

## Highly Safe Enhanced Raman Spectroscopy Multi-gas Analyzer with Real-time Measurement and ppm Level Detection Limit

Our Product Introduction

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### Basic Information

- Place of Origin: CHINA
- Brand Name: JINSP
- Certification: CE ISO9001
- Model Number: RS2600
- Minimum Order Quantity: 1
- Price: Negotiable
- Packaging Details: International Shipping Package
- Delivery Time: 90-120 working days
- Payment Terms: T/T, Western Union
- Supply Ability: 50 Unit 90-120 days



### Product Specification

- Model Name: RS2600 Multi-gas Analyzer
- Laser Excitation Wavelength:  $532 \pm 0.5 \text{ Nm}$
- Spectral Coverage:  $200 \sim 4200 \text{ Cm}^{-1}$
- Analysis Time: 2 Seconds
- Detection Limit: Ppm Level
- Measurement Time: Real-time
- Highlight: **Enhanced Raman Spectroscopy Multi-gas Analyzer**  
**, Real-time Measurement Multi-gas Analyzer**

## Product Description

## RS2600 Raman Based Multi-gas Analyzer

Redefine plant safety with RS2600's simultaneous monitoring of explosive limits and toxic gas thresholds. Its unique wide-range detection (1ppm-100% LEL) provides early warning for CH<sub>4</sub> leaks while tracking oxygen depletion risks in confined spaces. The pressure-independent operation ensures reliability during emergency venting scenarios.

Particularly vital for chemical plants handling reactive fluorine compounds, this analyzer's corrosion-resistant sensors deliver continuous protection against BF<sub>3</sub> releases. The <5-second response to concentration changes enables faster shutdown decisions than conventional gas detection systems.

### Specifications

<b>Components</b>	N <sub>2</sub> , H <sub>2</sub> , O <sub>2</sub> , CO, CO <sub>2</sub> , H <sub>2</sub> S, CmHn, etc.
<b>Analysis time</b>	2 seconds
<b>Measurement uncertainty</b>	≤0.2%
<b>Laser excitation wavelength</b>	532 ± 0.5 nm
<b>Spectral coverage</b>	200 ~ 4200 cm <sup>-1</sup>
<b>Spectral resolution</b>	≤8 cm <sup>-1</sup> at full spectral range
<b>Air circuit interface</b>	6 mm standard tube fitting (3 mm, 1/8", and 1/4" are optional)
<b>Input voltage</b>	100~240 VAC, 50~60 Hz
<b>Sample gas temperature</b>	-50 ~ 40 °C
<b>Sample gas pressure</b>	1.0 MPa
<b>Unit dimensions</b>	485 mm (Width) × 350 mm (Height) × 600 mm (Depth)
<b>Weight</b>	40 kg

### Technical highlights

Non-destructive gas analysis: Analytes including homonuclear diatomic gases (F<sub>2</sub>, Cl<sub>2</sub>, etc.) and isotopic gases (H<sub>2</sub>, D<sub>2</sub>, T<sub>2</sub>, etc.)

Short detection time: Data acquired in seconds

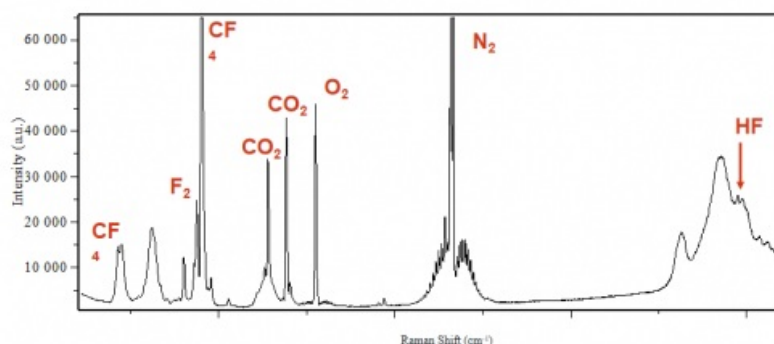
Minimal maintenance: Resistance to high pressure, direct detection without consumables (chromatographic column or carrier gas)

Wide detection range: LOD at ppm level, detection range up to 100%

**Application: 1.** Monitoring of F<sub>2</sub>, N<sub>2</sub>, HF and other components in the fluorination process.

### Monitoring of F<sub>2</sub>, N<sub>2</sub>, HF and other components in the fluorination process

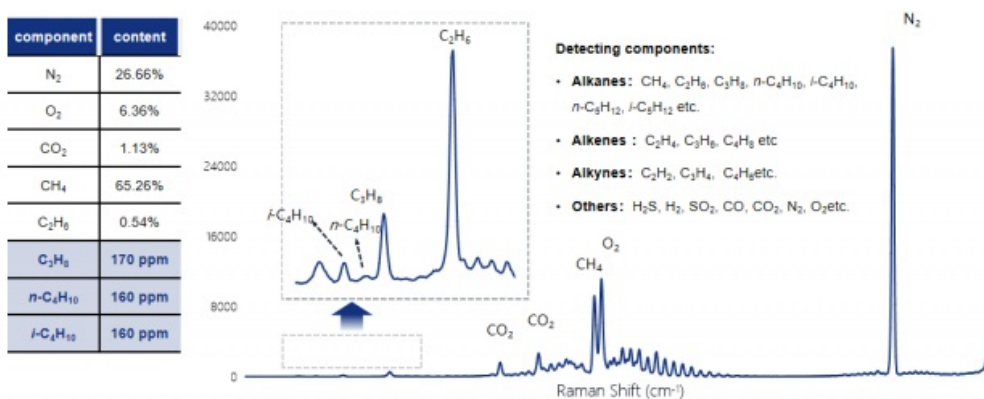
component	content
F <sub>2</sub>	2%
N <sub>2</sub>	79%
HF	0.2%
CO <sub>2</sub>	3%
CO	0.0%
O <sub>2</sub>	3%
CF <sub>4</sub>	10%



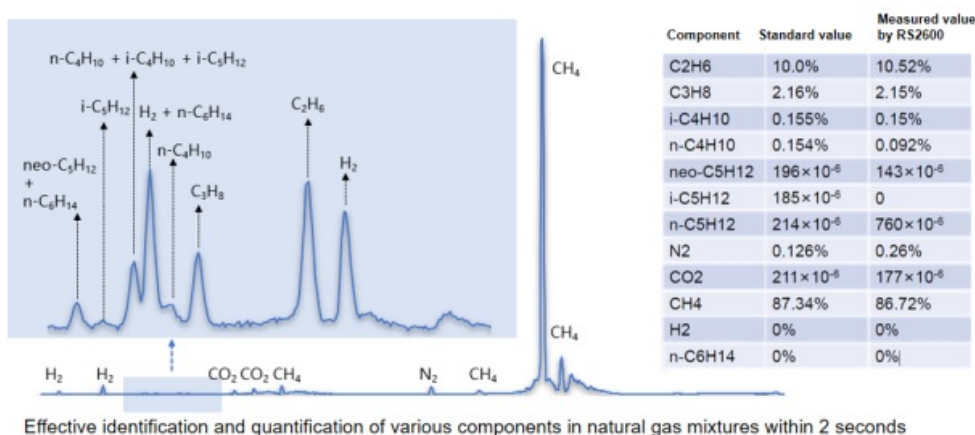
**Application: 2.** Quantitative analysis of different Elements in Petrochemical Natural Gas

Effective identification and quantification of various components in natural gas mixtures within 2 seconds, such as alkanes, alkenes, alkynes, etc.

## Quantitative analysis of different Elements in Petrochemical Natural Gas

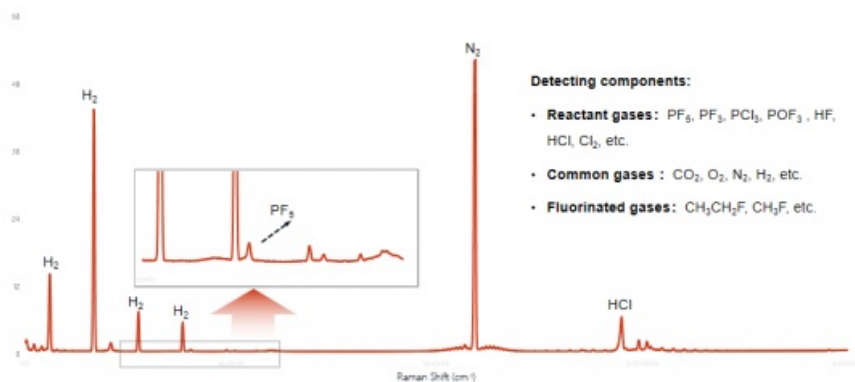


## Quantitative analysis of different Elements in Petrochemical Natural Gas



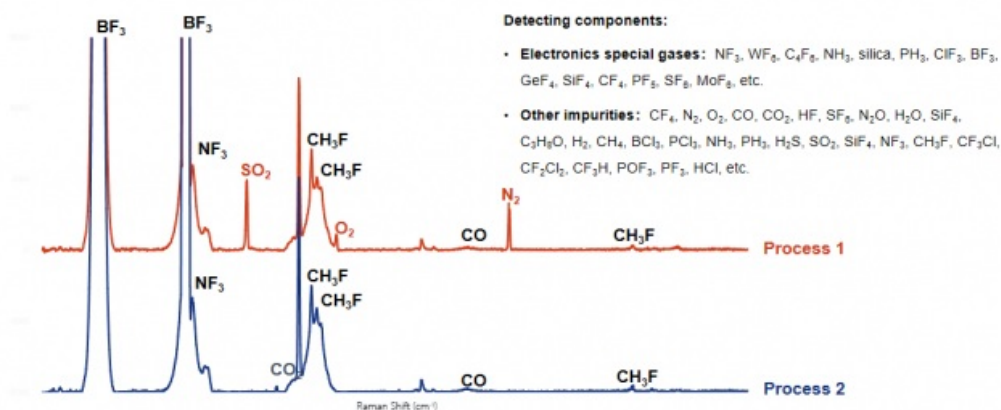
**Application: 3.** Detection of components in reaction and emitted gases of fluorine materials, such as reactant gases, common gases, fluoinated gases.

## Detection of components in reaction and emitted gases of fluorine materials



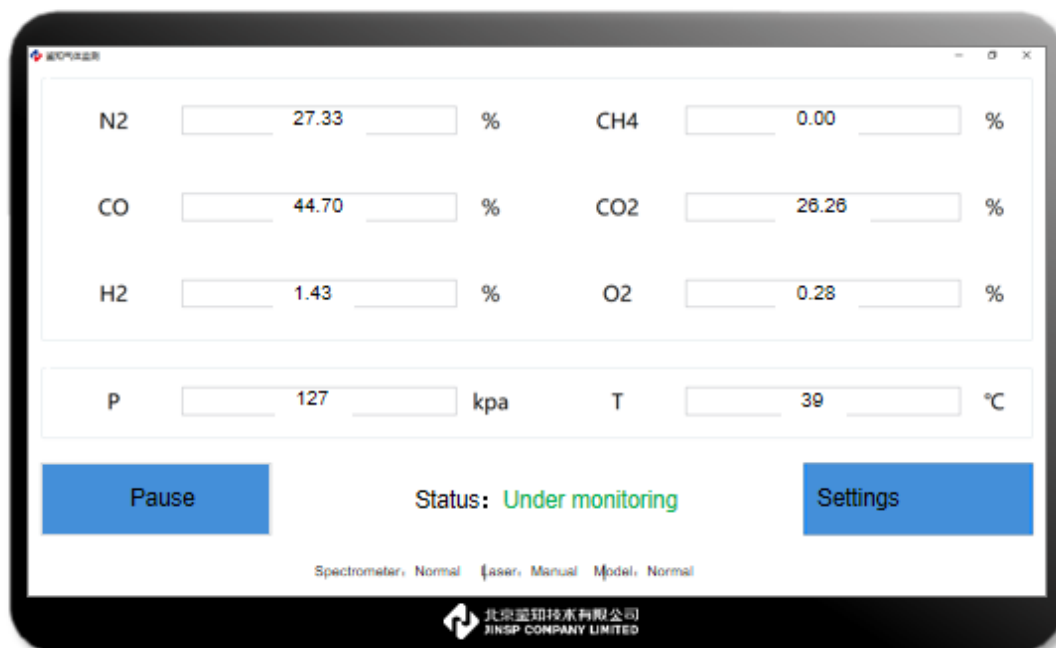
**Application: 4.** Detection of impurity gases and electronic special gases.

## Detection of Impurity Gases in Electronic Special Gases



### Gas Analyzer Features

1. By constructing quantitative models of multiple standard curves and combining them with chemometric methods, the correlation between spectral signals and the content of various component substances can be effectively established. This comprehensive method not only improves the accuracy of analysis, but also enables the simultaneous processing and analysis of multiple different chemical components, providing a powerful tool for quantitative analysis of complex samples.
2. Even in the case of changes in sample gas pressure or fluctuations in testing conditions, this quantitative analysis method can still maintain the accuracy of the results. This is due to its high stability and robustness, ensuring consistent analysis results in any environment, providing reliable data support for scientific research and industrial applications.



JINSP Company Limited, abbreviated as "JINSP", is a professional supplier with over 17 years of experience in spectral detection technology products, including Raman, FT-IR, LIBS technologies, etc. After 17 years of technology accumulation, the company's core key technologies have reached the international leading position at the level, and the cumulative number of patent applications exceeded 200.

JINSP offers over twenty spectroscopic products across various fields, including pharmaceutical and chemical industries, public security, and customs. Products are available nationwide and are exported to over 30 countries, with cumulative sales exceeding 3,000 units.

Benefit from 30+ R&D engineers, including 4 Ph.D., JINSP is deeply rooted in the field of personalized product customization, and is committed to meeting the diverse and unique needs of customers with excellent professional technology and innovative design capabilities.

# Company Profile





# Exhibition



# Certifications



## FAQ

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

A: We will send you 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 a operation training?**

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

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

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

**Q: Do you have MOQ requirement of each order?**

A: No, we support order for even 1pc order.

**Q: What is the product warranty?**

A: All product has 1 year warranty, support extending warranty period with extra cost. Please contact with our sales person.



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