Raman 532nm

Compact Raman spectrometer for
Research & education

- High sensitivity
- Easy working distance adjustment
- Vial or contact analysis through interchangeable microscope objectives
- Easy to use software with an extended range of data processing
- High spectral measure reproducibility
- Chemometrics software suite available
- OEM available

About Raman spectroscopy

Raman spectroscopy is a quick, non-destructive technique that provides valuable molecular information. It allows for the analysis of materials in their natural state, without the need for extensive sample preparation. Our compact Raman spectrometer delivers accurate, real-time chemical and structural insights, making it ideal for geology, gemmology, and education. Portable and easy to integrate, it enables on-site analysis with exceptional precision and sensitivity, thanks to its integrated micrometric stage, which allows for easy and precise adjustment of the sample position.

GoyaLab SAS - contact@goyalab.fr - www.goyalab.com
Institut d'optique d'Aquitaine, rue François Mitterrand - 33400 Talence - France

Specifications

PHYSICAL	
Dimension	188 x 115 x 55mm
Weight	1kg
OPTICAL PARAMETERS	
Optical resolution	*10cm^{-1} at midpoint of shift*
Spectral range	*100 – 3200 cm^{-1}*
Slits	*25µm*
Diffraction grating	*600l/mm, 580nm blaze*
DETECTION	
Sensor	CMOS sensor Dim: 3840 X 2160 px pixel size: 2µm
Exposure	1ms to 30s (multi cycles acquisition available)
Signal to Noise	1000 :1

RAMAN MODULE

Laser source	CNI 532nm / CW laser module FWHM : 0.1nm Adjustable power from 1mW to 80mW
Cut off	100cm^{-1} (In option at 20cm-1)
Objective	Std: 4x microscope objective Interchangeable by operator
Sample holder	Vial holder

SYSTEME CONFIGURATIONS

Data Format	txt – CVS – SPC
Power	5V - 500mA

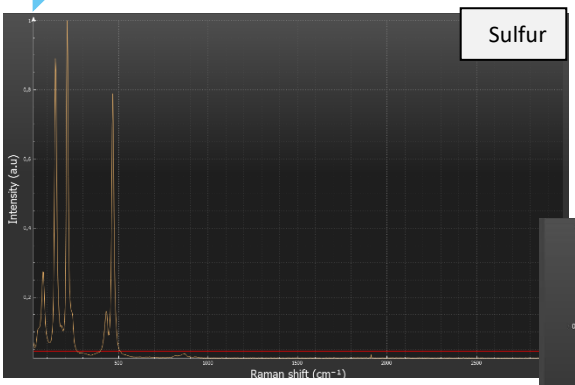
INTERFACES

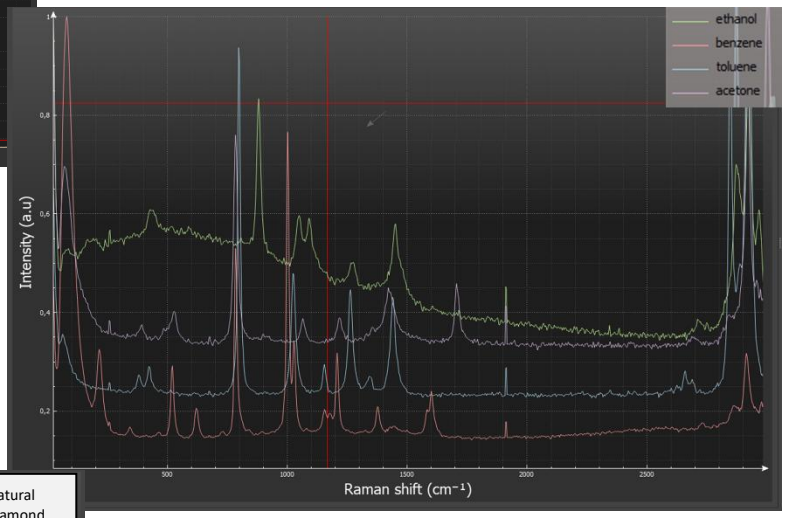
Operating system	Windows 11
USB	USB-C
Software	SpectroLab, compatible with KnowItAll

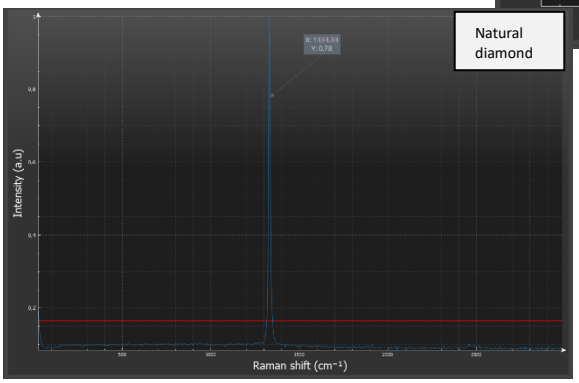
CALIBRATION

Wavelength	Automatic recalibration on polystyrene sample provided

Chemical compound spectra examples







About GoyaLab

GoyaLab is a French SME that designs, develops and markets measurement tools based on spectrometry. Moreover, it provides expertise in Research and Development, serving the industry in the development of specific applications in spectrometry.

GoyaLab's philosophy is to develop powerful spectrometry tools that are easy to use, mobile and affordable thanks to new communication technologies (smartphones, tablets).

GoyaLab wants to democratize spectrometry and make it accessible to all.

GoyaLab SAS - contact@goyalab.fr - www.goyalab.com
Institut d'optique d'Aquitaine, rue François Mitterrand - 33400 Talence - France