

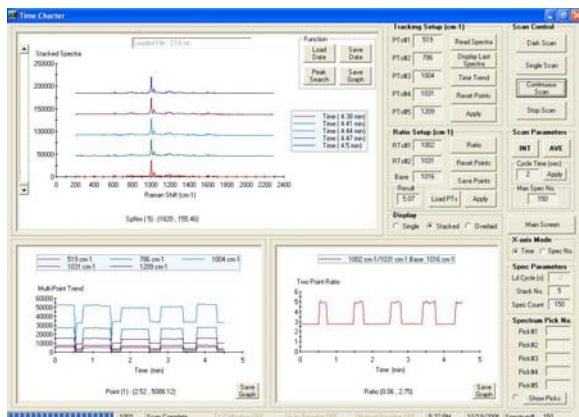
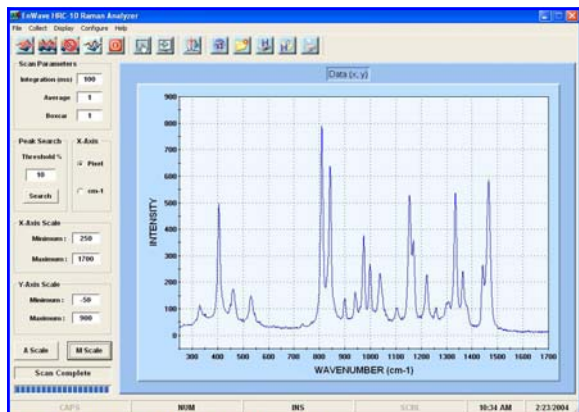
# ProRaman-W Series *WIDE-RANGE INDUSTRIAL PROCESS RAMAN ANALYZER*

The new **ProRaman-W Series** of Raman analyzers are high performance Raman instruments suitable for industrial applications or laboratory experiments requiring a high sensitivity Raman instrument at an affordable price.

ProRaman-W systems each features a 785 nm frequency stabilized laser, high sensitivity CCD spectrograph with the CCD cooled to either  $-60^{\circ}\text{C}$  or  $-70^{\circ}\text{C}$  and a high throughput immersion fiber optics probe. The system has  $\sim 10\text{cm}^{-1}$  averaged optical resolution (optional  $6\text{cm}^{-1}$ ) with wide-range spectral coverage from  $\sim 250$  to  $3,200\text{ cm}^{-1}$ .

The ProRaman-W series is ideal for on-line process monitoring and for any academic, research, industrial applications requiring an affordable, high performance Raman instrument.

## Sample Screen Shot



## SYSTEM FEATURES

- **High Sensitivity Raman System for Laboratory & Industrial Process Monitoring**
- **High Power, NIR, Frequency Stabilized, Narrow Linewidth Excitation Source**
- **Choice of CCD cooled to  $-60^{\circ}\text{C}$  or  $-70^{\circ}\text{C}$**
- **Averaged Optical Resolution  $\sim 10\text{ cm}^{-1}$ , Spectral Coverage  $\sim 250\text{-}3,200\text{ cm}^{-1}$  (785nm excitation)**
- **Immersion Fiber Probe ( O.D. > 8 )**
- **Best Performance / Cost**

**SPECIFICATIONS**

EXCITATION SOURCE	NIR, Frequency Stabilized, Narrow Linewidth Diode Laser Wavelength Accuracy: 785 nm Laser Power: ~400mW (Higher Output Power Available Upon Request) Estimated Laser Lifetime: > 10,000 Hours Laser Shutter Control 532, 670, 830 nm available
IMMERSION FIBER-OPTIC PROBE	Working Distance: 7 mm (Standard), 3mm and 10 mm (Optional) Rayleigh Rejection: O.D. > 8 at Laser Wavelength Reaction Process Probe available
CCD SPECTROGRAPH	F1.8 High Sensitivity CCD Spectrograph TEC cooled CCD camera to -60°C or -70°C 16 Bit Digitization Optical Resolution: ~10 cm <sup>-1</sup> (6cm <sup>-1</sup> Optional) ( 785 nm Excitation) Nominal Resolution: ~1.9cm <sup>-1</sup> /pixel Spectral Coverage: ~ 250 cm <sup>-1</sup> to 3,200 cm <sup>-1</sup> ( 785 nm Excitation)
SYSTEM SOFTWARE	Data Acquisition, Chemical Process Monitoring, and Spectra Management Software X-axis and Y-axis calibration function Spectral database search and management with GRAMS/AI Optional Symbion-RX Software for Pharmaceutical on-line process control applications (21CFR Part11 Compliant)
SYSTEM OPERATING TEMPERATURE/ PROTECTION	10°C - 40°C With Thermal Shutdown Protection
POWER REQUIREMENTS	90V AC to 264V AC Auto-Switched, 47Hz to 67Hz
DIMESIONS (L x W x H)" WEIGHT	17.25" x 17" x 7" ~ 30 LBS
SYSTEM WARRANTY	One Year for Parts and Labor

*Specifications are subject to change without notice.*



Appropriate safety guidelines should be followed when operating this instrument. Complies with 21 CFR 1040.10 and 1040.11

**Made in USA**