

ACQUITY UPLC SYSTEM ACCESSORIES

The best in LC performance keeps getting better with continued innovation and support

CUSTOMIZE YOUR ACQUITY UPLC SYSTEM TO MAXIMIZE PRODUCTIVITY

The ACQUITY UPLC® System is an integral part of successful laboratory-dependent organizations around the world. With input from our customers doing the latest cutting-edge applications, along with our expert scientists, Waters continues to add innovative system accessories to make it even more robust, easy-to-use, and flexible to accommodate every one of your analytical tasks. These purposeful innovations extend the ACQUITY UPLC System's ability to increase your laboratory productivity and to generate top-quality data.

SAMPLE ORGANIZER



DETECTOR OPTIONS

PDA eλ, PDA, TUV, FLR,
ELS, SQD, AND TQD

COLUMN MANAGER
OPTIONS

HIGH TEMPERATURE
COLUMN HEATER,
COLUMN HEATER/COOLER,
AND COLUMN MANAGER

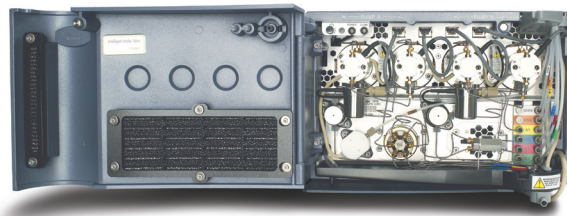
SAMPLE MANAGER

BINARY SOLVENT
MANAGER

BINARY SOLVENT MANAGER ACCESSORIES

ACQUITY UPLC Binary Solvent Manager (BSM), equipped with the Waters Intelligent Intake valve (i²Valve), enables faster system priming and startup times. BSM performance allows the system to handle:

- Difficult to pump solvents, without user intervention
- Slow, shallow gradients and fast (ballistic) gradients



BINARY SOLVENT MANAGER ACCESSORY	PART NUMBER	DESCRIPTION
ACQUITY UPLC 50- μ L mixer	700002911	Standard mixer, zirconia
ACQUITY UPLC HP 100- μ L mixer	205000404	Additional mixing for high absorbance background applications such as TFA gradients, zirconia
ACQUITY UPLC 425- μ L mixer	205000403	For peptides (max backpressure 10,000 psi)
Primary inlet check valve filter assembly	700002912	Inlet check valve for all ACQUITY UPLC Systems
Dual ball and seat check valve	700002968	Inlet check valve for ACQUITY UPLC Systems with passive check valves
i ² Valve cartridge assembly	700003563	Inlet check valve for ACQUITY UPLC Systems with passive check valves
ACQUITY UPLC BSM solvent filters, Pkg 7	700003616	For all general applications, critically cleaned, stainless steel
ACQUITY UPLC BSM solvent filters, Pkg 7	700003530	For more stringent solvent applications (stronger acidic and basic conditions), titanium

ACQUITY UPLC DETECTORS

ACQUITY UPLC optical and mass detectors are designed to complement and enhance the high-efficiency separations of the ACQUITY UPLC System, allowing you to analyze a wide variety of compounds. Included are Photodiode Array (PDA), PDA e λ , Tunable UV (TUV), Fluorescence (FLR), Evaporative Light Scattering (ELS), SQ and TQ detectors.

DETECTOR	PART NUMBER	DESCRIPTION
ACQUITY UPLC TUV Detector	205015008	Analytical flow cell, 10-mm pathlength, 500-nL volume
ACQUITY UPLC TUV Detector	205015009	High sensitivity flow cell, 25-mm pathlength, 2400-nL volume
ACQUITY UPLC TUV Detector	205015013	Nano flow cell, 0.75-mm pathlength, 10-nL volume
ACQUITY UPLC PDA and PDA e λ Detectors	205015004	Analytical flow cell, 10-mm pathlength, 500-nL volume
ACQUITY UPLC PDA and PDA e λ Detectors	205015005	High sensitivity flow cell, 25-mm pathlength, 2400-nL volume
ACQUITY UPLC FLR Detector	700003711	Analytical flow cell, replacement flow cell, 2- μ L volume
ACQUITY UPLC FLR Detector	205000500	Cuvette flow cell, scans and plots the excitation and emission wavelength ranges.
ACQUITY UPLC ELS Detector	205000342	Replacement nebulizer

COLUMN MANAGEMENT

Delivering accurate and efficient control of the ACQUITY UPLC System column temperatures is critical for the following reasons:

- UPLC® Columns have small volumes, thus residency time in the column heater is short
- At higher temperatures, the separation occurs faster, requiring the capacity to heat accurately and repeatedly

The ACQUITY UPLC System offers three column management choices and an optional column heater/cooler for HPLC columns, depending on the needs of your lab.

ACQUITY UPLC High Temperature Column Heater (HTCH)

PRODUCT	PART NUMBER
ACQUITY UPLC Column Heater	186015010

- Heating only
- Temperature control of a single UPLC or HPLC column in series
- eCord™ Information Management Technology support
- ACQUITY UPLC Column Stabilizer for advanced heat-exchange design, dispersion volume <2 µL, fixed position
- Heater swings out to position column exit line close to MS probe, or other detector inlet



ACQUITY UPLC Column Heater/Cooler (CHC)

PRODUCT	PART NUMBER
ACQUITY UPLC Column Heater/Cooler	176001287

- Heating and cooling
- Temperature control of up to four ACQUITY UPLC Columns in series
- eCord Information Management Technology support
- ACQUITY UPLC Column Stabilizer for advanced heat-exchange design, dispersion volume <2 µL
- Columns can be plumbed in series to extend maximum efficiency



ACQUITY UPLC Column Manager (CM)

PRODUCT	PART NUMBER
ACQUITY UPLC Column Manager/right inlet	176001285
ACQUITY UPLC Column Manager/left inlet	176001286

- Heating and cooling
- Temperature control of up to four ACQUITY UPLC or HPLC columns in parallel
- eCord Information Management Technology support
- ACQUITY UPLC Column Stabilizers for advanced heat-exchange design, dispersion volume <2 µL, fixed position, passive post-column exchanger for cooling
- Two advanced low-dispersion, high-pressure valves
- Valves are positioned outside the thermal control area, lengthening product lifetime
- Multiple, programmable, four-column switching, selectable bypass, and waste positions
- Column selection documented in method



ACQUITY UPLC 30-cm Column Heater/Cooler (30-cm CHC)

PRODUCT	PART NUMBER
ACQUITY UPLC 30-cm Column Heater/Cooler	186015011

- Optional accessory for longer HPLC columns
- Configured with the ACQUITY UPLC System
- Heating and cooling
- Temperature control of multiple HPLC columns in series
- HPLC plumbing accessory kit included
- Up to 300 mm in length



Column Manager Comparison Chart

COLUMN MANAGER	PART NUMBER	COLUMN TYPE	TEMPERATURE RANGE	APPLICATION TYPE	NUMBER OF COLUMNS	MIN I.D.	MAX I.D.	MAX LENGTH
HTCH	186015010	UPLC/HPLC	5 °C above ambient to 90 °C	Routine applications	1	1.0	4.6	150 mm
CHC	176001287	UPLC/HPLC	10 to 90 °C	High efficiency, low dispersion applications	Up to 4 serial	1.0	4.6	150 mm
CM (right inlet)	176001285	UPLC/HPLC	10 to 90 °C	Methods development/ high throughput	Up to 4 parallel	2.1	4.6	150 mm
CM (left inlet)	176001286	UPLC/HPLC	10 to 90 °C	Methods development/ high throughput	Up to 4 parallel	2.1	4.6	150 mm
30-cm CHC	186015011	HPLC	4 to 65 °C	Support of HPLC columns	Multiple HPLC	2.1	7.8	300 mm

Column Management Accessories

Parts for the Column Management systems include:

- Convenient high-pressure UPLC reusable fittings rated to 15,000 psi
- Low-pressure, high-temperature finger-tight fittings for HPLC and post-column pressures

COLUMN MANAGEMENT ACCESSORY	PART NUMBER	COLUMN MANAGER(S) SUPPORTED	DESCRIPTION
Column stabilizer for HTCH 50-mm columns	205000489	HTCH*	Heat exchanger for solvent, inlet to column
Column stabilizer for HTCH 100- to 150-mm columns	205000494	HTCH*	Heat exchanger for solvent, inlet to column
Column stabilizer for HTCH 50-mm columns	205000291	CH**	Heat exchanger for solvent, inlet to column
Column stabilizer for HTCH 100- to 150-mm columns	205000365	CH**	Heat exchanger for solvent, inlet to column
Kit, reusable fitting	700003139	HTCH, CM & CHC	High pressure reusable fitting set with tightening tool
HPLC pressure finger-tight fitting, column outlet fitting	410001905	30-mm CHC, CM	HPLC pressure finger-tight fitting, column outlet fitting
In-line filter holder and six 0.2-µm stainless steel replacement filters	205000343	CM, CH & CHC	ACQUITY UPLC Column replacement parts
Five 0.2-µm stainless steel replacement filters for in-line filter holder	700002775	CM, CH & CHC	ACQUITY UPLC Column replacement parts
Three 0.2-µm inlet/outlet frits for 2.1-mm I.D. UPLC Columns	700003776	CM, CH & CHC	ACQUITY UPLC Column replacement parts
Three 0.2-µm inlet/outlet frits for 1.0-mm I.D. UPLC Columns	700003775	CH & CHC	ACQUITY UPLC Column replacement parts
One inlet end nut for 2.1-mm I.D. UPLC Columns	700003779	CM, CH & CHC	ACQUITY UPLC Column replacement parts
One outlet end nut for 2.1-mm I.D. UPLC Columns	700003780	CM, CH & CHC	ACQUITY UPLC Column replacement parts
One inlet end nut for 1.0-mm I.D. UPLC Columns	700003777	CH & CHC	ACQUITY UPLC Column replacement parts
One outlet end nut for 1.0-mm I.D. UPLC Columns	700003778	CH & CHC	ACQUITY UPLC Column replacement parts
VanGuard™ Pre-Columns Pkg 3	186003975	CM, CH, CHC	Three ACQUITY UPLC BEH, C ₁₈ , 1.7 µm, 2.1 mm x 5 mm, VanGuard Pre-Columns

*ACQUITY UPLC Column Heater with 65 °C max temperature setting

**ACQUITY UPLC High Temperature Column Heater with with 90 °C setting

SAMPLE MANAGER AND SAMPLE ORGANIZER ACCESSORIES

Introducing samples accurately and reproducibly onto small-volume ACQUITY UPLC Columns is the key to preserving separation efficiency. Superior sample injector performance is required to preserve these high efficiencies produced by UPLC Columns resulting in minimized carryover, improved peak shape, and maximized speed.

The ACQUITY UPLC Sample Organizer increases sample capacity as much as 22 microtiter plates, eight deep-well plates, 388 2-mL vials, or 196 4-mL vials. Plates can be inserted or removed from the Sample Organizer at the user's discretion. Plates are transferred from the Sample Organizer to the ACQUITY UPLC Sample Manager in a programmable order, and any sample position can be accessed at any time. Plates and vials can be used in either the Sample Manager or Sample Organizer.



SAMPLE MANAGER & SAMPLE ORGANIZER ACCESSORY	PART NUMBER	DESCRIPTION
EverFlow injector valve	700002764	High-pressure valve
1- μ L Sample loop	430001516	Optimized for 1-mm I.D. column separations
2- μ L Sample loop	430001264	For low dispersion
5- μ L Sample loop	430001311	For low dispersion and wide injection volume range
10- μ L Sample loop	430001326	Default loop size
20- μ L Sample loop	430001320	For HPLC and bio-applications
50- μ L Sample loop and 250- μ L syringe	176000857	For HPLC applications
30- μ L Sample needle	700002644	Standard needle, all PEEK
15- μ L Sample needle	700002708	For 1.0 mm I.D. columns or nanoACQUITY UPLC [®] System applications, PEEK sil
30- μ L Sample needle	205000369	FEP with stainless steel tip
15- μ L Sample needle	205000370	FEP with stainless steel tip
30- μ L Sample needle	205000362	All stainless steel tip and tubing
15- μ L Sample needle	205000363	All stainless steel tip and tubing
ACQUITY UPLC peptide needle kit	205000507	For hydrophobic peptide separations with 20- μ L loop and PEEK sil needle
Waters holder, 48-well, 2-mL vial	405003743	For standard 2-mL vials
Waters holder, 24-well, 4-mL vial	405003742	For large vials
Waters holder, 24-well, 1.5-mL tube	405003740	For test tubes
Waters holder, 48-well, 0.65-mL tube	405003741	For centrifuge tubes
Label, 48-well, 2-ml vial, open access	615003783	Identifies vial position in MassLynx [™] Software
Storage shelf	700002730	Sample Organizer shelves

eCORD TECHNOLOGY

eCord Information Management Technology permits each column to interface with communication readers in the column management modules, enabling bi-directional communication of column manufacturing information and time-based usage of the column. Stored on the eCord device, this information is conveniently accessible through the ACQUITY UPLC System instrument console.



LEAK SENSOR

The leak sensor's simple design allows for the system to be quickly reset.



PRODUCT	PART NUMBER	DESCRIPTION
Leak sensor	205000505	Available with each system and detector module

Waters

THE SCIENCE OF WHAT'S POSSIBLE.™

Waters, nanoACQUITY UPLC, UPLC, and ACQUITY UPLC are registered trademarks of Waters Corporation. The Science of What's Possible, eCord, Empower, MassLynx, and VanGuard are trademarks of Waters Corporation. All other trademarks are the property of their respective owners.

©2008 Waters Corporation. Printed in the U.S.A.
January 2008 720002260EN TL-AP



Waters Corporation
34 Maple Street
Milford, MA 01757 U.S.A.
T: 1 508 478 2000
F: 1 508 872 1990
www.waters.com

