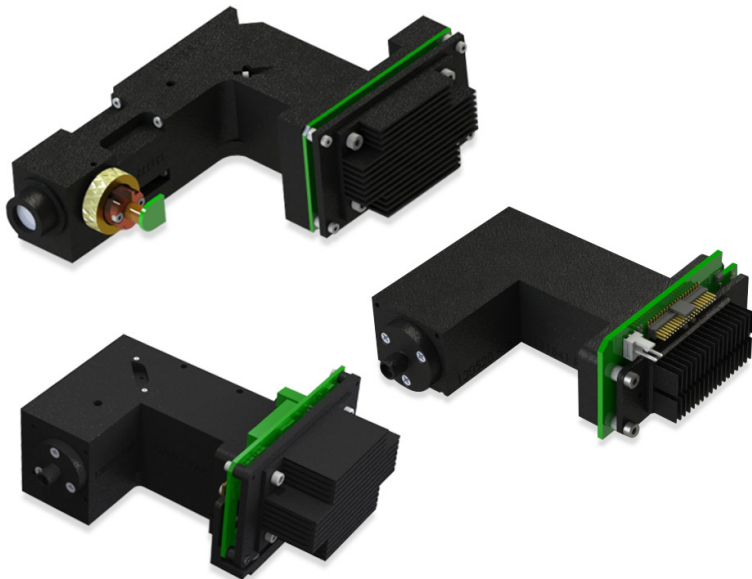


WP 785, 830, 1064 OEM Raman Spectrometers

Superior performance in a streamlined design



FEATURES AND BENEFITS

- Industry-leading, high efficiency optics
- Patented VPH transmission gratings
- Diffraction-limited design for better SNR
- Excellent unit-to-unit reproducibility
- Robust, thermally stable optical bench
- Comprehensive engineering support
- Fiber coupled, free space & integrated laser models

At Wasatch Photonics, we've built a team that understands the needs of OEM customers, and a spectrometer bench that exceeds them. Our OEM Raman spectrometers are robust, compact, and easy to integrate, while delivering the same outstanding sensitivity and SNR of our standard products. Our optical bench is designed in transmission with diffraction-limited optics, and remains aligned over temperature and at every wavelength to allow intensity matching to <10% across the spectrum. Consistency is key when you're designing a product to be built in the thousands, and we deliver – in performance, in expertise, and in the quality of our service.

Partnership you can count on. Experience you can trust.
Contact us to get started!



WP 785, 830, 1064 OEM Raman Spectrometers

PRODUCT SPECIFICATIONS & OPTIONS

The configuration options for our build-to-print OEM Raman spectrometers include slit size (resolution), sample coupling (fiber coupled, free space, or integrated laser), and starting wavelength (dependent on input filter). Our regulated detector ensures excellent SNR and stability at low cost. Contact us to discuss your needs for custom wavelength or range.

OPTICAL					
MODELS AVAILABLE >		WP 785 OEM	WP 830 OEM	WP 1064 OEM	
Wavenumber Range		340 - 2100 cm ⁻¹	400 - 2400 cm ⁻¹	250 - 1850 cm ⁻¹	
Resolution	25 μm slit	8 cm ⁻¹	10 cm ⁻¹	10 cm ⁻¹	
	50 μm slit	14 cm ⁻¹	15 cm ⁻¹	15 cm ⁻¹	
f-number (f/#)		1.3	1.3	1.3	
Coupling options		SMA 905, free space port, or integrated laser	SMA 905 or free space port	SMA 905 or free space port	

DETECTOR & ELECTRONICS					
MODELS AVAILABLE >		WP 785 OEM	WP 830 OEM	WP 1064 OEM	
Hamamatsu Detector		S11511-1006 CCD	S11511-1006 CCD	G9214-512SA InGaAs	
Detector Temperature		10°C	10°C	-15°C	
Detector Temperature Stability		± 0.2°C	± 0.2°C	± 0.1°C	
Active Pixels		1024 x 64	1024 x 64	512	
Pixel Size		14 x 14 μm	14 x 14 μm	25 x 500 μm	
Detector QE/Photosensitivity: Average / Peak		72% / 80%	63% / 76%	0.81 / 0.88 A/W	
Dynamic Range		50,000	50,000	16,666	
Signal to Noise Ratio (SNR)		500:1	500:1	2400:1	
Readout Noise		6 e- RMS	6 e- RMS	180 e- RMS	
Integration Time		3 ms - 60 s	3 ms - 60 s	1 ms - 60 s	
Maximum Sample Frequency		< 250 Hz	< 250 Hz	< 250 Hz	
Communications		USB 2.0 Type B connector	USB 2.0 Type B connector	USB 2.0 Type B connector	

DETECTOR & ELECTRONICS					
MODELS AVAILABLE >		WP 785 OEM	WP 830 OEM	WP 1064 OEM	
Size		10.7 x 10.2 x 4.6 cm (15.6 x 10.2 x 4.6 cm w/ laser)	9.1 x 9.1 x 4.2 cm	9.6 x 11 x 4.4 cm	
Weight		400 g (475 g w/ laser)	350 g	450 g	
Power Consumption		<500 mA @ 12 V (slightly higher w/ laser)	<500 mA @ 12 V	TBD	
Operating Temperature		0°C to 40°C, non-condensing			

LASER	
Integrated Laser Model (785 only)	
Laser CWL	785 nm
Power	100 mW
Type	Single mode

Custom options available upon request

