

WP Raman Spectrometer Series

Superior sensitivity across the spectrum



FEATURES AND BENEFITS

f/1.3 input to capture more light

>10x more sensitivity & speed

Superior optical design based on patented VPH transmission grating

Detector cooling options optimized for your application

Choice of range & resolution

Fiber coupled & free space models

Compact, robust & configurable

Excellent thermal stability

We place our own highly uniform VPH gratings at the heart of every spectrometer – delivering 10x more signal, lower limit of detection, and faster measurements than you'd ever expect from a compact footprint. We offer a custom-designed line of modular, highly configurable spectrometers for Raman, enabling clearer, faster spectra at more excitation wavelengths than anywhere else. Whether you're a researcher or OEM, we offer the performance, thermal stability, and applications experience to help you bring Raman to life.

Wasatch Photonics offers applications expertise & sample evaluation to find your optimal spectroscopy solution.

Contact us to get started!

WP Raman Spectrometer Series

STANDARD PRODUCT SPECIFICATIONS & OPTIONS

The configuration options for our build-to-print Raman spectrometers include slit size (resolution), sample coupling (fiber coupled or free space), and detector cooling. We offer ambient (-A), TEC-regulated (-R), and TEC-cooled (-C) detectors, allowing you to balance your required signal to noise (SNR) and temperature stability with cost for the best possible value.

PART NUMBER	MODEL	RANGE (cm ⁻¹)	RESOLUTION (cm ⁻¹)				DETECTOR Cooling	SIZE (cm)	WEIGHT (kg)
			10 μm	15 μm	25 μm	50 μm			
WP 248	-A	400 - 3200	—	—	14	—	—	30.2x17.9x7.5	3.0
	-R	400 - 3200	—	—	14	—	10°C		
WP 405	-A	300 - 3700	—	8	12	20	—	16.5x16.2x6.7	1.8
	-R	300 - 3700	—	8	12	20	10°C		
	-C	250 - 3000	—	8	12	20	-15°C		
WP 532	-A	150 - 3200	—	7	9	14	—	16.5x16.2x6.7	1.8
	-R	150 - 3200	—	7	9	14	10°C		
	-C	150 - 2600	—	7	9	14	-15°C		
WP 532 EXR	-R2	100 - 5000	—	—	11	—	10°C	24.0x13x7.1	3.0
	-C2	100 - 4450	—	—	11	—	15°C		
WP 633	-A	275 - 2000	—	5	7	13	—	16.5x16.2x6.7	1.8
	-R	275 - 2000	—	5	7	13	10°C		
	-C	275 - 2000	—	5	7	13	-15°C		
WP 785	-A	270 - 2000	—	6	7	11	—	16.5x16.2x6.7	1.8
	-R	270 - 2000	—	6	7	11	10°C		
	-C	270 - 2000	—	4	6	10	-15°C		
WP 785 ER	-R2	100 - 3600	7	—	8	13	10°C	24.0x13.5x7.1	3.0
	-C2	200 - 3350	7	—	9	13	-15°C		
WP 830	-A	250 - 1850	—	6	7	10	—	16.5x16.2x6.7	1.8
	-R	250 - 1850	—	6	7	10	10°C		
	-C	250 - 1850	—	4	6	10	-15°C		
WP 1064	-C2	250 - 1850	—	—	6	11	-15°C	11.7x13.0x7.0	1.6

DETECTOR P/N*	# OF PIXELS	COOLING LEVEL	INTEGRATION TIME
-A	1024	None (~25°C)	7 ms - 60 s
-R	1024	10°C ± 0.2°C	3 ms - 60 s
-R2	2048	10°C ± 0.2°C	3 ms - 60 s
-C	1024	-15°C ± 0.1°C	25 ms - 60 s
-C2 (532, 785)	1024	-15°C ± 0.1°C	8 ms - 60 s
-C2 (1064)	512	-15°C ± 0.1°C	1 ms - 60 s

ALL MODELS	FIBER COUPLING	FREE SPACE
Connection	SMA (0.39 NA)	Open aperture (f/1.3 input)
Operating Temperature	0°C to 40°C, non-condensing	
Communications	USB 2.0 Type B connector	
Maximum scan rate	Up to 220 Hz	
Software / control (included at no charge)	ENLIGHTEN™ software & SDKs for developers	

*See product pages on wasatchphotonics.com for detailed specifications

Custom & OEM designs available upon request

