



# WP UV-VIS Spectrometer Series

Sensitive, linear absorbance to 3.7 AU



## FEATURES AND BENEFITS

250-850 nm wavelength range

Industry-leading high efficiency optics

f/2.0 input to capture more light

Patented VPH transmission gratings

High sensitivity for fast data sampling rates

Linear absorbance up to 3.7 AU @ 350 nm

Low stray light for superior LOD

Fiber coupled & free space models

Compact, robust & configurable

We've maximized the efficiency of our spectrometers to give you more sensitivity, better SNR, 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. Our build-to-print options for resolution, detector cooling, and sample coupling allow you to configure a spectrometer or system with the exact performance you need.

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

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## STANDARD PRODUCT SPECIFICATIONS & OPTIONS

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

OPTICAL				
DETECTOR COOLING OPTIONS >		Ambient	Regulated	TEC Cooled
Spectral Range				250 - 850 nm
Resolution	25 $\mu\text{m}$ slit			1.7 nm
	50 $\mu\text{m}$ slit			3.4 nm
f-number (f/#)		2.0		
Connector (fiber coupled models only)		SMA 905		

**COMING SOON!**

DETECTOR & ELECTRONICS			
DETECTOR COOLING OPTIONS >	Ambient	Regulated	TEC Cooled
Hamamatsu Detector	S10420-1106 CCD	S11511-1106 CCD	S7031-1006 CCD
Detector Temperature	ambient	10°C	-15°C
Detector Temperature Stability	-	$\pm 0.2^\circ\text{C}$	$\pm 0.1^\circ\text{C}$
Active Pixels	2048 x 64	2048 x 64	1024 x 58
Pixel Size	14 x 14 $\mu\text{m}$	14 x 14 $\mu\text{m}$	24 x 24 $\mu\text{m}$
Detector Quantum Efficiency: Average / Peak	70% / 77%	60% / 83%	74% / 93%
Dynamic Range	50,000	50,000	125,000
Signal to Noise Ratio (SNR)	500:1	500:1	1000:1
Readout Noise	6 e- RMS	6 e- RMS	8 e- RMS
Integration Time	1 ms - 60 s	1 ms - 60 s	8 ms - 60 s
Maximum Sample Frequency	285 Hz		
Communications	USB 2.0 Type B connector		

MECHANICAL & ENVIRONMENTAL	
Fiber or Free Space Coupled	
Size	16.0 x 14.5 x 6.0 cm
Weight	1.36 kg
Operating Temperature	0 °C to 40 °C, non-condensing

Custom options available upon request

