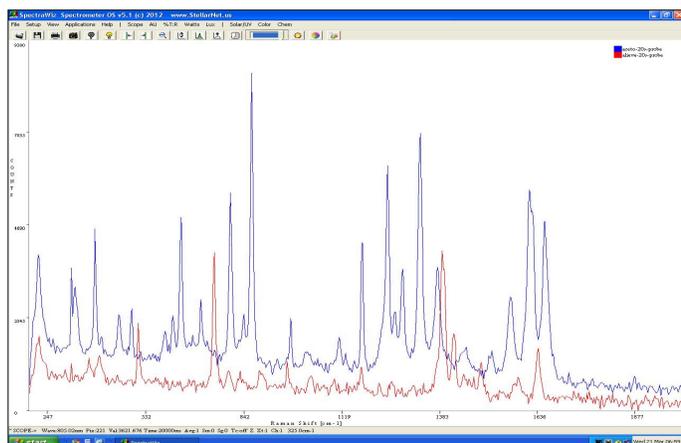


# Raman Spectrometers

## ➤ Raman Spectroscopy Instrumentation

- Our Raman spectrometers are ruggedized miniature spectrometers configured specifically for Raman spectroscopy applications using 785nm lasers
- Enhanced optics allow for extreme sensitivity and extra low stray light values down to 0.05%
- High Resolution models available down to  $4\text{ cm}^{-1}$  with options for maintaining S/N with TEC cooling
- Compact size & seriously Rugged for portable and field applications. Metal enclosures are extremely durable!



Raman-HR spectra of Aleve and Acetaminophen

## ➤ Raman Spectrometer Features

- Low cost - Ruggedized - High performance
- Shock proof - Permanently aligned optics
- Standard Fiber interface to Raman probes
- SpectraWiz Software and SDK included Free
- Simple USB2 interface to Netbook & PC's
- Suitable for lab, process, or field applications

Spec	Raman configured spectrometers		
Optical Resolution:	$4\text{ cm}^{-1}$ or $8\text{ cm}^{-1}$	Dimensions:	1x3x5 inch
Signal to Noise:	1000:1	Weight:	14 ounces
Detector Type:	Enhanced CCD with 2048 pixels	Power Consumption:	<100mA , USB powered
Diffraction Gratings:	1200 g/mm with gold surface	Fiber Optic Input:	SMA905
Spectral Range @785nm	200-2200 $\text{cm}^{-1}$ -or- 200-3200 $\text{cm}^{-1}$	Interface:	USB-2
Stray Light:	<0.05%	Operating Systems:	WinXP, Vista, Win7 (32/64-bit)
Exposure Times:	to 20sec -or- to 60 sec w/ TEC	Software:	SpectraWiz, LabView,

Item	Description	
Raman-SR	Raman Standard Resolution for 200-3200 $\text{cm}^{-1}$ @ 785nm with $8\text{ cm}^{-1}$ resolution via CCD	
Raman-HR	Raman High Resolution for 200-2200 $\text{cm}^{-1}$ @ 785nm with $4\text{ cm}^{-1}$ resolution via CCD	
Raman-HR-TEC	Raman High Resolution for 200-2200 $\text{cm}^{-1}$ @ 785nm with $4\text{ cm}^{-1}$ resolution via CCD with Thermo Electric Cooler (TEC) for best S/N with detector integration times > 10 seconds	
Raman-HR-TEC-IG	Raman High Resolution for 200-2200 $\text{cm}^{-1}$ @ 1064nm with $8\text{ cm}^{-1}$ resolution via PDA with TEC cooled 1024 pixel InGaAs photodiode array. Minimize fluorescence via 1064nm laser!	

All data and statements contained herein are subject to change in accordance with StellarNet's policy of continual product improvement. Please contact us about availability of additional laser frequencies used for Raman such as 532 / 647 / 830 / 1064nm.