

ProRaman-L Series HIGH PERFORMANCE LABORATORY RAMAN ANALYZERS

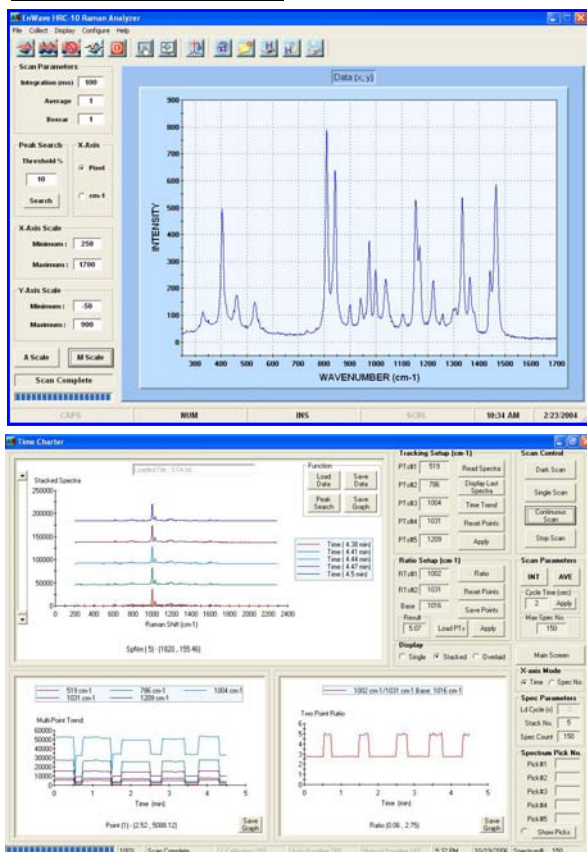
The new **ProRaman-L Series** are high-performance laboratory Raman instruments suitable for industrial applications or laboratory experiments requiring an affordable, high sensitivity Raman instrument.

Each system in the ProRaman-L Series features a 785nm frequency stabilized laser, a high sensitivity spectrograph with cooled CCD options from -50°C to -70°C , and a high throughput laboratory fiber optic probe. Each system achieves $\sim 4.5\text{--}6.5\text{cm}^{-1}$ average optical resolution (depending on model) with spectral coverage available from $\sim 250\text{--}2,350\text{cm}^{-1}$; $\sim 100\text{--}2,200\text{cm}^{-1}$; or $\sim 100\text{--}3,300\text{cm}^{-1}$.

The ProRaman-L Series is ideal for demanding laboratory Raman identification, chemical process monitoring in the lab, and for any academic, research, industrial laboratories 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**
- **CCD Cooled to from -50°C to -70°C**
- **Averaged Optical Resolution $\sim 4.5\text{--}6.5\text{cm}^{-1}$, Spectral Coverage: ~ 250 to $2,350\text{ cm}^{-1}$; ~ 100 to $2,20\text{ cm}^{-1}$; and ~ 100 to $3,300\text{ cm}^{-1}$ (785nm excitation)**
- **HRP-8 High Throughput Laboratory Probe (O.D. > 8)**
- **Best Performance / Cost**

HIGH PERFORMANCE LABORATORY RAMAN ANALYZERS *ProRaman-L Series*
SPECIFICATIONS

EXCITATION SOURCE NIR, Frequency Stabilized, Narrow Linewidth Diode Laser
Wavelength Accuracy: 785 nm
Laser Power: ~300-400mW (Higher Output Power Available Upon Request)
Estimated Laser Lifetime: > 10,000 Hours
Laser Shutter Control
532, 670, 830nm available

LABORATORY FIBER-OPTIC PROBE Working Distance: 7 mm (Standard), 3mm and 10 mm (Optional)
Rayleigh Rejection: O.D. > 8 at Laser Wavelength

CCD SPECTROGRAPH High sensitivity F2.2 Spectrograph
TEC cooled CCD camera (-50°C, -60°C, or -70°C)
16 Bit Digization
Integration time: Up to 10 minutes

A2 Model:
Spectral Coverage: ~250cm⁻¹ to 2,350 cm⁻¹
Optical Resolution: ~4.5 cm⁻¹ (Standard 785nm laser)
Nominal Resolution: ~1.3 cm⁻¹/pixel

A1 Model:
Spectral Coverage: ~100cm⁻¹ to 2,200 cm⁻¹
Optical Resolution: ~4.5 cm⁻¹ (Standard 785nm laser)
Nominal Resolution: ~1.3 cm⁻¹/pixel

B Model:
Spectral Coverage: ~100 to 3,300 cm⁻¹
Optical Resolution: ~6.5cm⁻¹ (Standard 785nm laser)
Nominal Resolution: 2 cm⁻¹/pixel

SYSTEM SOFTWARE Data Acquisition and Spectra Management Software
Data Files Can Be saved as .TXT, .SPC, .DAT, or .BMP Formats
Direct Export to GRAMS or Excel for Post Processing and Modeling
Time Chart with Stacked, Overlaid, and Single Spectrum Display Modes
Time Trend and Ratio Calculate in Time Chart Mode
Auto Base Line, Manual Base Line

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 4" x 6.25" x 8.25"
~ 6 LBS

SYSTEM WARRANTY One Year for Parts and Labor

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

Made in USA

Specifications are subject to change without notice.

