

# WP 248 Raman Spectrometer

## Eliminate fluorescence background



#### **FEATURES AND BENEFITS**

f/2.0 input to capture more light

Superior optical design based on patented transmissive VPH grating

Captures clean spectra in seconds

Lens input for collimated FOV

Custom 248.6 nm longpass filter

Trigger option to synch with laser

Compact, simple, & robust design

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 Raman solution.
Contact us to get started!

## WP 248 Raman Spectrometer Series

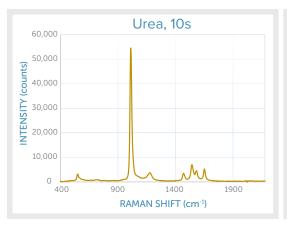
### STANDARD PRODUCT SPECIFICATIONS & OPTIONS

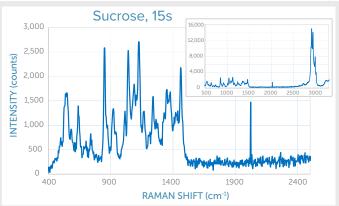
Our build-to-print 248 nm Raman spectrometer includes a built-in longpass filter for Rayleigh scatter rejection, and is offered with choice of ambient or TEC-regulated detector, allowing you to balance your required signal to noise (SNR) and temperature stability with cost for the best possible value.

OPTICAL				
DETECTOR COOLING OPTIONS >		Ambient	TEC-Regulated	
Wavenumber Range ( $\lambda_{\rm ex}$ = 248.6 nm)		400-3200 cm <sup>-1</sup>		
Resolution (FWHM)	25 μm slit	1	4 cm <sup>-1</sup>	
f-number (f/#)		2.0		
Spectrometer input		Integrated lens (free space available upon request & user-exchangeable in field)		

DETECTOR & ELECTRONICS				
DETECTOR COOLING OPTIONS >	Ambient	TEC-Regulated		
Hamamatsu Detector	S10420-1006 CCD	S16011-1006 CCD		
Detector Temperature	ambient	10°C		
Detector Temperature Stability	-	± 0.2°C		
Active Pixels	1024			
Pixel Size	14 x 14 μm			
Integration Time	3 ms - 60 s			
Spectrometer Triggering	Triggering accessory for Photon Systems NeCu laser included			
Communications	USB 2.0 Type B connector			

MECHANICAL & ENVIRONMENTAL			
	Integrated Lens or Free Space Coupled		
Size	30.2 x 17.9 x 7.5 cm		
Weight	3.0 kg		
Power Consumption	<500 mA @ 12 V		
Operating Temperature	0°C to 40°C, non-condensing		







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