

RS2000LABPro 785nm Laser Benchtop Raman Analytical Instruments Laboratory

Our Product Introduction

for more products please visit us on spectralanalyser.com

Basic Information

- Place of Origin: CHINA
- Brand Name: JINSP
- Certification: CE ISO9001
- Model Number: RS2000LABPro
- Minimum Order Quantity: 1
- Price: Negotiable
- Packaging Details: Customized Packaging
- Delivery Time: 60-80working days
- Payment Terms: TT
- Supply Ability: 20 PCS/60-80 days



Product Specification

- Laser Wavelength: 785nm
- Wavelength Accuracy: 0.2nm
- Wavelength Stability: 0.01nm
- Connectivity Interface: USB 2.0
- Output Data Format: Spc Standard Spectrum, Prn, Txt And Other Formats Are Optional
- Communication Protocols: Modbus
- Power Supply: 100 ~ 240 VAC 50 ~ 60 Hz
- Operating Temperature: 0 ~ 40
- Power Consumption: 50W
- Detection Accuracy: 0.01%
- Highlight: **raman analytical instruments Laboratory,**
785nm raman analytical instruments

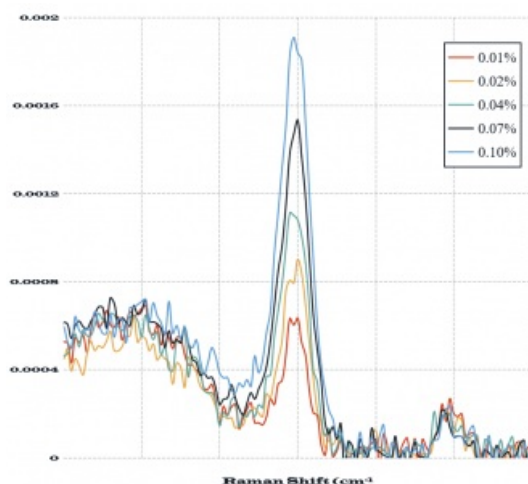
RS2000LABPro 785nm Laser High Sensitivity Portable/Benchtop Laboratory Raman Analytical Instrument



Product Description:

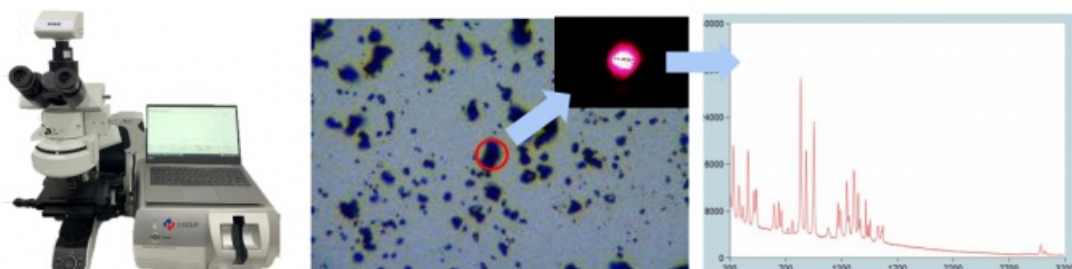
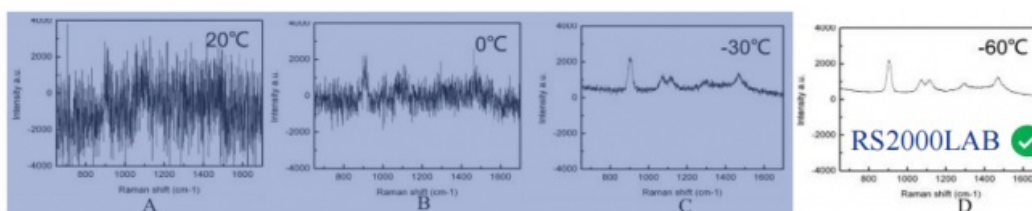
JINSP® RS2000LABPro Proportable Raman spectrometer is a high-performance detection device, which supports qualitative and quantitative analysis of chemicals quickly and in a non-destructive manner, with high sensitivity, high SNR and wide spectral range.

RS2000LABPro can be configured with different excitation wavelengths based on the specific detection tasks. It is equipped with different kinds of test accessories and sample holders to satisfy detection tasks in such fields as drug substance research, biomedicine, chemical analysis, material research, etc.



Technical Advantages:

- **Exceptional light efficiency:** The transmission spectrometer is designed to maximize light throughput, ensuring that even the faintest signals are captured with precision and clarity. Its innovative optical design allows for superior light transmission, making it an ideal choice for applications requiring high levels of accuracy and efficiency in spectral analysis.
- **Superior sensitivity:** The deeply cooled detector integrated into this advanced instrument offers unparalleled sensitivity, enabling the detection of even the most subtle signals. This high sensitivity is complemented by a remarkable signal-to-noise ratio (SNR), which ensures that the data collected is not only accurate but also reliable, making it an indispensable tool for researchers and scientists in various fields.
- **Versatile application:** This versatile instrument can be easily adjusted to incorporate micro-Raman functionality when integrated with a microscope. This integration allows for a wide range of applications, from material science to biological research, providing users with the flexibility to adapt the system to their specific needs and requirements.
- **Advanced software capabilities:** The spectrometer comes equipped with state-of-the-art software that offers a comprehensive suite of features. These include data acquisition, which allows for the efficient collection of spectral data; data smoothing, which helps in refining the collected data for better analysis; noise reduction techniques to ensure that only the most relevant information is considered; difference spectrum analysis for comparing multiple samples or conditions; comparison tools that enable side-by-side analysis of different datasets; and the establishment of quantitative analysis methods, which allows for the precise measurement and comparison of sample concentrations.
- **Multi-functional detection accessories:** The spectrometer is equipped with a variety of detection accessories, making it a truly versatile instrument. These accessories include solid and liquid sleeves, which are designed to accommodate different sample types, as well as a closed detection chamber. This chamber ensures that samples remain secure and uncontaminated during the detection process. Whether dealing with solids, powders, or liquids, this spectrometer is well-equipped to handle a diverse array of sample forms, providing users with the flexibility to conduct a wide range of detection tasks with ease and efficiency.



Technical Parameters:

Technical Parameter	Value
Product	Portable/Desktop Raman Analyzer
Measurement Type	Raman Spectrometer
Laser wavelength	785nm

Wavelength accuracy	0.2 nm
Wavelength stability	0.01 nm
Resolution	$<6\text{ cm}^{-1}$
Laser power	0~500 mW, continuously adjustable power
Sample Type	Liquid & solid
Standard accessories	Solid sleeve, liquid sleeve, light-proof sample cell
Optional accessories	Microscope, mechanically adjustable stage
Software functionality	Spectral acquisition, spectral data processing, spectrogram comparison, equipment calibration
Net Weight	$\leq 10\text{ kg}$
Working environment	Working temperature: 0~40 . Storage temperature: -20~55
Data output format	Spc standard spectra, txt, prn and other formats available
Power supply	100-240 VAC, 50-60HZ
Certifications	CE ISO9001

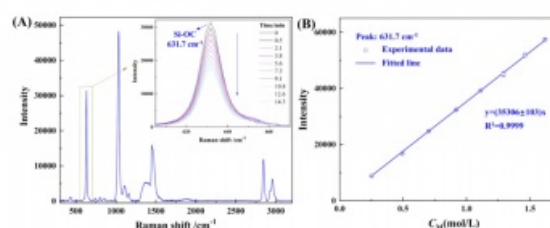
Applications:

Research on silicone reaction kinetics

Quantitative determination of base-catalyzed hydrolysis kinetics of methyltrimethoxysilane by in-situ Raman spectroscopy - ScienceDirect



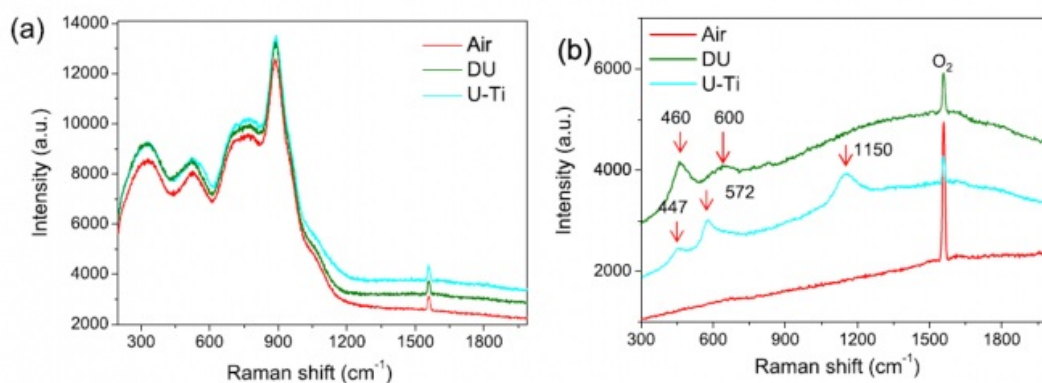
Fig. 1. Photograph of the in-situ Raman monitoring system.



Raman spectra and quantitative models of different MTMS contents in methanol solution

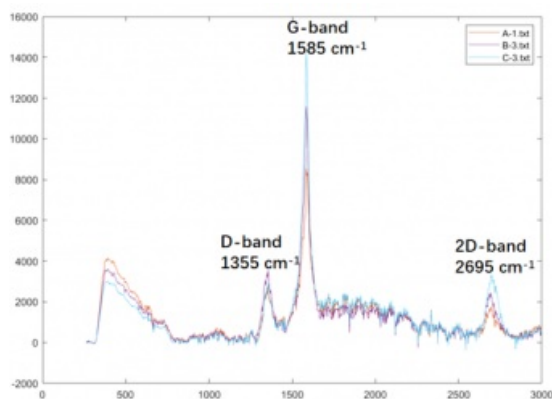
Surface analysis of uranium materials

The spectral background problem of portable fiber Raman instruments and a solution for the on-site detection of extremely weak signals | Review of Scientific Instruments | AIP Publishing



Structural Characterization of Carbon Materials

Graphene, carbon nanotubes, and carbon composite materials are hot research topics in the field of physics, chemistry, and advanced materials.



FAQ:

Q1: This is the first time I use it, is it easy to operate?

A1: We will send you a manual and guide video in English, it can teach you how to operate the spectrometer. Also, our technicians will offer professional technical operation meetings.

Q2: Can you offer an operation training?

A2: Your technicians can come to our factory for training. Jinsp engineers can go to your place for local support (installation, training, debugging, maintenance).

Q3: How to receive the best price in the shortest time?

A3: When you send us an inquiry, please kindly offer details with wavelength, detector, effective pixels, focal length, and so on. We will send you a quotation with details soon to your email.

Q4: If the spectrometer has a problem in my place, what could I do?

A4: The spectrometer has a one-year warranty. If it breaks down, our technician will figure out what the problem maybe, according to the client's feedback. We can repair for free within one year warranty.

Q5: What about quality assurance?

A5: We have a quality inspection team. All goods will go through quality inspection before shipment. We can send you pictures for inspection.



JINSP Company Ltd.



8618620854039



phoebeyu@jinsptech.com



spectralanalyser.com

21st Floor, Building D, Tsinghua Tongfang Science and Technology Plaza, Haidian District, Beijing China