



Sensitivity – Resolution – Performance

The high performance Dimension Raman systems provide the power of high sensitivity and resolution at extraordinary value through the integration of proprietary design in optics and the state-of-the-art CCD detectors. The Dimension Raman systems are powered by LSI RamanSoft™, complete with user-friendly interfaces for data processing and data analysis. The Dimension-P1™, as well as the more compact Dimension-P2™, are available in both high and standard resolution models.

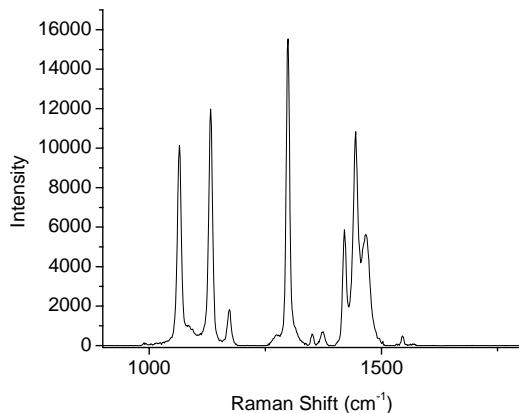
Features:

- Unique fiber bundle and coupling of LSI Vector Raman Probe™ provides high efficiency
- Compute control of laser power
- Internal sample cell and External Sampling Module for superior versatility
- Auto-calibration with calibration kit
- Adaptors available for Raman microscopy
- Powered by LSI RamanSoft™ with User-friendly interfaces that makes the high performance systems easy to use

Benefits:

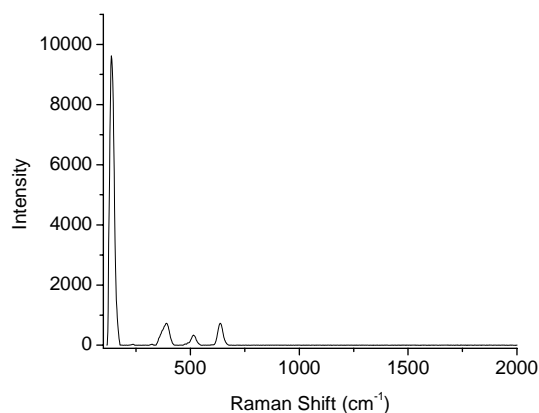
- High sensitivity and resolution, enhanced stability and exceptional signal throughput
- Easy access to data acquisition, processing, and analysis
- Unique automatic and manual background removal
- Integrated data acquisition and database searching
- Real-time process/reaction monitoring at rates as fast as 10 ms
- Integration with GRAMS IQ Predict™ and Spectral ID®

High Resolution



High Density Polyethylene (HDPE) at 3 cm⁻¹ by Dimension-P1™ HR.

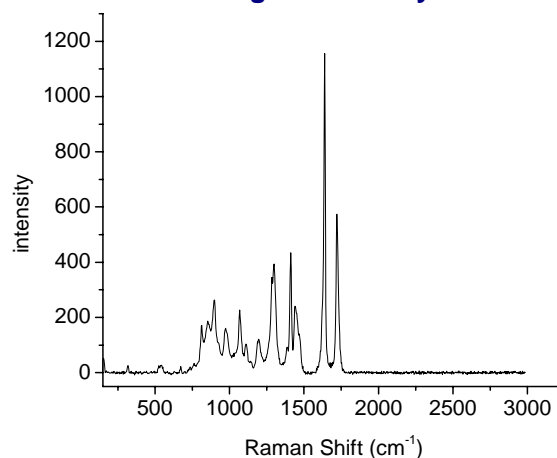
Wide Coverage



0.1% Anatase by Dimension-P1™ HR (< 130 cm⁻¹).



High Sensitivity



1,6 Hexanediol Diacrylate in 50 msec by Dimension-P2™ SR.

SPECIFICATIONS

Raman Systems	Dimension-P1™		Dimension-P2™	
	SR Model	HR Model	SR Model	HR Model
Spectrometer				
Optics	85 mm, f/1.8 lens-based, Czerny-Turner spectrograph			
Nominal Resolution	2.5 cm ⁻¹ / pixel	1.5 cm ⁻¹ / pixel	3 cm ⁻¹ / pixel	2 cm ⁻¹ / pixel
Spectral Coverage	150 - 3200 cm ⁻¹	150 - 2000 cm ⁻¹	150 - 3000 cm ⁻¹	150 - 1900 cm ⁻¹
Sensitivity(@100 mW w/785 nm laser)	>10,000 counts at 992 cm ⁻¹ of Na ₂ SO ₄ @ lowest of 3 available gain settings		>5,000 counts at 992 cm ⁻¹ of Na ₂ SO ₄	
Detector				
CCD	1340 × 100 pixels, 20 μm × 20 μm		1024 × 124 pixels, 24 μm × 24 μm	
TE Cooling	< -70°C		< -15°C	
Digitization Rate (16 bits)	100 kHz, 2 MHz		100 kHz	
Excitation Lasers				
Laser	785 nm (other wavelengths at 830 nm, 632.8 nm, and 532 nm available)			
Laser Power	Up to 700 mW (maximum power 250 - 350 mW to the sample) - Stability ±2%			
Sampling				
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		Multi-purpose External Sampling Module	
Software				
RamanSoft™	Control of laser power, CCD settings, data acquisition, processing & analysis including quantification, Real-Time Monitoring, SpectrumSearch™, SpectrumPredict™			
Dimensions				
L × W × H	52 cm × 39 cm × 20 cm		39 cm × 25 cm × 15 cm	
Weight	18.5 kg		10 kg	
Options				
Microscope	Nikon and Olympus Microscopes, other brands available			
Microscope Adapter	Raman Microscope adapter to microscopes			
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®			