WP 830 Raman Spectrometer Series

Maintain signal, reduce fluorescence

FEATURES AND BENEFITS

- 250 - 1850 cm^{-1} Raman range
- Superior sensitivity, compact size
- Robust optical design for stable, reproducible Raman spectra
- Easy to use Raman software & SDKs
- Multiple system configurations: modular, semi, and fully integrated
- Optional 450 mW interlocked laser
- Configurable for your specific sample and needs

Optimal balance between signal and background, without increased cost

830 nm Raman is a preferred excitation wavelength for those seeking to minimize fluorescence without use of an NIR detector, particularly for biomedical applications. Our proprietary high-NA design was created specifically for the needs of Raman users like you. It captures more light from your sample, guiding it through optimized optics and our own patented high-efficiency VPH transmission gratings to deliver more sensitivity, less noise, and faster measurements than you'd ever expect from a compact spectrometer. It's built with rock-solid mechanics to give you the reproducibility, stability, and durability you need. It's run by Raman-ready software and SDKs that make spectral acquisition easy. That leaves only one question - which model is right for you? Let's explore that answer together.

Need advice or testing for your Raman application? Contact us to get started!

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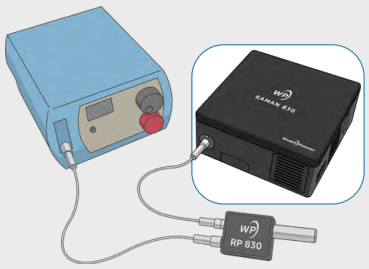
STANDARD PRODUCT SPECIFICATIONS & OPTIONS

We believe Raman should be sensitive, robust, and reproducible, and its format should fit the unique requirements of *your* application. That's why we offer solutions that span three levels of integration, from fully modular & flexible to fully integrated & compact, each with configuration options that adapt to your needs. Whether you need a spectrometer or a full system, our experts can advise on the best value for you, and provide the data & testing to back it up.

SPECIFICATIONS

MODEL	PARAMETER		VALUE(S)		SYSTEM CONFIGURATION
SPECTROMETER	Measurement Range (cm^{-1}) *		250 - 1850 cm^{-1}		**WP-830-SR-IC | FULLY MODULAR**
	Resolution	15 µm slit	6 cm^{-1} (-A, -R)	4 cm^{-1} (-C)	
		25 µm slit	7 cm^{-1} (-A, -R)	6 cm^{-1} (-C)	
		50 µm slit	10 cm^{-1} (-A, -R)	10 cm^{-1} (-C)	
	Spectrometer f/#		f/1.3		
	Spectrometer input		SMA 905 (lens or FC/PC optional)		
	Detector cooling options (see table below for details)		Uncooled/ambient (-A) TEC-regulated, 10°C (-R) TEC-cooled, -15°C (-C)		
SPECTROMETER & LASER	Integrated laser		830 nm (nominal)		**WP-830-SR-IL-IC | SEMI-INTEGRATED**
	Laser type		Multimode		
	Laser power		Up to 450 mW, control via software		
	Laser output		FC/PC connector		
SPECTROMETER LASER & SAMPLING OPTICS	Integrated laser		830 nm, multimode Up to 450 mW, control via software		**WP-830-SR-ILP | FULLY INTEGRATED**
	Sample interface optics		Fully integrated, matched NA optics (internal lens & filters)		
	Working distance (from face of lens)		22 mm		
	Laser spot size (nominal)		120 µm		

* Start and end wavenumber may be customized, but total range is fixed. Contact us for options.

DETECTOR OPTIONS	Uncooled (-A)	TEC-regulated (-R)	TEC-cooled (-C)
Detector Temperature	Ambient	10°C ± 0.2°C	-15°C ± 0.2°C
# of Pixels	1024	1024	1024
Integration Time	3 ms - 60 s	3 ms - 60 s	25 ms - 60 s
Communications	ENLIGHTEN™ desktop software & SDKs included; data transfer via USB 2.0		

Explore related products:

- Need to reduce fluorescence further? Our 1064 nm modular spectrometer or fully integrated system could help
- Accessories: User-configurabe probes, sample holders & standalone lasers
- Streamlined drop-in OEM modules with the same sensitivity & speed

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