

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		SIZE (cm)	WEIGHT (kg)
			10 μm	25 μm	50 μm	Cooling	P/N		
WP 405	-A	300 - 3700	8	12	20	~25°C [†]	S11510-1006	16.5x16.2x6.7	1.8
	-R	300 - 3700	8	12	20	10°C	S11511-1006		
	-C	250 - 3000	8	12	20	-15°C	S10141-1007		
WP 532	-A	125 - 3200	7	9	15	~25°C [†]	S11510-1006	16.5x16.2x6.7	1.8
	-R	125 - 3200	7	9	15	10°C	S11511-1006		
	-C	125 - 2600	8	9	15	-15°C	S10141-1007		
WP 532 ER	-A	250 - 4300	6	8	14	~25°C [†]	S10420-1006	16.8x10.8x4.8	1.0
	-C	250 - 4000	10	14	19	-15°C	S10141-1007	21.5x15.0x7.5	3.0
WP 633	-A	270 - 2400	5	7	13	~25°C [†]	S11510-1006	16.5x16.2x6.7	1.8
	-R	270 - 2400	5	7	13	10°C	S11511-1006		
	-C	250 - 2200	5	7	13	-15°C	S10141-1007		
WP 785	-A	270 - 2000	4	6	10	~25°C [†]	S11510-1006	16.5x16.2x6.7	1.8
	-R	270 - 2000	4	6	10	10°C	S11511-1006		
	-C	270 - 2000	4	6	10	-15°C	S10141-1007		
WP 785 ER	-R2	100 - 3500	6	9	14	10°C	S11511-1106	24.0x13.5x7.1	3.0
	-C	200 - 3350	9	10	16	-15°C	S7031-1006		
WP 830	-A	200 - 1850	4	6	10	~25°C [†]	S11510-1006	16.5x16.2x6.7	1.8
	-R	200 - 1850	4	6	10	10°C	S11511-1006		
	-C	200 - 1850	4	6	10	-15°C	S10141-1007		
WP 1064	-C	250 - 1850	—	6	10	-15°C	G9214-512SA	11.7x13.0x7.0	1.6

[†] ~25°C or ambient temperature of operating environment

DETECTOR P/N*	# OF PIXELS	COOLING LEVEL	SNR	DYNAMIC RANGE	INTEGRATION TIME
S10420-1006	1024	None (~25°C)	500:1	50,000	7 ms - 60 s
S11510-1006	1024	None (~25°C)	500:1	50,000	3 ms - 60 s
S11511-1006	1024	10°C ± 0.2°C	500:1	50,000	3 ms - 60 s
S11511-1106	2048	10°C ± 0.2°C	500:1	50,000	3 ms - 60 s
S10141-1007	1024	-15°C ± 0.1°C	2400:1	37,500	25 ms - 60 s
S7031-1006	1024	-15°C ± 0.1°C	1000:1	125,000	8 ms - 60 s
G9214-512SA	512	-15°C ± 0.1°C	2400:1	16,666	1 ms - 60 s

*See product pages on wasatchphotonics.com for detailed specifications

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	

Custom & OEM designs available upon request

