1064nm Laser Industrial Process Online Raman Analyzer Single Channel

Our Product Introduction

Basic Information

- Place of Origin: CHINA
- Brand Name: JINSP
- Certification: CE ISO9001
- Model Number: RS2100PAT
- Minimum Order Quantity: 1
- Price: Negotiable
- Packaging Details: Customized Packaging
- Delivery Time: 90-120 working days
- Payment Terms: TT
- Supply Ability: 20 PCS/90-120 days

Product Specification

- Laser Wavelength: 1064nm
- Wavelength Accuracy: 0.2nm
- Wavelength Stability: 0.01nm
- Power Supply: 900 W (max) 500 W (typical Running)
- Number Of Detection Channels: 1 Single Channel
- Explosion Protection Rating (Main Unit): Ex Db Eb Ib Pzc C T4 Gc / Ex Ib Pzc Tb C T130°C Dc
- Detection Accuracy: 0.5%
- Operating Temperature: -20 ~ 50
- Highlight: **1064nm Laser Online Raman Analyzer**, **Online Raman Analyzer Single Channel**, **Raman Analyser Single Channel**

Our Product Introduction

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Product Description

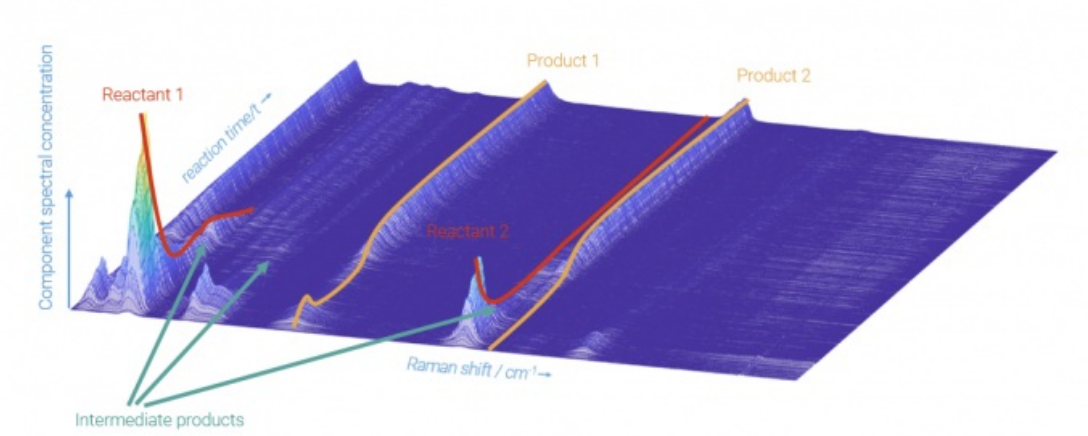
1064nm Laser Single Channel High Applicability Cost Effective Industrial Process Online Raman Ananlyzer

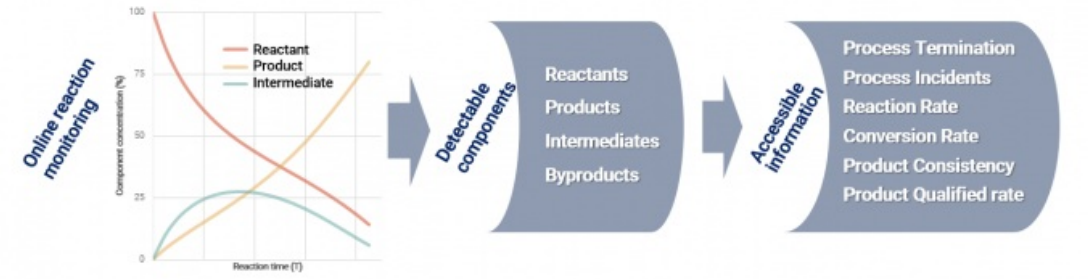
Product Description:

Industrial explosion-proof design can be used for online analysis of chemical product production processes, suitable for continuous flow reactors and batch reactors.

JINSP® RS2100PAT online Raman analyzers provide in situ, real-time, and continuous composition analysis of chemical processes in the production environment.

RS2100PAT analyzers are highly suitable for dangerous chemical processes including nitration, chlorination, fluorination, hydrogenation, diazotization, etc. Available with both continuous flow processes and batch processes. RS2100PAT analyzers help increase process understanding and boost product quality.





Highlights:

• In situ: This innovative approach eliminates the need for sampling, thereby avoiding any potential contact with hazardous samples that could pose a risk to human health or the environment. By conducting measurements directly at the location of interest, it ensures a higher level of safety and accuracy in the data collected.

• Real-time results: The system is designed to deliver instantaneous results, providing data within mere seconds. This rapid response capability ensures that decisions can be made promptly, enhancing overall operational efficiency and minimizing downtime.
• Continuous monitoring: The technology enables uninterrupted monitoring throughout the entire process. This ensures that any changes or anomalies are detected immediately, allowing for real-time adjustments and interventions, thereby maintaining optimal conditions and preventing potential issues.

• Intelligent: The system is equipped with advanced analytical capabilities that automatically provide detailed results. By leveraging cutting-edge algorithms and machine learning techniques, it interprets complex data and presents it in an easily understandable format, reducing the need for manual analysis and human error.

• Internet connectivity: The device is connected to the internet, ensuring that the results are communicated to the central control system in a timely manner. This feature enables remote monitoring and management, allowing for quick dissemination of information and coordinated responses across different locations, ultimately improving the overall efficiency and effectiveness of the operation.

Can withstand extreme reaction conditions such as strong acid, strong alkali, strong corrosiveness, high temperature, and high pressure

Real-time response in seconds, no need to wait, providing analysis results promptly.

No sampling or sample processing required, in-situ monitoring without interference to the reaction system.

Continuous monitoring to quickly determine the reaction endpoint and alert for any anomalies.

Technical Parameters:

Technical Parameter	**Value**
Product	Online Raman Analyzer
Measurement Type	Raman Spectrometer
Laser wavelength	1064nm
Sample Type	Liquid
Number of detection channels	1 single channel
Chamber dimension	600 mm(width)× 400 mm(depth)× 900 mm(height)
Device dimension	900 mm(width)× 400 mm(depth)× 1300 mm(height)
Explosion Protection Rating (Main Unit)	Ex db eb ib pzc C T4 Gc / Ex ib pzc tb C T130°C Dc
Operating temperature	-20 ~ +50
Thermostat	Three-level temperature control system design can operate stably for a long time in an environment of -20 ~ 50 , and is suitable for online monitoring environments in different factories
Connectivity	RS485 and RJ45 network ports provide Mod Bus protocol, can be adapted to many types of industrial control systems, and can feedback results to the control system.
Probe	One standard 5 m non-immersed fiber optic probe (PR100)

% Relative humidity	0~90%RH
Power supply	900 W (Max) 500 W (Typical running)
Pre-heating time	60 min

Applications:

Li-ion battery industry
Research on the synthesis process of bis(fluoro sulfonyl)amide

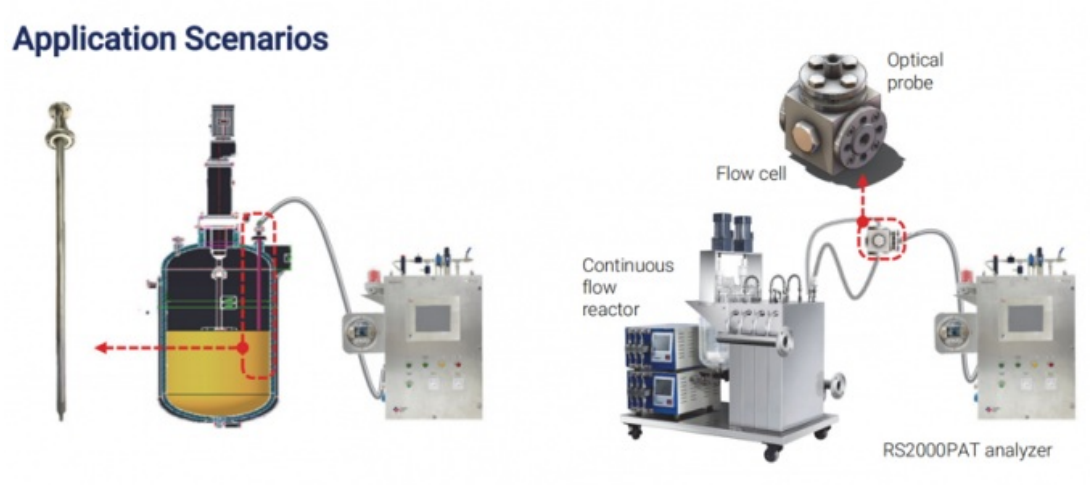
Biopharmaceutical industry
Quality Control in Biofermentation Engineering

Fine chemical industry
Research on the process of producing furfuryl alcohol by hydrogenation reaction of furfural

For example: Product quality/Consistency Control in Large-Scale Production
In the large-scale production of chemical/biochemical processes, ensuring the consistency of product quality requires batch-by-batch or real-time analysis and testing of reaction products. Online monitoring technology can automatically check the quality control of 100% of batches due to its speed and continuity advantages. In contrast, offline detection techniques, frequently depend on sampling inspections, which expose non-sampled products to potential quality risks as a consequence of their intricate procedures and delayed outcomes.
Typical Users: Process production personnel in pharmaceutical and biopharmaceutical companies; production personnel in new materials and chemical enterprises.

Usage models:

The RS2100PAT can be used in two ways in large-scale production.
The first way is to use an industrial immersion long probe to go deep below the liquid surface of the reaction system to monitor the reaction components, which is more suitable for kettle-type batch reactors;
The second way is to use the flow cell to bypass to connected probe for online monitoring, which is more suitable for continuous flow reactors and other types of reaction vessels.



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.

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