

WP Raman XS series

Ultrasensitive Raman in the palm of your hand



COMPACT WITHOUT COMPROMISE

High throughput optical bench design based on our patented VPH gratings

Low f#, highly sensitive optical design

Excitation wavelengths: 633, 785, 830 nm

Raman fingerprint range for rapid ID

Integrated TEC controlled single mode laser and probe / sampling optics

High signal reproducibility & cm^{-1} stability

Application-specific accessories

We're revolutionizing Raman spectroscopy with an ultra-compact, field-deployable system with unprecedented sensitivity at a commercial sensor price point in volume. It combines our signature high-NA optics, patented HD broadband gratings, and an uncooled CMOS camera into our most compact optical bench yet. The result? High sensitivity and rapid measurements in an ultralight, miniaturized, thermally stable engine. Snap on one of our application-specific accessories, or design your own to match the free-space interface with laser interlock for complete customization & control. It's superior Raman - in the palm of your hand.

[Request a demo](#)



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STANDARD PRODUCT SPECIFICATIONS & OPTIONS

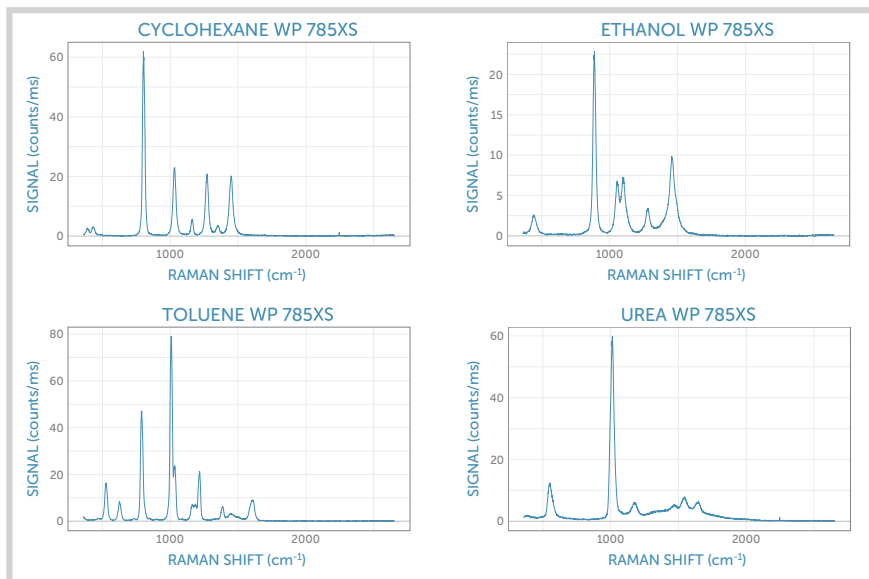
Our high-sensitivity, f/1.3 optical bench comes with your choice of Raman excitation wavelengths, all covering the fingerprint region for reliable chemical identification. Use of an uncooled CMOS detector ensures low power draw, whether operated on battery, or over USB-C for combined power and communications. All units may be run via USB-C using our ENLIGHTEN™ operating software. The free space output features an accessory interface with laser interlock, for which several accessories are available: point and shoot, cuvette/vial holder, and polystyrene calibration standard. In addition, the associated accessory plate uses an SM05 thread, facilitating the interface of custom accessories.

PART NUMBER	SPECTRAL RANGE*	RESOLUTION	LASER + OPTICS	TEC CONTROLLED LASER SPECS
		f/1.3 Input		
WP-633XS-ILP	400 - 2700 cm^{-1}	16 cm^{-1}	✓	40 mW, single mode
WP-785XS-ILP	400 - 2400 cm^{-1}	14 cm^{-1}	✓	100 mW, single mode
WP-830XS-ILP	400 - 2000 cm^{-1}	12 cm^{-1}	✓	75 mW, single mode

*Resolution specification for a 20 μm slit, 1 mm in height.

SYSTEM SPECIFICATIONS	
Optical interface	Fully integrated, free-space sampling optics: 21 mm working distance
Accessory interface	Snap-on magnetic interface with laser interlock
Dimensions & Weight	98 x 54 x 36 mm, < 300 g
Operating Temperature	0-40°C, non-condensing
Communications	USB 2.0 Type C connector
Software / Control	ENLIGHTEN™ via USB

CLASS 3B LASER PRODUCT
WARNING – VISIBLE AND INVISIBLE LASER RADIATION
AVOID EXPOSURE TO BEAM

WP XS Raman system with accessory for discrete samples, which can accommodate vials, microvials, and square cuvettes.

Sample spectra taken using the WP 785XS-ILP, integration time < 1s.