

WP VIS-NIR Spectrometer Series

High throughput for speed or sensitivity



FEATURES AND BENEFITS

f/1.3 input to capture more light

Superior optical design based on transmissive VPH grating

Fast data sampling rates

TEC cooling option for best S:N

SMA fiber coupled, free space, and integrated laser models

USB, Ethernet & Bluetooth connectivity

Compact, robust & configurable

We've maximized the efficiency of our spectrometers to give you more sensitivity, better S:N, and faster measurements. Collect more light with our f/2.0 input, keep more light with our high transmission VPH gratings & diffraction-limited optics, and detect more light with scientific-grade detectors. From sample coupling to detector cooling, we give you more options.

Wasatch Photonics offers the expertise & testing to find your optimal Raman solution. Contact us to get started!

WP VIS-NIR Spectrometer Series

STANDARD PRODUCT SPECIFICATIONS & OPTIONS

OPTICAL		
f-number (f/#)	2.0	
Spectral Range	440 - 1100 nm	
Resolution	10 μm slit	1 nm
	25 μm slit	2 nm
	50 μm slit	4 nm
Connector (Fiber coupled model only)	SMA 905	

DETECTOR & ELECTRONICS		
DETECTOR COOLING OPTIONS >	Ambient	Regulated
Hamamatsu Detector	S10420-1006 CCD	S10420-1006 CCD
Detector Temperature	ambient	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	76% / 78%	
Dynamic Range	50,000	
Signal to Noise (S:N)	500:1	
Readout Noise	6 e- RMS	
Integration Time	1 ms - 60 s	
Maximum Sample Frequency	285 Hz	
Communications	USB 2.0 Type B connector, Ethernet and Bluetooth optional	

MECHANICAL & ENVIRONMENTAL	
	Fiber or Free Space Coupled
Size	16.5 x 12.7 x 5.1 cm
Weight	1.2 kg
Operating Temperature	0 °C to 40 °C, non-condensing

Custom options available upon request

