Waters
THE SCIENCE OF WHAT'S POSSIBLE.®

ACQUITY UPLC Process Sample Manager

The ACQUITY UPLC® Process Sample Manager (PSM) is a free-standing, self-contained instrument module. The ACQUITY UPLC PSM will accept any combination of standards, controls, or process samples in a vial format from a process operator or laboratory chemist, as well as aspirate process samples directly from a process slip-stream or process vessel. The ACQUITY UPLC PSM can verify the sample ID via a barcode reader, perform in-situ dilutions, and inject the mixture onto the column for chromatographic analysis and results reporting.

ACQUITY UPLC PROCESS SAMPLE MANAGER

Maximum sample capacity	32 available sites for process and control samples
Internal sample capacity	32 positions for standard 8-mL vials
External sampling	1 port standard*
Number of sample injections	Up to 60 injections per sample vial
Sample access	Total random access
Injection mode	Full-loop injection only
Injection loop volumes	1-µL, 2-µL, or 5-µL sample loops only
Dilution range	Up to 1:100
Injection precision (without dilution)	< or =0.5 %RSD for caffeine peak area, full-loop injection
Injection precision (with dilution)	< or =1.0 %RSD for caffeine peak area, full-loop injection 1 to 50 dilution factor
Dilution linearity	> or =0.999 coefficient of deviation 1 to 50 dilution factor
Sample carryover	< or = 0.01% of the previous injection for caffeine
Needle wash solvent consumption	Variable (configured by user)
Sample wash solvent consumption	Variable (configured by user)
Diluent solvent consumption	Variable (configured by user).
Minimum injection cycle time	Variable depending injection mode (configured by user)
Minimum on-line sample volume	Variable based on injection mode, tubing I.D., and length required (configured by user)
Maximum atline sample consumed per analysis (vial)	100 µL
Sample compartment temperature control	4.0 to 40.0 °C programmable in 0.1 °C increments

Sample compartment temperature stability	±0.5 °C from set point measured at the control sensor
Sample compartment temperature accuracy	±1.0 °C from set point measured at the control sensor
Sample compartment temperatur distribution	±3 °C from set point as measured in air, not in a vial
Sample compartment cooling time	<60 minutes from 30 to 4 °C

ENVIRONMENTAL SPECIFICATIONS

Acoustic noise	<65dBA
Operating temperature range	4.0 to 40.0 °C (39.2 to 104.0 °F)
Operating humidity range	20% to 80% non-condensing

ELECTRICAL SPECIFICATIONS

Power requirement	100 to 240 VAC
Line Frequency	50 to 60 Hz
Power consumption	450 VAC

PHYSICAL SPECIFICATIONS

Width	13.5 in (34.3 cm)
Height	21.25 in (54 cm)
Depth	26.5 in (67.3 cm)

* Additional process/reactor lines can be added with use of an external valve

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