



Ultra High Performance Dispersive Raman Spectrometer

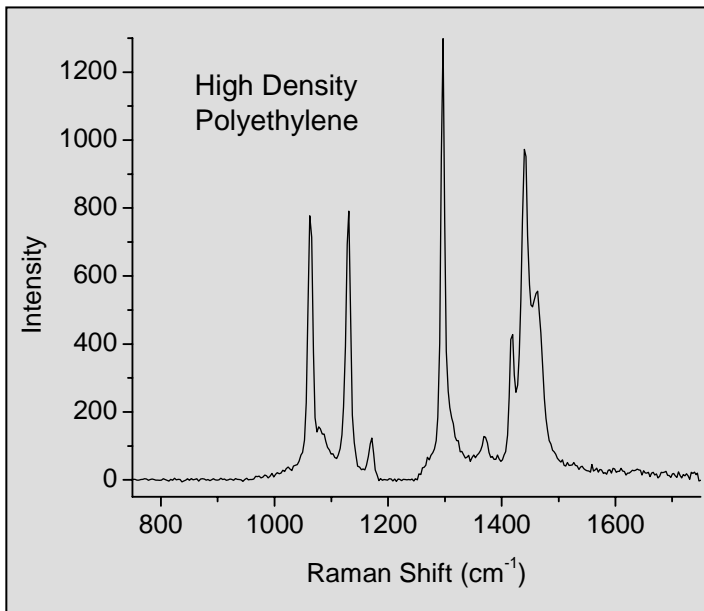
SPECIFICATIONS

Raman Systems	Dimension-P1™ XL			
	532HR	473HR	785SR	785HR
Spectrometer				
Optics	85 mm, f/1.8 lens-based, Czerny-Turner spectrographs			
Nominal Resolution	1.5 cm ⁻¹	1.5 cm ⁻¹	2.5 cm ⁻¹	1.5 cm ⁻¹
Spectral Coverage	60 - 2500 cm ⁻¹	80- 2500 cm ⁻¹	200 - 3100 cm ⁻¹	125 - 2200 cm ⁻¹
Grating	1800gr./mm	2400 gr./mm	600gr./mm	1200gr./mm
Sensitivity(@100 mW w/785 nm laser)	>18,000 counts at 992 cm ⁻¹ of Na ₂ SO ₄ @ lowest of 3 available gain settings			
Detector				
CCD	1340 X 100 pixels, 20 μm x 20 μm			
TE Cooling	< -75°C		< -75°C	
Type Quantum Efficiency	Deep illuminated PIXIS100B >90% at 500nm		PIXIS100F >45% at 700nm	
Excitation Lasers				
Laser	785 nm , 632.8, 532 nm and 473nm available			
Laser Power	50mW	25mW	700mW	700mW
Sampling				
Fiber Optic Probe	LSI Vector Raman Probe™, 1 meter fiber cable standard (other lengths available)			
Sample Cells	Multi-purpose External Sampling Module (Standard) and External chamber (Option)			
Software				
RamanSoft™	Control of laser power, CCD settings, data acquisition, processing & analysis including quantification, Real-Time Monitoring, SpectrumSearch™ , SpectrumPredict™			
Dimensions				
L x W x H	52 cm x 39 cm x 20 cm			
Weight	18.5 kg			

The Dimension-P2™

Why Settle for Less

High Performance and High Value
Compact Size for Portability and Field Operations
Deploy for Quality Control or Process Monitoring
Suitable for Research and Teaching Labs



The resolution and sensitivity of the Dimension-P2™, the versatility of the Vector Raman Probe and sampling module permit rapid analysis of a broad range of materials. Illustrated here is the 1 second spectrum taken of high density polyethylene pellets. Characteristic features of this form of polyethylene at 1420 and 1475 cm⁻¹ are easily determined.

The Dimension-P2™ has the sensitivity and clear spectra provided by the optical design in all of the LSI's Dimension Raman Systems. This is illustrated by the noise free spectrum of 1,6 hexanediol diacrylate obtained in just 50 milliseconds and processed by RamanSoft's Automated Background Removal algorithm.

