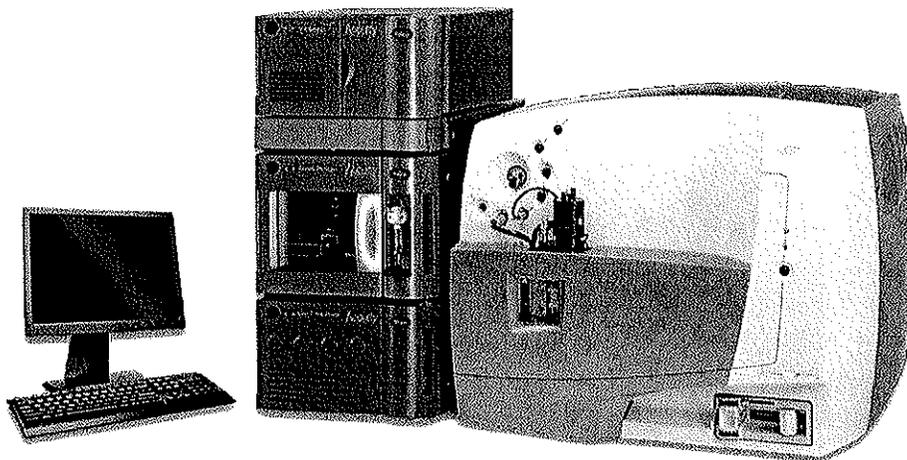
From Waters' easy-to-use, high-performance single quad mass detectors, to advanced tandem and time-of-flight mass spectrometers (TOF MS), the ACQUITY UPLC system is the only inlet you'll need for MS and MS/MS analyses, regardless of your analytical goal.

UPLC's dramatic peak resolution results in greatly enhanced detection sensitivity, allowing you to see more quality information in less time.

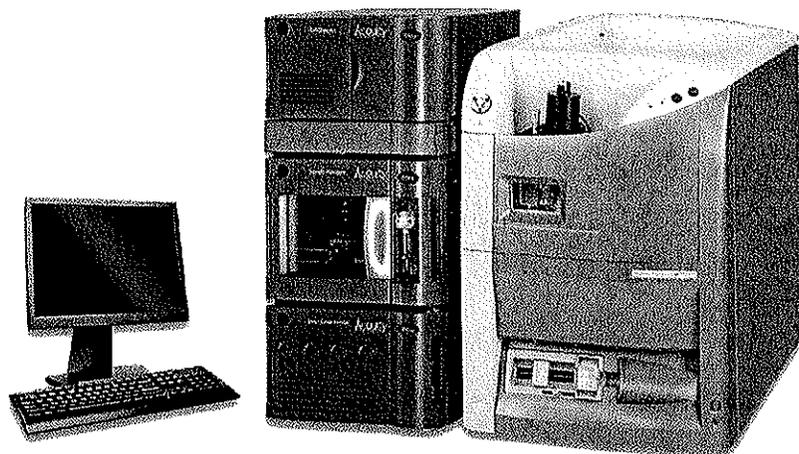
By matching our compliant-ready UPLC/MS and UPLC/MS/MS system solutions with MassLynx software and its Application Managers for specialized data processing, you will complete your analysis accurately and quickly, with complete confidence in your answers.



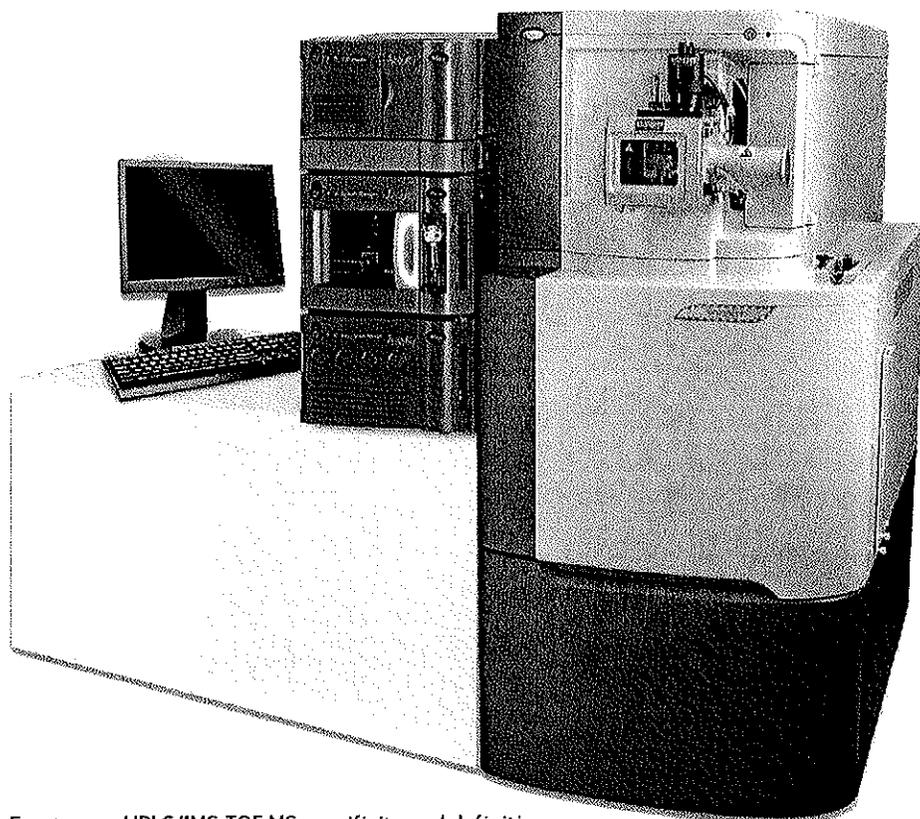
High throughput UPLC/MS and UPLC/MS/MS robustness
*ACQUITY[®] SQD and ACQUITY TQD
with Empower or MassLynx software.*



Exact mass UPLC/MS certainty
*ACQUITY UPLC system with the LCT Premier[™] XE
mass spectrometer and MassLynx software.*



Quantitative UPLC/MS/MS sensitivity
ACQUITY UPLC system with the Quattro Premier™ XE mass spectrometer and MassLynx software.



Exact mass UPLC/IMS-TOF MS specificity and definition
ACQUITY UPLC system with the Synapt™ HDMS™ system and MassLynx software.

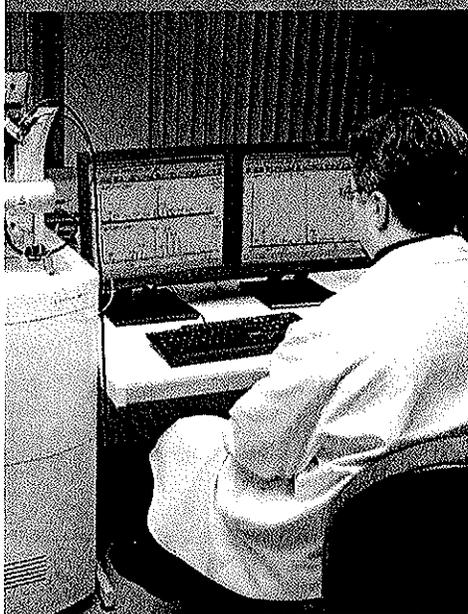
ENHANCE YOUR EXISTING INVESTMENT: UPLC AND THIRD-PARTY MASS SPECTROMETERS

Waters recognizes that a majority of labs have already made significant capital commitments to mass spectrometry equipment that may be manufactured by third-party providers. You can still take advantage of the significant advantages that the ACQUITY UPLC system offers as a front-end to a variety of MS instruments.

The ACQUITY UPLC system is now easily compatible with third-party MS solutions via expanded software control options, allowing you to get the most efficiency and performance from your existing technologies.

"The Waters ACQUITY UPLC system has revolutionized the way we do metabolic profiling in my lab—the combination of this system with statistically-linked NMR spectroscopy is nearly unbeatable for metabolic biomarker discovery."

Prof. Jeremy Nicholson
Div. of Biological Sciences
Imperial College



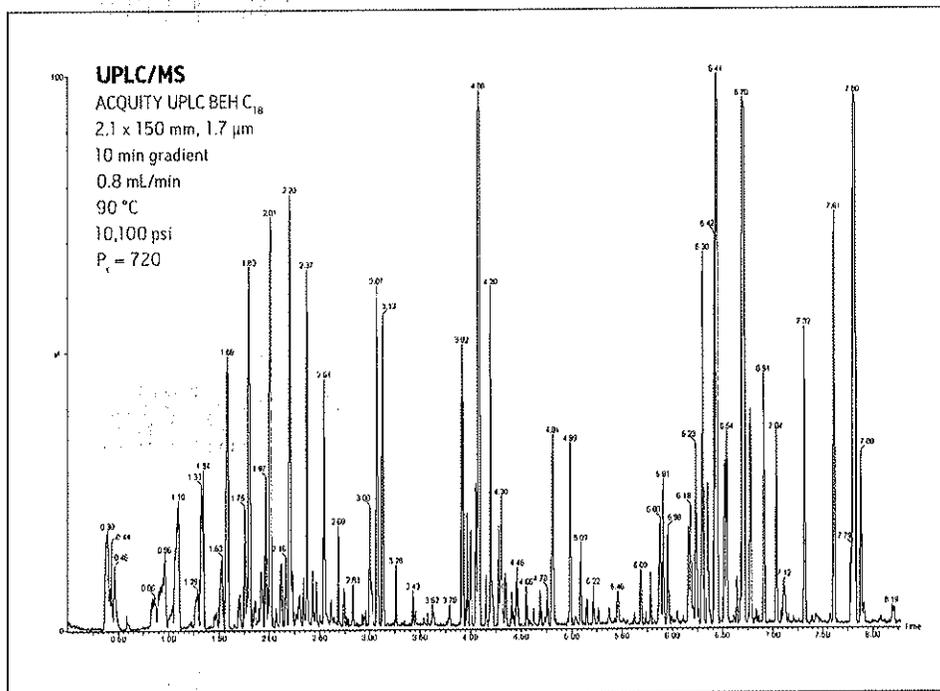
As a result of employing the Waters UPLC/MS approach for metabolomics, a large pharmaceutical safety assessment group is discovering earlier the derived biomarkers of toxicity that will be monitored as part of the group's clinical trial program.

THE PROOF IS IN THE DATA

Ultimate resolution

At a time when scientists have reached a chromatographic performance barrier and are pushing the limits of conventional HPLC, UltraPerformance LC technology brings an unprecedented level of separating power.

As the requirement to better characterize your sample becomes commonplace in research, regulatory, and chemical analysis environments, HPLC capabilities often fall short of the task at hand. The best way to ensure that you get maximum information is to achieve better chromatographic resolution and increased peak capacity – which are both delivered by UPLC.



This example shows the natural products analysis of ginseng extract using UPLC α -TOF MS with the ACQUITY UPLC system and the LCT Premier XE mass spectrometer.

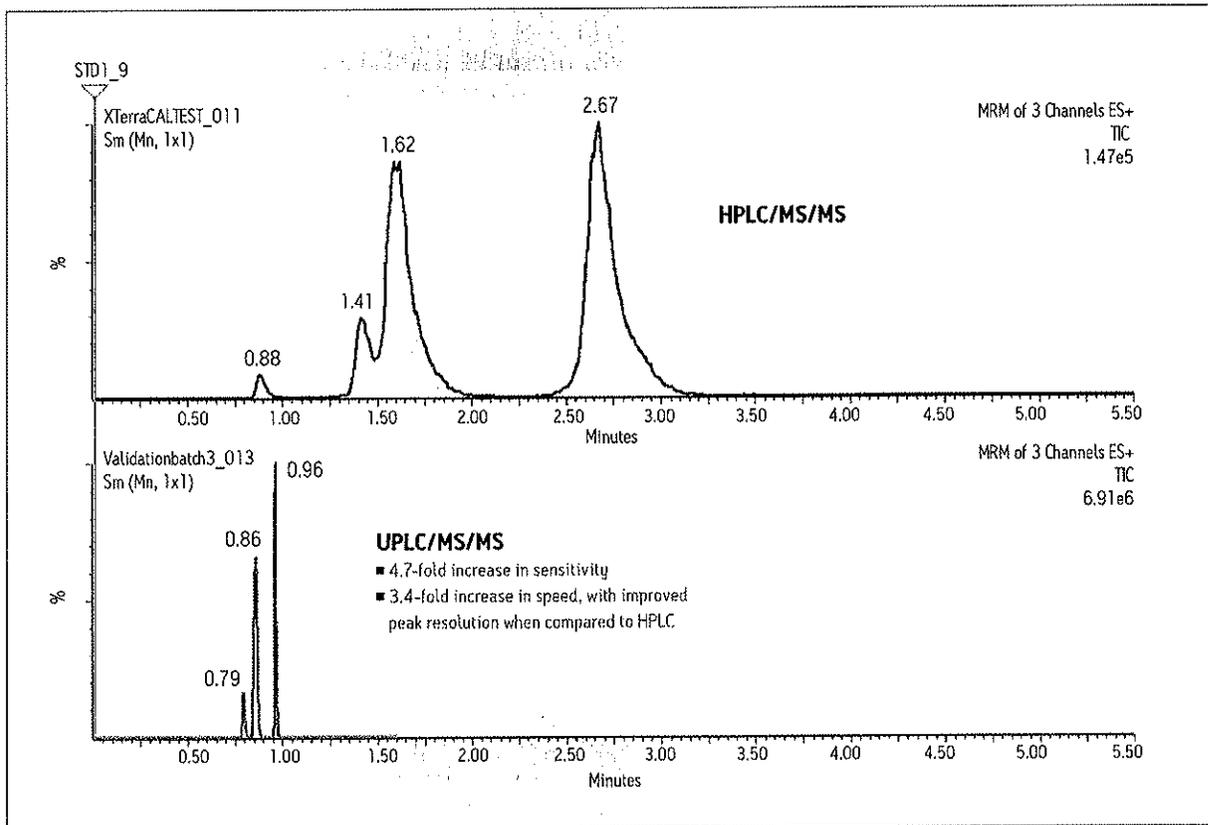


An open access lab's turnaround time was cut in half - while it also reduced solvent consumption by 85 percent.

Ultimate speed and sensitivity

In every analysis, there is a constant drive to generate better quality data in shorter timeframes with lower levels of analyte detection to speed up research, development, and product release. The ACQUITY UPLC system enables you to easily develop methods as well as to transfer your existing HPLC methods, allowing you to realize significant improvements in productivity, while enhancing chromatographic performance, detection limits, and data quality.

And when you couple the ACQUITY UPLC system with Waters' advanced optical and mass detection technologies, your lab will have the definitive platform for high throughput, high sensitivity qualitative and quantitative analysis.



Beta blockers calibration standard mix from plasma extract: Comparing HPLC/MS/MS with UPLC/MS/MS with the ACQUITY UPLC system and the Quattro Premier XE tandem quadrupole mass spectrometer.

With the ACQUITY UPLC system, your laboratories will achieve more than ever before.



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Waters

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May 2007 720001507EN JH-CP



ACQUITY UPLC PDA DETECTOR

The Waters® ACQUITY UPLC® Photodiode Array (PDA) Detector is specifically designed for Waters ACQUITY UPLC System. With data rates up to 80 Hz and noise specifications as low as 10 μ AU, the ACQUITY UPLC PDA Detector offers sensitivity that is unmatched by any other photodiode array detector on the market. Further, enhanced software control provides flexibility for simultaneous 2D and 3D operation in either Empower™ or MassLynx™ Software.

OPERATING SPECIFICATIONS

Wavelength range 1	190 to 500 nm
Light source	Prealigned, Deuterium lamp
Wavelength accuracy	± 1 nm
Linearity range	Deviation at 2.0 AU \leq 5%, propylparaben, at 257 nm
Optical resolution	1.2 nm
Digital resolution	1.2 to 500.0 nm
Baseline noise	10×10^{-6} AU, at 230 nm, 10 mm shunt cell
Drift	$\leq 1.0 \times 10^{-3}$ AU/hour/°C
Flow cell design	Light-guiding UPLC flow cell
Path length	10 mm (analytical cell)
Cell volume	500 nL (analytical cell)
Wetted materials	316 stainless steel, fused silica, Teflon AF, PEEK
Data acquisition	Up to 80 Hz
Pressure limit	1000 psi
Unattended operation	Leak sensors, full diagnostic data captured through console software

PHYSICAL/ENVIRONMENTAL SPECIFICATIONS

Dimensions	Width:	34.3 cm (13.5 in.)
	Height:	21.6 cm (8.5 in.)
	Depth:	60.9 cm (24.0 in.)
Weight	15.6 kg (34.4 pounds)	
Operating temperature	4 to 40 °C (39 to 104 °F)	
Operating humidity	< 90%, non-condensing	
Warranty	2000 hour lamp, 1 year	
Compliance	CE Mark CSA C-tick and UL	

[INSTRUMENT SPECIFICATIONS]

ELECTRICAL SPECIFICATIONS

Power requirements	100 to 240 VAC
Line frequency	50 to 60 Hz
Power consumption	100 VA (nominal)

ORDERING INFORMATION

PART NUMBER

ACQUITY UPLC Photodiode Array Detector
(flow cell included)

176015026

Optional flow cells:

Analytical	500 nL volume, 10 mm pathlength	205015004
High sensitivity	2400 nL volume, 25 mm pathlength	205015005

Waters

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Limited warranty: instrumentation

Waters Technologies Corporation, d/b/a Waters Corporation ("Waters") warrants from the date of shipment for the applicable Warranty Period that its instrumentation identified and/or marketed as Waters or Micromass® Technology products shall be free from defects in design, material, and workmanship and shall conform to and perform materially in accordance with the specifications set forth in the applicable operator or user manual when used in the proper operating environment under normal use and service. This warranty covers all new instrumentation products manufactured by Waters. Any warranty that may be applicable to Third-Party instrumentation products and accessories shall be provided by the respective manufacturers or suppliers of such Third-Party components.

Any Waters instrumentation product that is classified as a Class I or Class II medical device under 21 CFR 862.2260, 21 CFR 862.2860, or 21 CFR 862-1555 is for use only by properly qualified personnel and not for home use, as indicated in the Intended Use statement provided in the product literature. Waters instruments are for general purpose use and/or in vitro diagnostic procedures, unless specifically expressed otherwise in the product literature. Waters systems provide a measurement used for the purpose of screening for a human disease in a clinical application and are not intended to result in a medical diagnosis of any human disease. Any such diagnosis must be made by a qualified health care professional. This instrumentation limited warranty is subject to the conditions set forth below.

Exclusions

The foregoing limited warranty does not apply to any material deviation from the specifications by any instrumentation product that results from (a) use of the instrumentation for any purpose other than general purpose use and/or in vitro diagnostic procedures, unless specifically expressed otherwise in the product literature; (b) use of the instrumentation products for investigational use with or without confirmation of diagnosis by another, medically established diagnostic product or procedure; (c) errors or defects in any Third-Party Component; (d) modification of the instrumentation products by anyone other than Waters; (e) failure by Customer to install any standard enhancement or update in accordance with an update procedure or release of firmware or any operating system release; (f) any willful or negligent action or omission of Customer; (g) any misuse, or incorrect use, of the instrumentation product; (h) any malfunction of any information system or instrument with which the instrumentation product may be connected; or (i) failure to establish or maintain the operating environment for the instrumentation product in accordance with the applicable operator or user manual.

Exclusive remedy

In the event of any failure of an instrumentation product to perform in accordance with the foregoing limited warranty, Waters' sole liability and Customer's sole and exclusive remedy, shall at Waters' sole discretion be the repair or replacement of the instrumentation product or refund of amounts paid by Customer for the instrumentation product that does not meet the limited warranty.

Warranty service: instrumentation

Warranty service is performed at no charge and at Waters' option and in Waters' sole discretion in one of three ways:

- A service representative is dispatched to the customer facility.
- The instrumentation product is returned for repair at a Waters facility.
- Replacement parts with appropriate installation instructions are sent to the customer.

Warranty service is performed only if the customer notifies Waters during the applicable warranty period.

Unless otherwise agreed in writing at the time of sale, if the instrumentation product for which warranty service is sought has been removed from the initial installation geographic site, no warranty service will be provided.

Warranty service is provided during normal business hours (8 AM to 5 PM, Monday through Friday). Service is not available when Waters offices are closed in observance of legal holidays.

Warranty service exceptions for instrumentation

Warranty service is not performed on • any instrumentation product or part that has been repaired by others, improperly installed, altered, or damaged in any way.

- any instrumentation product or parts not manufactured by Waters.
- any instrumentation product that malfunctions because the customer has failed to perform maintenance, calibration checks, or observe good operating procedures.
- any instrumentation product that malfunctions due to the use of unapproved maintenance, or repair parts, or operating supplies and computers not meeting minimum hardware requirements, or as a result of network-related problems.

Repair or replacement is not made

- for expendable items such as filament devices, panel lights, fuses, batteries, filters, and seals, when such items were operable at the time of initial use.
- because of decomposition due to chemical action.
- because of poor facilities, operating conditions, or inadequate utilities.

Limited warranty: software

Waters Technologies Corporation, d/b/a Waters Corporation ("Waters") warrants for a period of ninety (90) days from the date of shipment that the software products ("Software") will, when used in the designated operating environment, perform substantially in accordance with the operating specifications set forth in the user manual as amended by any release notes issued during the Warranty Period and that the Software physical magnetic media will be free of defects in materials and workmanship. The foregoing warranty shall apply only to the most current version of the Software that was supplied to the customer by Waters. The limited warranty is subject to the conditions set forth below:

1. The Customer must give written notice to Waters during the Warranty Period with an explanation of the circumstances of any claim that the Software fails to conform to this limited warranty.
2. The Customer's sole and exclusive remedy in the event of any such failure is expressly limited to the correction or replacement of the defective Software or the refund of the fees paid for the defective Software.
3. Waters does not warrant that the operation of the Software will be uninterrupted or error-free.
4. This limited warranty is for the benefit of and applies only to the Customer.
5. The limited warranty shall not apply to any Software delivered to the Customer that has been improperly installed or modified or that has been the subject of neglect, misuse, abuse, misapplication or alteration.
6. No representative of Waters is authorized to commit Waters to any warranty other than the warranty contained herein.

Limited warranty: repair and maintenance service

Waters Technologies Corporation, d/b/a Waters Corporation ("Waters") warrants repairs and maintenance services for a period of ninety (90) days from the date of delivery of such services. Waters also warrants the parts used shall be free from defects in design, material and workmanship and shall conform to and perform materially in accordance with the specifications set forth in the applicable operator or user

manual when used in the proper operating environment under normal use and service. In addition, Waters warrants the service workmanship used to complete a repair or maintenance event will result in the return of the serviced component or instrument back to its original performance specifications.

Repair and maintenance warranty service is not provided for

- any instrument, maintenance or repair part that has been repaired by others, improperly installed, altered, or damaged in any way.
- any instrumentation product that malfunctions because the customer has failed to perform maintenance, calibration checks, or observe good operating procedures.
- any instrumentation product that malfunctions due to the use of unapproved maintenance or repair parts or operating supplies and computers not meeting minimum hardware requirements or as a result of network related problems.
- any system component or assembly that falls outside the scope of the repair or maintenance service that fails either during or within ninety (90) days of the service event.

Repair or replacement is not made

- for expendable items such as filament devices, panel lights, fuses, batteries, filters, and seals if such items were operable at the time of initial use.
- because of decomposition due to chemical action.
- because of poor facilities, operating conditions, or inadequate utilities.

Warranty disclaimers: instrumentation and software

THE LIMITED WARRANTIES SET FORTH HEREIN ARE EXCLUSIVE AND IN LIEU OF ALL OTHER REPRESENTATIONS, WARRANTIES AND GUARANTEES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS OF THE PRODUCTS FOR A PARTICULAR PURPOSE, INCLUDING FITNESS FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES OR FOR INVESTIGATIONAL USE WITH OR WITHOUT CONFIRMATION OF DIAGNOSIS BY ANOTHER MEDICALLY ESTABLISHED DIAGNOSTIC PRODUCT OR PROCEDURE, OR NONINFRINGEMENT, AND ANY WARRANTIES ARISING OUT OF COURSE OF DEALING OR COURSE OF PERFORMANCE. CUSTOMER EXPRESSLY ACKNOWLEDGES THAT BECAUSE OF THE COMPLEX NATURE OF THE PRODUCTS AND THEIR MANUFACTURE, WATERS CORPORATION CANNOT AND DOES NOT WARRANT THAT THE OPERATION OF THE PRODUCTS WILL BE WITHOUT INTERRUPTION OR ERROR-FREE OR WITHOUT DEFECT. CUSTOMER EXPRESSLY ACKNOWLEDGES THAT CUSTOMER IS SOLELY RESPONSIBLE FOR USE OF THE PRODUCTS IN CLINICAL DIAGNOSTIC PROCEDURES OR FOR INVESTIGATIONAL USE WITH OR WITHOUT CONFIRMATION OF DIAGNOSIS BY ANOTHER MEDICALLY ESTABLISHED DIAGNOSTIC PRODUCT OR PROCEDURE. IN NO EVENT SHALL WATERS OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, PUNITIVE OR CONSEQUENTIAL DAMAGES INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS INFORMATION OR PECUNIARY LOSS ARISING OUT OF THE USE OR INABILITY TO USE THIS SOFTWARE OF INSTRUMENTATION, EVEN IF WATERS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN THE EVENT WATERS' DISCLAIMER IS NOT EFFECTIVE, WATERS' TOTAL LIABILITY IN ANY EVENT SHALL NOT EXCEED THE PURCHASE PRICE OF THE GOODS AND SERVICES TO WHICH THE DAMAGES RELATE AND, THE PARTIES AGREE THAT SUCH LIMITED LIABILITY IS A REASONABLE ALLOCATION OF THE RISKS INVOLVING THE PRODUCT.

Transfer of warranty

The warranty is not transferable from the original owner or original installation site to another geographic location without the written consent of Waters. In the event that the instrument(s) must be relocated within the same company and country during the warranty period, Waters offers relocation services to

ensure proper care is taken when de-installing, packing and re-installing in order to maintain the warranty coverage.

Product warranty periods

Note that warranty periods begin when products are shipped.

Instrumentation

Warranted Item	Component(s)	Warranty Period
Electronic and mechanical assemblies	Entire instrument, except for maintenance parts, operating supplies, and expendable components	<p>One year (13 months) from the date of shipment, unless otherwise stated in the instrument's accompanying user documentation as in the case of the Waters 2695 Separations Module, whose documentation specifies that a two-year warranty applies to the instrument's sample manager and solvent manager drive mechanism.</p> <p>A ninety (90) day warranty accompanies instruments that have served as demonstration models or that have been otherwise used when purchased (i.e., they are not in new condition). For such instruments, a nine-month, extended warranty can be purchased at the point of sale and thus provide a full, one-year (12-month) warranty.</p>
Normal wear and maintenance parts	As defined in the instrument Performance Maintenance Kit, if available	Ninety (90) days from date of shipment
Operating supplies and expendables	Autosampler vials, solvent and sample filters, and fuses.	Warranted to function properly when delivered

Software

Warranted Item	Component(s)	Warranty Period
Media	Compact discs (CDs) and diskettes	Ninety (90) days from date of shipment
Performance		Ninety (90) days from date of installation

Service

Warranted Item	Component(s)	Warranty Period
Parts installed during a demand service repair	Mechanical and electronic assemblies	Ninety (90) days from date of shipment
Service labor	Service workmanship	Ninety (90) days from date of service delivery

Warranty returns

No returns may be made without prior notification of, and authorization from, Waters. If it is necessary to return products to Waters, contact Waters Customer Service, the Waters subsidiary nearest you, or your Waters representative for a return merchandise authorization (RMA) number and forwarding address. Extended and enhanced warranty coverage is available for instrumentation and software products under the applicable service and support plan. Contact your local Waters office for more information.

Warranties: non-Waters hardware

Waters does not assemble, configure, or install software on any computer or computer peripheral that has not been purchased from Waters. The warranty for hardware not manufactured by Waters Corporation follows the warranty, if any, of the original equipment manufacturer.

Waters' USA and Canadian customers seeking service and support may contact Waters Technical Service (800 252-4752). Others may phone their local Waters subsidiary or Waters corporate headquarters in Milford, Massachusetts (USA), or they may visit the Waters Website (<http://www.waters.com>) and click Support. Optional installation services are available to purchasers of Workstation Add-On Kit software products. The services consist of up to one day of software installation, system configuration, and primary operator familiarization training. During this day of system installation service, a certified Waters field service technician will configure the Customer's computer, load software, and interface the computer with the system.

Training and extended support Instrument startup and training

Waters offers optional instrument startup and familiarization training for a single, designated primary operator of a purchased and configured system.

Instrument startup consists of these procedures:

- Assembling computer hardware and connecting the printer
- Connecting computer hardware to the system instruments
- Configuring and testing a system for proper instrument function and data collection

Extended training

Connections® University provides software training beyond that which is provided at startup. Courses are available at the World Wide Training Center in Milford Massachusetts, regionally, or on-site. On-site courses let you tailor the content and length of training to suit your needs.

System updates and support are available through a Connections Total Assurance Warranty or Total Assurance Plan. A Total Assurance Plan is renewable annually and provides scheduled performance maintenance visit(s), valuable software upgrades and instrument upgrades, telephone support, priority service response, unlimited system repair services and other value-added options to update your system and keep it operating at optimum performance.

For details about the training and extended support programs, Waters' USA and Canadian customers may contact Waters Technical Service (800 252-4752). Others may phone their local Waters subsidiary or Waters corporate headquarters in Milford, Massachusetts (USA), or they may visit the Waters Website (<http://www.waters.com>) and click Support.

Shipments, damages, claims, and returns

All shipments are made free on board (FOB) shipping point. Waters suggests that you authorize insurance for all shipments. Instruments and major components are packed and shipped via ground transportation unless otherwise required. Supplies and/or replacement parts are packed and shipped via a ground courier, air parcel post, or parcel post, unless otherwise requested.

Damages

The U.S. Interstate Commerce Commission (ICC) has determined that carriers are as responsible for concealed damages that occur during transit as they are for obvious damages. Concealed damage is damage that occurs to the contents of a shipping package where the package exterior remains apparently undamaged. Therefore, unpack the instrument or component promptly after receiving it, aware that it may have sustained concealed damage while in transit.

Claims

If you discover the item shipped has sustained concealed damage, do not continue to unpack it. Instead, request the local agent or carrier to immediately inspect the unit, and secure a written (inspection) report of his or her findings to support the claim. You must make this request within 15 days of receiving the damaged unit, otherwise, the carrier will not honor the claim. Do not return damaged goods to Waters without first securing the inspection report and contacting Waters for a return merchandise authorization (RMA) number.

Ensure the shipment is protected and secure after you receive it. Components removed from the shipment, or damaged while awaiting installation, are the responsibility of the Customer.

After a damage inspection report is secured, Waters cooperates fully in supplying replacements and handling a claim, which either party may initiate.

Returns

No returns may be made without prior notification and authorization. If for any reason it is necessary to return material to Waters, contact Waters Customer Service, the Waters subsidiary nearest you, or your local Waters representative for a return merchandise authorization (RMA) number and forwarding address.



THE SCIENCE OF WHAT'S POSSIBLE.™

Roberta Wagner
State of West Virginia
Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

Telephone : 304 558 0067

Sales Proposal
Please reference this Quotation when Purchase Order is issued
Quotation No. 20402415 - Expiration Date : 09/15/2010
RFQ- LBS11009 Due 7/15/2010

Dear Roberta Wagner,

Thank you for your interest in Waters! Please find the enclosed Sales Quotation for the products you inquired about. We look forward to working with you and your team for all of your laboratory needs.

To place an order for products and services on this quotation, you may send your hard copy purchase order via email to waters_quotes@waters.com

You may also contact Waters Sales Support to place your order via telephone at 800 252 4752 Ext.8023, or fax your purchase order to 508 482 8532 or 508 482 8834.

If you have any questions regarding this quotation, please contact your local Account Representative: Larry Cadle. Larry may be reached by telephone at 800 252 4752 Ext.6272, or via Email at Larry_Cadle@Waters.com, or visit us online at www.waters.com.

Waters Sales Support
Tel: 800 252 4752 Ext.8023
Email: waters_quotes@waters.com

Account : State of West Virginia
 Quotation number : 20402415
 Creation date : 07/06/2010
 Expiration date : 09/15/2010

Sales Proposal
 Please reference this Quotation when Purchase Order is issued

Item	Product#	Qty	Description	Unit Price	Discount	Net Price
1	176850019	1	WATERS TQ DETECTOR <i>With the following configuration:</i>	257,889.02	- 90,261.16	167,627.86
	176001263	1	Waters TQ Detector			
	205000414	1	KIT, MAINS CORDS, US			
	186003887	1	Assy., Vacuum Roughing Pump			
	176002013	1	MS Ref Stds: ACQUITY/TQD Install			
	176001255	1	ML 4.1 & Standard PC for TQ			
			Installation, Training and Plans			
	741000321	1	TQD SYSTEM INSTALLATION CERT			
	750000487	1	NA - On-Site Field Apps Ed Cert (2 days)			
2	668000273	1	MONITOR, Lenovo ThinkVision Flat Panel	570.00	- 199.50	370.50
3	176015000	1	ACQUITY UPLC Core System	62,700.00	- 21,945.00	40,755.00
4	176015026	1	ACQUITY UPLC PDA Detector	26,300.00	- 9,205.00	17,095.00
5	186002011	1	Atlantis HILIC Silica 3µm 2.1x50mm col	479.00	- 167.65	311.35
6	176000864	1	ACQUITY UPLC BEH C18 1.7µm 2.1x100mm 3pk	1,932.00	- 676.20	1,255.80
7	7992177	1	NITROGEN GENERATOR COMPRESSOR	13,500.00		13,500.00
Sub Total						240,915.51
Freight Charges						2,800.00
Total Quotation in USD (Excludes Applicable Taxes)						243,715.51

Waters Standard Terms & Conditions

Delivery: 60 DAYS
 Freight Terms: FOB Shipping Point
 Prepaid & Added
 Payment Terms: NET 30 DAYS

In response to the terms and conditions contained in the bid documentation provided by the State of West Virginia, Waters hereby proposes its standard terms and conditions as are included in the Waters Licenses, Warranties and Support Services document provided to the State of West Virginia herewith.

Sales Proposal

Please reference this Quotation when Purchase Order is issued

Detail Product Description(s)

Part No.	Description
176001263	Waters TQ Detector

Waters TQ Detector

The Waters TQ Detector is a compact, benchtop tandem quadrupole API mass spectrometer. The system features new automated set-up technology and fast acquisition capability for simple, rapid LC/MS/MS.

The following items are included as part of the standard system:

Z SPRAY™ API interface#Dual orthogonal interface for robust LC/MS

IntelliStart™ fluidics#Automated tuning, calibration and method development

Electrospray (ESI) inlet probe#for efficient ionisation of a wide range of compounds

ESCI™ ionisation capability#rapid switching source for both ESI and APCI in the same run.

1. ZSpray API INTERFACE

Atmospheric pressure ionisation (API) LC interface including:

One easily dismantlable ion source enclosure.

Cone gas facility for chemical noise reduction.

Electronic mass flow meters for drying gas and cone gas.

Tool free cone removal

Source isolation valve

Micrometer probe positioning

The source and spraying elements are visible through a transparent enclosure and are easily accessible via a quick-release door. The source elements may be wiped clean in situ or removed for cleaning without the need for tools and without breaking vacuum. The nebulized spray is orientated orthogonally and positioned off axis for maximum source longevity and analyser protection against 'dirty' samples. The source also includes facilities for declustering ions formed at atmospheric pressure. Positive and negative capability is included. All source voltages and gases are under data system control. IntelliStart fluidics: The system comprises an on-board infusion system capable of delivering solutions from 2 built-in vial locations to aid tuning, calibration and method development. The solutions are delivered via a switching valve for direct infusion to the probe or combined into an LC flow. The valve can be programmed from the software to function as a divert valve. The fluidics can be controlled manually via the system Console or automatically as part of the IntelliStart system check software.

2. TANDEM QUADRUPOLE ANALYSER

2x High performance quadrupole analysers with inter-element beam focusing and a mass range of 2-2000 amu.

Pre-filters maximise resolution and transmission especially at high mass and also to eliminate main filter cleaning. All lens and analyser voltages are digitally controlled and recorded. Analyser parameters may be programmed with respect to mass for optimal performance.

3. T-WAVE COLLISION CELL

High efficiency gas cell for collision induced dissociation. Programmable software control of collision energy and gas pressure, including experimental record. The Travelling Wave (T-Wave) device enables rapid cell clearance and refill for fast MRM transition switching while maintaining optimum signal to noise.

4. VACUUM SYSTEM

Clean, differentially pumped, automated vacuum system comprising:

Air-cooled Pfeiffer splitflow turbomolecular drag pump evacuating both the source & analyser. Vacuum read backs and system

Sales Proposal

Please reference this Quotation when Purchase Order is issued

Detail Product Description(s)

Part No. Description
176001263 Waters TQ Detector - Continued

vent/pump cycles are digitally monitored and controlled, to provide total software control and ensure fail-safe operation in the event of power failure. And One rotary pump for backing of the turbo pump, (to be ordered separately # see options).

5. DETECTOR

Dynolite photomultiplier detector. A High Voltage conversion dynode and phosphor are positioned at 90° off-axis to the analyser for the elimination of neutral noise. The photomultiplier is enclosed in its own vacuum envelope for long life. The detector operates in both positive and negative ion modes, and can switch rapidly under software digital control.

186003887 Assy., Vacuum Roughing Pump

Leybold Vacuum Roughing Pump
Standard Leybold Sogevac rotary backing pump.

176001255 ML 4.1 & Standard PC for TQ

ML 4.1 & Standard PC for TQ

MassLynx 4.1 Application Software

Multi-tasking suite of analytical applications and instrument management software operating in Microsoft Windows environment. MassLynx includes:

Mass Spectrometer Control Software

a) Data acquisition formats.

Scan data can be acquired to file in the following formats:

Centroided data acquisition.

Profile data acquisition.

Multi Channel Analysis (MCA) data acquisition.

b) MS and MS-MS acquisition functions.

The following data acquisition functions are available:

MS scanning.

MS selected ion recording.

MS-MS precursor ion scanning (parents).

MS-MS product ion scanning (daughters).

MS-MS neutral loss/gain scanning.

MS-MS multiple reaction monitoring.

Data directed switching (automated MS to MS-MS scan function switching).

Polarity mode switching.

Ionisation mode switching (ESCI)

External contact start/stop/events.

Analogue channel acquisition via a SATIN module.

c) Tuning Utilities.

Sales Proposal
Please reference this Quotation when Purchase Order is issued

Detail Product Description(s)

Part No.	Description
176001255	ML 4.1 & Standard PC for TQ - Continued

The system features easy-to-use automated and manual tuning and calibration software tools. Tuning parameters include:

Ionisation mode and polarity.
MS & MS/MS acquisition.
All ion source parameters.
All lens voltages.
MS1 and MS2 resolution.
MS1 and MS2 ion energy.
Photo-multiplier gain.

d) Inlet Control Software

Integrated control of specific Waters LC, autosampler and detector systems
Third party LC and autosampler systems from specified vendors

e) Data processing and review:

Spectrum Review and Processing
Chromatogram Review and Processing
3-D Contour plotting
Spectral library search facilities (user defined or commercial libraries)
Batch processing of qualitative and quantitative sample sets:

OpenLynx Application Manager

OpenLynx Processing provides summary reports for groups of samples. OpenLynx methods may be configured to include:

- 1) Analytes found/not found.
- 2) Purity,
- 3) Probable elemental composition (with Exact Mass Measurement Instrumentation),
- 4) Chromatograms,
- 5) Spectra. OpenLynx reports are portable and may be viewed (read-only) with optional Browser utility without MassLynx software.

QuanLynx Application Manager

QuanLynx provides quantification of MassLynx data. QuanLynx quickly processes groups of samples, providing automated peak detection, calibration and quantification. The QuanLynx Report provides facile online data review and report printing. QuanLynx operates within the MassLynx security system (where enabled); it includes tools to enable compliance with the FDA's guidelines on electronic records and electronic signatures (21 CFR Part 11). QuanLynx reports are portable and may be reviewed with optional Browser utility without MassLynx software.

The MassLynx Security Subsystem (where installed) provides a compliant-ready solution for US FDA GxP and 21 CFR 11 and other regulations.

License to operate software on one workstation.

MassLynx Security, when installed, provides a compliant-ready solution for US FDA GxP and 21 CFR 11 and other regulations. QuanLynx & TargetLynx are compliant-ready and include tools to enable compliance with the FDA's guidelines on electronic

Sales Proposal
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Detail Product Description(s)

Part No. Description
176001255 ML 4.1 & Standard PC for TQ - Continued

records and electronic signatures.

Other MassLynx Application Managers are compatible with MassLynx security but are not compliant-ready.

Lenovo ThinkCentre M58p E8400 with Windows XP Professional

Processor: Intel Core 2 Duo E8400 Processor (3.0 GHz 1333 MHz FSB 6MB L2); Operating system: Windows XP Professional;
Form factor: Tower; Motherboard: Intel Q45 Chipset; Total memory: 2 GB PC3-8500 SDRAM (2 DIMMs); Maximum memory: 8GB;

Video adapter: Intel GMA 4500 (integrated); Audio adapter: Intel Q45 (integrated); First hard drive bay: 250GB Hard Disc Drive, 7200RPM SATA; Second hard drive bay: None; Diskette drive: Floppy Disk Drive; First optical device bay: DVD Recordable; Networking: Intel PRO 100/1000 Gigabit Ethernet (integrated); Keyboard: Preferred Pro Full-size Keyboard (Stealth Black) - US Euro; Pointing device: Optical USB wheel mouse;

System Warranty: Four Years Onsite International; Warranty with Non-HDD Return;

Expansion: 2 * PCI, 1 * PCI Expressx1, 1* PCI Expressx16; Ports: 1 Parallel, 1 * Serial, External microphone, External Display, Headphone, Line in, Line out, 8 USB 2.0 (2 front, 6 back); Additional Software: IBM RecordNow; Additional Network card: PCI Express 1x NetXtreme Gigabit Ethernet; National Instruments GPIB controller card; Monitor: None; Printer: None

741000321 TQD SYSTEM INSTALLATION CERT

Waters TQ Detector MS System Installation

Includes:

- System Set up and Specification Testing
- Product Familiarization Training
- 1 Year Manufacturers Warranty
- Insight Remote Intelligent Services

668000273 MONITOR, Lenovo ThinkVision Flat Panel

22" Flat Panel Monitor

176015000 ACQUITY UPLC Core System

ACQUITY UPLC Core System.

1. Waters ACQUITY Ultra Performance LC Systems have been holistically designed to control and optimize all the parameters required to take full advantage of the benefits of UPLC in today's laboratory. The ACQUITY UPLC Core System forms the basis for all UPLC systems. The ACQUITY UPLC System is an integrated solvent and sample management UPLC instrument configured for binary solvent delivery and sample introduction. The system may be configured for a broad range of applications supported by UPLC optical and mass spectrometry detectors, with a choice of instrument control and data management software.

The following items are included as part of the core system:

- ACQUITY UPLC Binary Solvent Manager
- ACQUITY UPLC Sample Manager w/High Temperature Column Heater Module
- ACQUITY UPLC Solvent Tray Module

Sales Proposal

Please reference this Quotation when Purchase Order is issued

Detail Product Description(s)

Part No. Description
176015000 ACQUITY UPLC Core System - Continued

- ACQUITY UPLC System Test Mix
- ACQUITY UPLC System Test Column 2.

2. Connections INSIGHT is provided at no charge during the first year.

176015026 ACQUITY UPLC PDA Detector

ACQUITY UPLC PDA Detector

The ACQUITY UPLC Photodiode Array (PDA) Detector is specifically designed to compliment the ACQUITY UPLC H-Class System. With noise specifications as low as 10 $\frac{1}{4}$ AU, the ACQUITY UPLC PDA offers sensitivity that is unmatched by any photodiode array detector on the market. Further, enhanced software control provides flexibility for simultaneous 2D and 3D operation in either Empower or MassLynx software.

Detector wavelength range is 190-500 nm, with 1.2 nm spectral resolution. Detector response is linear (d5% at 2.0 AU) across the 2.0 AU dynamic range. Detector supports full three-dimensional spectral analysis or multi-wavelength operation (up to eight (8) wavelengths) under Empower Software control.

Lamp optimization software guarantees low noise performance in the visible wavelength range and compensates for lamp degradation over time to ensure consistent response. The combination of lamp optimization software and an automatic second order filter enables operation in the linear wavelength range without requiring a lamp change. The lamp is warranted for 2000 hours.

Results management features supported in Empower software include Spectrum Index Review, Spectral Contrast Peak Purity, Multi-Component Peak Purity, and Spectral Library Matching.

The 10mm analytical light-guided flow cell delivers sensitivity and resolution to ACQUITY UPLC applications. Low dispersion performance is achieved with a 500 nL internal volume and 62.5 $\frac{1}{4}$ m PEEK interconnect inlet/outlet tubing.

176000864 ACQUITY UPLC BEH C18 1.7 μ m 2.1x100mm 3pk

ACQUITY UPLC BEH C18 Column Kit (x3) 2.1mm x 100mm

Kit contains three (3) ACQUITY UPLC BEH C18, 1.7 $\frac{1}{4}$ m, 2.1mm x100mm Columns.

Select this kit for high resolution applications (e.g. peptide mapping), for UV-compatible flow rates > 400 $\frac{1}{4}$ L/min which can be split in UPLC/UV/MS systems.

7992177 NITROGEN GENERATOR COMPRESSOR

NITROGEN GENERATOR COMPRESSOR

Product not manufactured by Waters. Peak will supply the warranty

Account : State of West Virginia
Quotation number : 20402415
Creation date : 07/06/2010
Expiration date : 09/15/2010

Sales Proposal
Please reference this Quotation when Purchase Order is issued
Waters General Sales Terms and Conditions

THIS TRANSACTION IS EXPRESSLY CONDITIONED UPON AND SUBJECT TO ALL OF THE FOLLOWING TERMS AND CONDITIONS:

1. Acceptance - Buyer's acceptance of the offer to purchase the products and/or services set forth on the front page made by Waters Technologies Corporation d/b/a Waters Corporation (Waters) of this quotation shall create a contract subject to and expressly limited by the terms and conditions contained on this form. Acceptance of this quotation may only be made on the exact terms and conditions set forth on this quotation; if additional or different terms are proposed by Buyer, such additional or different terms shall not become a part of the contract formed by Buyer's acceptance of the quotation. Receipt of the products sold hereunder or commencement of the services provided hereunder shall be deemed acceptance of the terms and conditions of this quotation.
2. Taxes and Payment - Any tax, duty, custom or other fee of any nature imposed upon this transaction by any federal, state or local governmental authority shall be paid by Buyer in addition to the price quoted. In the event Waters is required to prepay any such tax or fee, Buyer will reimburse Waters. Payment terms shall be net thirty (30) days after shipment and are subject to credit approval. An interest charge equal to 1 1/2% per month (18% per year) will be added to quotations outstanding beyond 30 days after shipment. In addition, Waters reserves the right, in its sole discretion, to require C.O.D. payment terms from any Buyer. Waters may also refuse to sell to any person until all prior overdue accounts are paid in full.
3. Delivery and Shipment - Delivery terms shall be F.O.B. Waters shipping point; identification of the products shall occur when they leave Waters shipping point at which time title and risk of loss shall pass to Buyer. All shipment costs shall be paid by Buyer and if prepaid by Waters the amount thereof shall be reimbursed to Waters. Waters will make reasonable commercial efforts to ship the products or provide the services hereunder in accordance with the delivery date set forth on the reverse side hereof provided, that Waters accepts no liability for any losses or for general, indirect special or consequential damages arising out of delays in delivery.
4. Warranty - The products and/or services shall be covered by the applicable Waters standard warranty, a copy of which is supplied with the products and/or services or upon request. NO OTHER WARRANTY, WHETHER EXPRESS OR IMPLIED, IS MADE WITH RESPECT TO THE PRODUCTS AND/OR SERVICES. WATERS EXPRESSLY EXCLUDES THE IMPLIED WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE. Any model or sample furnished to the Buyer is merely illustrative of the general types and quality of goods and does not represent that the products will conform to the model or sample. Buyer's remedies under Waters warranty shall be limited to repair or replacement of the product or component which failed to conform to Waters applicable standard warranty. WATERS SHALL NOT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, SPECIAL OR ANY OTHER INDIRECT DAMAGES RESULTING FROM ECONOMIC LOSS OR PROPERTY DAMAGE SUSTAINED BY BUYER FROM THE USE OF ITS PRODUCTS OR SERVICES.
5. Returned Goods - Waters may, in its sole discretion, authorize product returns in appropriate circumstances, subject to such conditions as Waters may specify. Any such return shall be subject to the express prior authorization of Waters and payment by Buyer of a restocking charge. No returns will be authorized after one hundred twenty (120) days following shipment to Buyer.
6. Technical Advice - Waters may, at Buyer's request furnish technical assistance, advice and information with respect to the products if and to the extent that such advice, assistance and information is conveniently available. It is expressly agreed that there is no obligation to provide such information, which is provided without charge at the Buyer's risk, and which is PROVIDED WITHOUT WARRANTY OF ANY KIND AND IS SUBJECT TO THE WARRANTY DISCLAIMERS AND LIMITATION OF LIABILITY SET FORTH IN PARAGRAPH 4.
7. Waters Right of Possession, etc. - Buyer hereby grants Waters a purchase money security interest in the goods offered by this quotation to secure the due and punctual payment of the purchase price specified in this quotation. In the event of default by Buyer in any payment due Waters, Waters shall have the right, in addition to any other remedies it may have at law or in equity, to withhold shipment, to recall goods in transit and retake the same, to repossess any goods which may be stored with Waters for Buyer's account without the necessity of Waters initiating any other proceedings. In addition, Waters shall have all of the rights and remedies of a secured party under the Massachusetts Uniform Commercial Code and may exercise all such rights and remedies in accordance therewith. Buyer shall execute such documents as Waters may request to effectuate the foregoing security interest.
8. Agents, etc. - No agent, employee or other representative has the right to modify or expand Waters standard warranty applicable to the products and/or services or to make any representations as to the products other than those set forth in the applicable user or operator's guide delivered with the products, and any such affirmation, representation or warranty, if made, should not be relied upon by Buyer and shall not form a part of contract between Waters and Buyer for the purchase of the products or services.
9. Fair Labor Standards - The products or services provided hereunder were produced and/or performed in compliance with the requirements of all sections of the Fair Labor Standards Act of 1938 as amended.
10. Equal Employment - Waters is an Equal Opportunity Employer. It does not discriminate in any phase of the employment process against any person because of race, color, creed, religion, national origin, sex, age, veteran or handicapped status.
11. Modifications, Waiver, Termination - The contract formed by Buyer's acceptance of this quotation may be modified and any breach thereunder may be waived only by a written and signed document by the party against whom enforcement thereof is sought.
12. Governing Law - The contract formed by Buyer's acceptance of this quotation shall be governed by and construed in accordance with the laws of the Commonwealth of Massachusetts, U.S.A.
13. Compliance with Laws - Buyer shall at all times comply with all applicable federal, state and local laws and regulations, including, without limitation, the provisions of the United States Export Control Laws as may be in effect for any of the products or services, and, if products or services hereunder are used in clinical applications, all applicable rules and regulations of the United States Food and Drug Administration and/or other domestic or international agencies with respect to the application of, as the case may be, Good Clinical Practices ("GCP"), Good Laboratory Practices ("GLP") or good Manufacturing Practices ("GMP").
14. Additional Terms and Conditions - This quotation is also subject to any Waters Special Terms and Conditions applicable to the products or services offered by this quotation, which appear on the front of this quotation. Any variance from the terms and conditions of this quotation in any order or other written notification from Buyer, will be of no effect. Should Buyer order products or services through a Waters office located outside of the United States, the terms and conditions of the quotation issued by the office outside of the United States shall govern such order.
15. Arbitration - Any and all disputes or controversies arising in connection with the contract formed by Buyer's acceptance of this quotation or the sale of products and/or performance of the services shall be resolved by final and binding arbitration in Boston, Massachusetts, under the rules of the American Arbitration Association then obtaining. The arbitrators shall have no power to add to, subtract from or modify any of these terms or conditions of this contract. Any award rendered in such arbitration may be enforced by either party in either the courts of the Commonwealth of Massachusetts or in the United States District Court for the District of Massachusetts, to whose jurisdiction for such purposes Waters and Buyer each hereby irrevocably consents and submits.
16. Software - To the extent there is any software included with the products, the software is being licensed, not sold and all rights, title and interest therein shall remain with Waters. Use of the software shall be in accordance with the applicable software license delivered with the products. U.S. Government Restricted Rights - RESTRICTED RIGHTS LEGEND. Use, duplication or disclosure by the Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 or subparagraphs (c)(1) and (2) of the Commercial Computer Software - Restricted Rights clause at 48 CFR 52.227-19, as applicable.
17. Force Majeure - Waters shall have no liability for failure to perform, or delay in performance, in the delivery of any and all equipment manufactured or sold by Waters including instruments, supplies, components, systems, chemistry, accessories, replacement spare parts, or any and all services provided by Waters, caused by circumstances beyond its reasonable control including, but not limited to, acts of God, acts of nature, floods, fire, explosions, war or military mobilization, United States governmental action or inaction, request of governmental authority, delays of any kind in transportation or inability to obtain material or equipment, acts of other governments, strikes, or labor disturbances.

800 252 4752

Waters Technologies Corporation dba Waters Corporation, 34 Maple St, Milford MA 01757

This quotation is expressly conditioned upon, and subject to all terms and conditions set forth within