

## MICROSENSE-N SERIES

LOW COST HIGH PERFORMANCE  
RAMAN MICROSCOPE

The MicroSense-N Series Raman microscope provides the most cost-efficient solution for microscopic Raman analysis.



The MicroSense-N system features a Leica DM300 microscope and an EZRaman-N Raman analyzer, the best available low cost Raman system. The MicroSense-N-785 achieves 50Microm spatial resolution with a 40x objective and  $\sim 6.5\text{cm}^{-1}$  spectral resolution with many spectral coverage options to choose from, with both 785nm and 532nm lasers available. The system comes with a high resolution CMOS imaging camera to view samples while making measurements.

The EZRaman-N unit is also detachable and can be used independently as a laboratory Raman analyzer.

The MicroSense-N is a powerful, versatile, robust and affordable Raman microscopy system. It is an ideal choice for any academic, research, industrial, and all other applications requiring an affordable, high performance Raman Microscope System.

### Features and Benefits

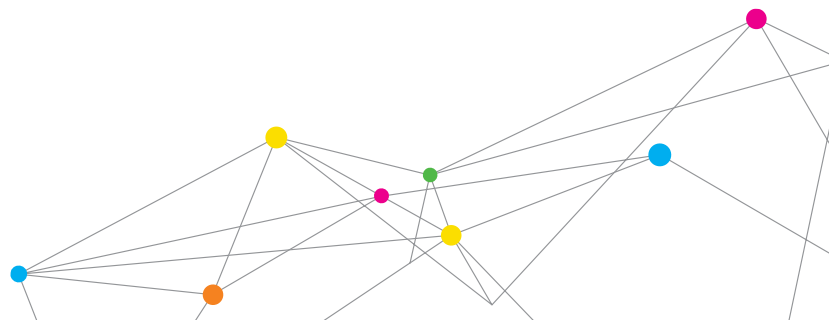
- + Fast sample times
- + Laboratory performance at a low price
- + Average optical resolution  $\sim 6.5\text{cm}^{-1}$  (785nm laser option)
- + 50  $\mu\text{m}$  laser beam spot resolution with 40x objective
- + Dual-use detachable laboratory Raman unit
- + Compact and robust
- + Easy to move from one location to another
- + Minimal sample preparation

### Applications

- + Academic
- + Research
- + Industrial



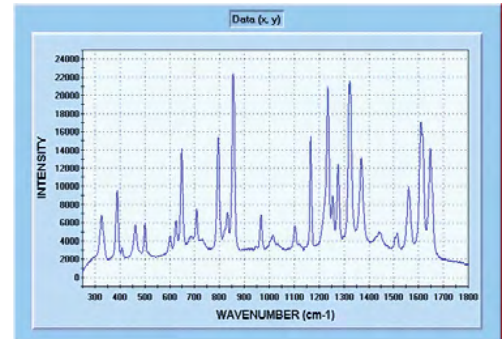
UNDERSTANDING, ACCELERATED



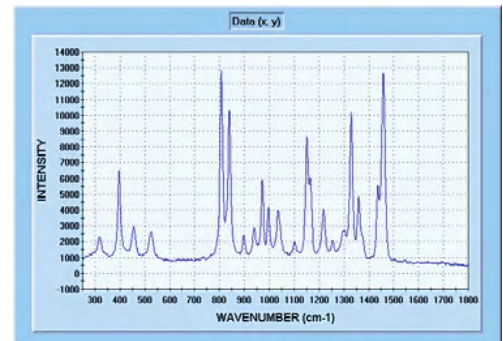
# SPECIFICATIONS

## MICROSENSE-N SERIES LOW COST HIGH PERFORMANCE RAMAN MICROSCOPE

Raman Spectrometer				
	EZRaman-N-785		EZRaman-N-532	
Laser	785 nm frequency stabilized, narrow linewidth diode laser		532 nm DPSS laser	
Output Power	~300mW		~50mW	
Spectral Parameter Options	Model	Spectral Range	Model	Spectral Range
	A1	100 - 2,200 $\text{cm}^{-1}$	B	100 - 3,300 $\text{cm}^{-1}$
	A2	250 - 2,350 $\text{cm}^{-1}$	C	100 - 4,000 $\text{cm}^{-1}$
	B	100 - 3,300 $\text{cm}^{-1}$	—	
Nominal Resolution	~1.3 - 1.9 $\text{cm}^{-1}$ /pixel		~1.8 - 2.3 $\text{cm}^{-1}$ /pixel	
Hrp-8 High Throughout Fiber-Optic Raman Probe	Rayleigh rejection: O.D. > 8 at laser wavelength			
Working Distance	~7 mm (standard), 3mm or 10 mm (optional)			
Operating Temperature	10°C - 40°C with thermal shutdown protection			
Laser Shutter Control	Optical power adjustable from 0 to full power (optional: single transverse mode laser with ~50mW output power at laser source)			
CCD	F/1.6 CCD spectrograph			
CCD	High sensitivity CCD spectrograph TEC cooled to -25°C from ambient temperature			
MicroViewer				
MicroViewer-785/532 Raman adaptor with 1.3M Pixel CMOS viewing camera and white light LED epi-illumination				
Microscope				
Leica BME Microscope with 10x, and 40x Objectives. (Optional 100x and 40x Long Working Distance Objectives also available) Spatial Resolution 50 $\mu\text{m}$ with 40x objective (multi mode 300mW laser) Spatial Resolution 5 $\mu\text{m}$ with 40x objective (single mode 50mW laser)				
System Software				
RamanReader data acquisition and spectral search ready software micro-imaging software for sample viewing				
System Operating Temperature/Protection				
10°C - 40°C with thermal shutdown protection				
Power Requirements				
DC power supply (work both for 110/220V)				
Physical				
Dimension (L x W x H)	EZRaman-N: 286 x 218 x 178 mm			
	Microscope: 257 x 182 x 380 mm			
Weight	~ 35 LBS			
System Warranty				
One year for parts and labor				



Sample Spectra –Tylenol



Sample Spectra –Polypropylene

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

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