

With its pin-in-place Smart toolheads, the Universal Platform Sampling accessory for the DXR SmartRaman spectrometer brings versatile sampling capabilities to busy, multiple-purpose analytical laboratories.

Universal Platform Sampling Accessory

for the DXR SmartRaman Spectrometer



The DXR SmartRaman Spectrometer with the Universal Platform Sampling accessory

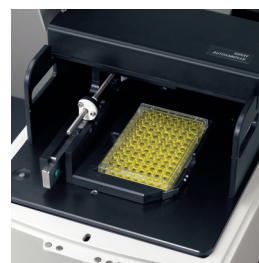


The Universal Platform Sampling accessory for the DXR SmartRaman spectrometer is designed for use in the busy, multi-purpose lab environment that demands dependable, low maintenance and high-throughput instrumentation. With its pin-in-place Smart toolheads to accommodate samples from bottles to tablets to multi-well plates, plus its autofocusing and autoexposure capabilities,

the Universal Platform Sampling accessory brings Raman performance to the non-expert. Featuring patent-pending Variable Dynamic Point Sampling technology to eliminate artifacts caused by sample heterogeneity, the Universal Platform Sampling accessory delivers results reproducibly from the broadest range of sample types.



The Universal Tablet Holder toolhead



The Well-Plate Autosampler toolhead



The Bottle Holder toolhead

Universal Platform Sampling Accessory General Specifications

Description	Pre-aligned, pin-in-place sampling accessory for the DXR SmartRaman spectrometer
Laser Safety	The enclosure is Class I laser-safe, laser-safety interlocks included
Smart Accessory	The Universal Platform Sampling accessory stores its serial number and identity and reports this information to OMNIC™ for full traceability
Specialized Toolheads	Base platform accepts specialized toolheads to accommodate full range of sample formats.
Power Supply	Powered by the DXR SmartRaman spectrometer. Separate power supply not required
Installation	Hot-swappable; there is no need to shut down the DXR SmartRaman prior to installing or replacing the accessory

Performance Specifications

Variable Dynamic Point Sampling Technology	Excitation laser spot and Raman data collection optics simultaneously rastered over sample, so no loss of Raman signal Sampling area software-controlled. Laser spot size range from nominal 10 µm to 5 mm ² Eliminates artifacts caused by sample heterogeneity
Autofocus	Optimizes Raman signal Focus range from surface of sampling accessory to a maximum of 7.6 mm above the surface of the accessory Focusing step size: 0.025 mm
Autoexposure	Calculates exposure time and number of exposures to optimize data
Signal-to-noise Ratio	See the DXR SmartRaman spectrometer specification sheet

Optional System Validation

ValPro System Qualification	DQ documentation for hardware and software Comprehensive IQ and OQ procedures in the industry-standard format Full-system qualification, including the DXR SmartRaman spectrometer OQ tests based on industry-standard methods Serialized and traceable standard Software for performance verification test Support for user-specific OQ or PQ tests
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Physical Dimensions

External Dimensions	30 cm width, 39 cm depth, 29 cm height
Weight	8.6 kg

Optional Sampling Toolheads

General Specifications	Smart Technology	Stores serial number and identity for immediate recognition by OMNIC software and for full results traceability
	Hot-swappable	Eliminates the need to power down the DXR SmartRaman spectrometer or the Universal Platform Sampling accessory when installing or replacing toolheads
	Pin-in-place	Maintains optimal alignment
		Controlled by OMNIC software suite for fully automated operation
Well-plate Autosampler Toolhead	Fully automated Raman data collection from multi-well array format	Includes Array Automation software
		Chemometric post-data-collection analysis options include PCR, MCR, correlation, cluster analysis
	Accepts clear multi-well plates sampled from beneath	Supports up to 384-well plates
		Software-controlled calibration compensates for variability in multi-well plate dimensions
Universal Tablet Holder Toolhead		Accommodates trays for tablet autosampling that have the same dimensions as those of multi-well plates ¹
	X and Y dimension travel	3.0 in x 4.2 in
	X and Y step size	0.012 mm
Bottle Holder Toolhead		Flexible, spring-loaded format securely holds a range of tablet sizes and shapes. Adjustable iris design.
	Maximum tablet diameter	38 mm
	Minimum tablet diameter	3.2 mm
Universal Plate Toolhead		Samples bottles through the side. Accepts both brown and clear glass
	Maximum bottle size	1 L
	Bottle maximum and minimum diameter	12.1 cm maximum, 1.3 cm minimum diameter
	Bottle maximum and minimum height	18.5 cm maximum, 3.8 cm minimum height
Universal Plate Toolhead		Included as standard with Universal Platform Sampling accessory. Samples placed directly over the toolhead window. Suitable for samples such as plastic bags and glass vials.
	Maximum sample dimensions	23 cm width, 27 cm length, 11 cm height

1. Tablet autosamplers are customizable to accommodate tablets with a range of dimensions. Please inquire.