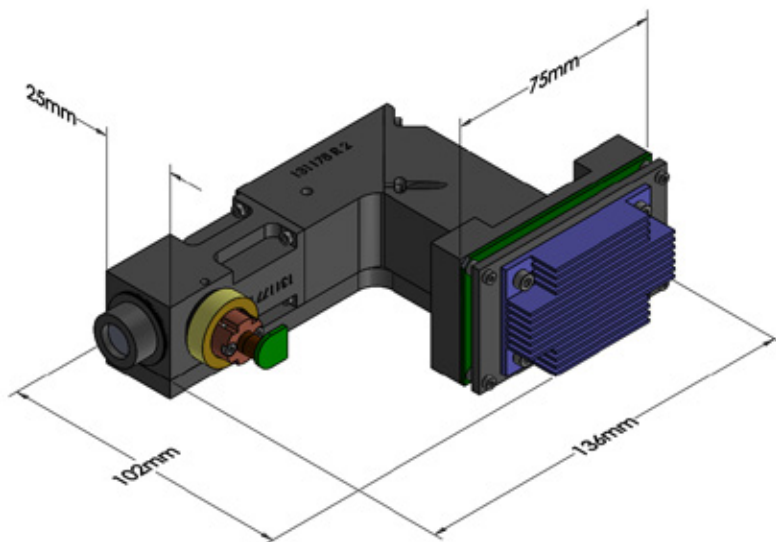


WP 785 OEM Raman Spectrometer

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 unique needs of OEM customers, and a spectrometer bench that exceeds them. Our WP 785 OEM spectrometer is robust, compact, and easy to integrate, while delivering the same outstanding sensitivity and SNR of our standard products. It's designed in transmission with diffraction-limited optics to remain aligned over temperature and at every wavelength, facilitating 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 OEM Raman Spectrometer

PRODUCT SPECIFICATIONS & OPTIONS

The configuration options for our build-to-print 785 nm 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				
SAMPLE COUPLING OPTIONS >		Fiber coupled	Free space	Integrated laser
Wavenumber Range ($\lambda_{ex} = 785 \text{ nm}$)		200 - 2100 cm^{-1} available (340 cm^{-1} start with standard longpass filter)		
Resolution	25 μm slit	8 cm^{-1}		
	50 μm slit	14 cm^{-1}		
f-number (f/#)		1.3		
Connector (fiber coupled models only)		SMA 905	free space port	free space port

DETECTOR & ELECTRONICS	
DETECTOR COOLING >	Regulated
Hamamatsu Detector	S11511-1006 CCD
Detector Temperature	10°C
Detector Temperature Stability	$\pm 0.2^\circ\text{C}$
Active Pixels	1024 x 64
Pixel Size	14 x 14 μm
Detector Quantum Efficiency: Average / Peak	$\sqrt{72\% / 80\%}$
Dynamic Range	50,000
Signal to Noise Ratio (SNR)	500:1
Readout Noise	6 e- RMS
Integration Time	3 ms - 60 s
Maximum Sample Frequency	285 Hz
Communications	USB 2.0 Type B connector

MECHANICAL & ENVIRONMENTAL		
	Fiber or Free Space Coupled	Integrated Laser Model (-L)
Size	10.7 x 10.2 x 4.6 cm	15.6 x 10.2 x 4.6 cm
Weight	400 g	475 g
Operating Temperature	0°C to 40°C, non-condensing	

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

Custom options available upon request

