

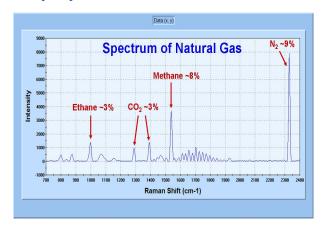
The GasRaman NOCH-1 is an optical fiber-based Raman system for gas phase sample analyses. Based on Raman scattering, the instrument are suitable for  $H_2$ ,  $N_2$ ,  $O_2$ ,  $CO_2$ ,  $NO_2$ ,  $CH_4$  and other gases with active Raman signals.

The GasRaman NOCH-1 simultaneously detect multiple gases with linear responses to the concentration of the samples. The instrument can be used in laboratory or online process monitoring. It provides fast and robust quantitative analyses for applications in natural gas, biogas, petrochemical, chemical, polymers, nuclear industry, and biotech process analyses.

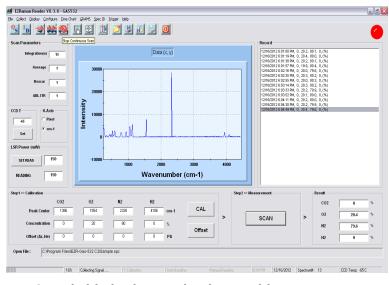
#### **Features**

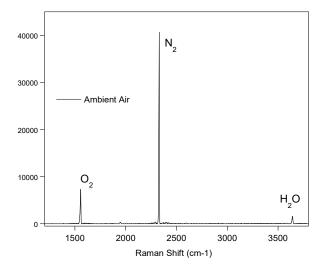
- 532nm DPSS laser excitation with high sensitivity
- High Rayleigh rejection fiber optic probe with various length options for convenience and remote sampling
- Enable multi-gas analysis like H<sub>2</sub>, N<sub>2</sub>, O<sub>2</sub>, CO<sub>2</sub>, NO<sub>2</sub> and other gases at atmospheric pressure to ~0.02% using FloGasCell
- Fast and robust quantitative analyses with RamanReader-G laboratory software.
- Long term repeatability, stability, and reliability
- Robust, stable, and little maintenance
- Compact and durable design for process gas phase Raman analysis

## Sample Spectra



### RamanReader-G software interface





- Control of the hardware and evaluation of the Raman spectra.
- Quantitative analyses of gas samples
- Raman software is GRAMS compatible
- Optional Symbion DX-GasRaman software for industrial process monitoring

# GasRaman NOCH-1

## **Specifications**

Model	GasRaman NOCH-1
Excitation Laser (nm)	532nm Laser
Spectrometer	Spectral Coverage: ~250 nm to 4200 cm-1
CCD	TE Cooled CCD camera; 16 Bit Digization
SOFTWARE	RamanReader-G Gas Analysis Software
OPERATING TEMPERATURE	10°C - 40°C with Thermal Shutdown Protection
POWER REQUIREMENTS	DC power supply (work both for 110/220V)
DIMESIONS (L x W x H)"	17" x 17" x 9.5"
WARRANTY	One Year for Parts and Labor
Optional Accessories	<ul> <li>FloGasCell: 3x Sensitivity improvement flow through gas cell</li> <li>Optional Symbion-DX GasRaman for industrial on-line process monitoring integration</li> </ul>

 $Specifications\ \ are\ subject\ to\ change\ without\ notice.$ 

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

