



# The Dimension-P1™ Raman System

*Now You Have the Power*

## Specifications:

Model	SR Model	HR Model
<b>Spectrometer</b>		
Optics	85 mm, f/1.8 lens-based, Czerny-Turner spectrograph	
Nominal Resolution	2.5 cm <sup>-1</sup> / pixel	1.5 cm <sup>-1</sup> / pixel
Spectral Coverage	150 - 3200 cm <sup>-1</sup>	150 - 2000 cm <sup>-1</sup>
Sensitivity (@100 mW w/785 nm laser)	>10,000 counts at 992 cm <sup>-1</sup> of Na <sub>2</sub> SO <sub>4</sub> @ lowest of 3 available gain settings	
<b>Detector</b>		
CCD	1340 × 100 pixels, 20 μm × 20 μm	
TE Cooling	< -70°C	
Digitization Rate (16 bits)	100 kHz, 2 MHz	
<b>Excitation Lasers</b>		
Laser	785 nm (other wavelengths at 830, 632.8, and 532 nm available)	
Laser Power	Up to 700 mW (maximum power 250 - 350 mW to sample) - Stability ±2%	
<b>Sampling</b>		
Fiber Optic Probe	LSI Vector Raman Probe™, 1 meter fiber cable standard (other lengths available)	
Sample Cells	4-position internal sample cell and multi-purpose External Sampling Module	
<b>Software</b>		
RamanSoft™	Control of laser power, CCD settings, data acquisition, processing & analysis including quantification, Real-Time Monitoring, SpectrumSearch™, SpectrumPredict™	
<b>Dimensions</b>		
L × W × H	52 cm × 39 cm × 20 cm	
Weight	18.5 kg	
<b>Options</b>		
Calibration Kit	Sources and tools for wavelength and instrument response calibration. Sealed sample for laser wavelength calibration	
Add'l Software	GRAMS/AI™ 7 with PLSplus/IQ™ add-on, Spectral ID®	

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