High Signal-to-Noise Ratio Miniature Modular Fiber Optic Spectrometer with 200nm - 1100nm Spectral Range

Our Product Introduction

Basic Information

- Place of Origin: CHINA
- Brand Name: JINSP
- Certification: CE
- Model Number: SR50C
- Minimum Order Quantity: 1
- Price: Negotiable
- Packaging Details: International Shipping Package
- Delivery Time: 30-40 working days
- Payment Terms: T/T, Western Union
- Supply Ability: 100 PCS/30-40 days

Product Specification

- Spectral Range: 200-1100 Nm
- Integration Time: 1 Ms - 60 S
- Signal-to-Noise Ratio: 650:1(4ms
- Dimensions: 76mm*65mm*38mm
- Highlight: **Modular Fiber Optic Spectrometer**, **Miniature Fiber Optic Spectrometer**, **200nm - 1100nm Fiber Optic Spectrometer**

More Images

Product Description

Compact Modular Fiber Optic Spectrometer 200nm - 1100nm

JINSP multi-purpose compact fiber optic spectrometer is characterized by small size, high performance, cost-effective, and versatility. It is well suited for building various common spectral measurement systems, enabling reflection, transmission, and absorption spectra in the range of 200 to 1100 nm.

The spectrometer employs the industry's highest-quality diffraction blazed grating and excellent optical design to ensure high optical luminous flux (throughput) and improve weak signal detection capabilities. Replacing diffraction gratings with different line densities, high- resolution spectral detection can be achieved in the ultraviolet, visible, and near-infrared bands. Equipped with a 2048-pixel high quantum efficiency CMOS chip and a professional high-speed, low-noise signal acquisition and processing circuit, it delivers optimal spectral signal-to-noise ratio.

Technical Parameters:

Detector	Chip Type	Linear array CMOS, Hamamatsu S11639
	Effective Pixel	2048
	Pixel Size	14μm *200μm
	Sensing Area	28.7mm *0.2mm
Optical Parameters	Numerical Aperture	0.14
	Focal Length	≤ 50mm
	Entrance Slit Width	10μm, 25μm, 50μm, 100μm, 200μm
	Resolution	See list of product models for details
	Fiber Interface	SMA905, free space
Electrical Parameters	Integration Time	1ms-60s
	Signal-to-Noise Ratio	650:1(4ms)
	Data Output Interface	Type-C
	ADC Bit Depth	16-bit
	Power Supply	DC 4.5V to 5.5V (type @5V)
	Operating Current	< 500mA
Others	Operating Temperature	10°C ~ 40°C
	Storage Temperature	-20°C ~ 60°C
	Operating Humidity	90%RH (no condensation)
	Dimensions	79mm*68mm*42mm
	Weight	220g

List of Product Models:

Model	Spectral Range (nm)	Resolution (nm)	Slit (μm)
SR50C-G01	200~1000(UV-NIR)	3.5	50
		2.4	25
		1.5	10
SR50C-G03	350~870(VIS)	2.5	50
		2.0	25
		1.2	10
SR50C-G04 SR50C-G07 SR50C-G08	200~550(UV) 350~700(VIS) 780~1050(NIR)	1.8	50
		1.3	25
		0.8	10
SR50C-G09	200~450(UV)	1.0	50
		0.6	25

SR50C-G10	525~700(VIS)	0.3	10

*** Customization available for other ranges**

Technical Characteristics:

Wide Spectral Range

Customized spectral range supporting 200-1100nm

High Signal-to-Noise Ratio

Low-noise CMOS signal processing circuit, with excellent signal-to-noise ratio

Applications:

Supports detection of absorption, transmittance and reflectivity of ultraviolet, visible light and near infrared radiations.

Light source and laser wavelength identification.

OEM product module:

Environmental protection industry (smoke and water quality monitoring),

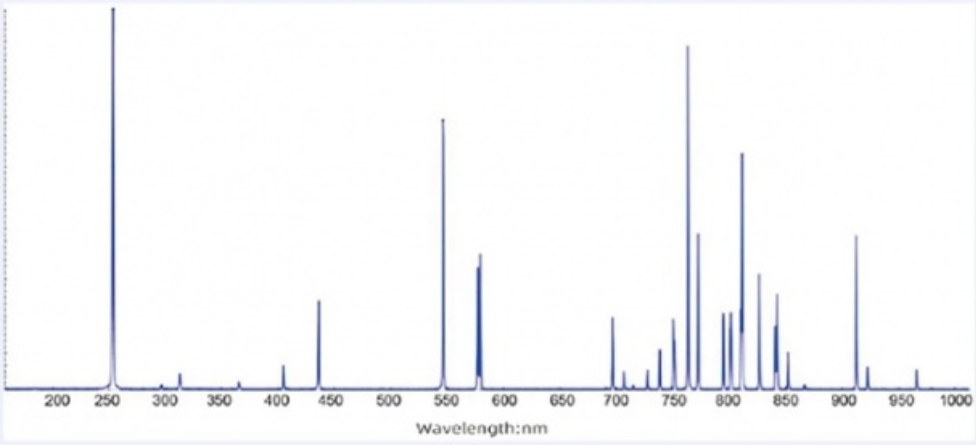
LIBS, fluorescence spectrum,

Raman spectrum.

Technical Characteristics

Wide Spectral Range

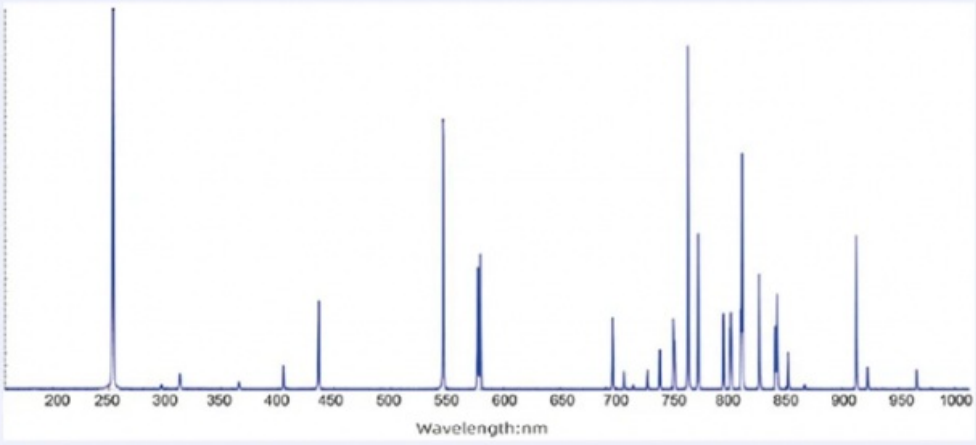
Customized spectral range supporting 200-1100nm



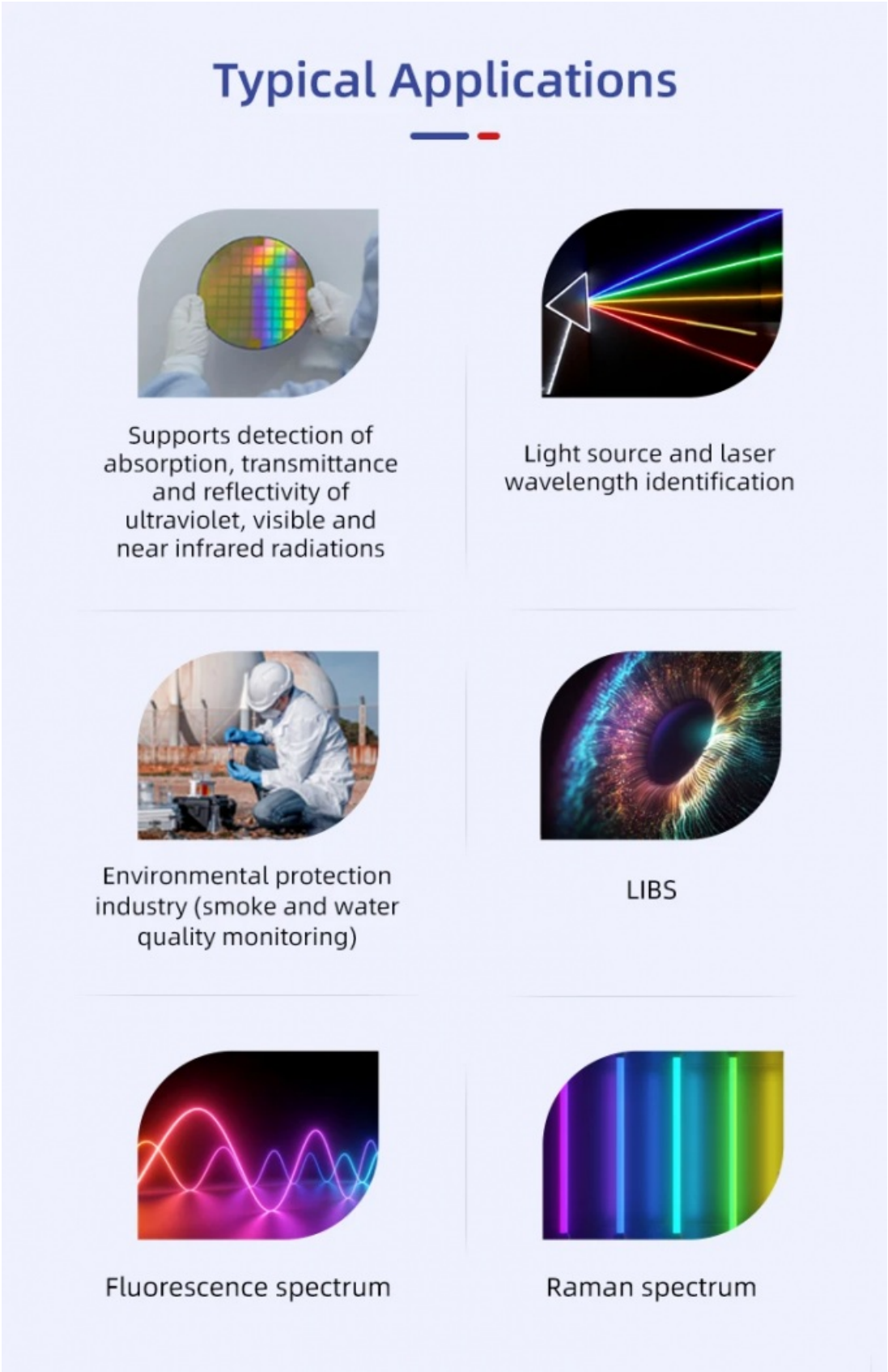
Test results and applications in the range of 200~1000nm–Mercury-Argon Lamp Spectrum

High Signal-to-Noise Ratio

Low-noise CMOS signal processing circuit, with excellent signal-to-noise ratio



Low Noise: Dark noise standard deviation is approximately 20 for 10ms



Company Introduction:

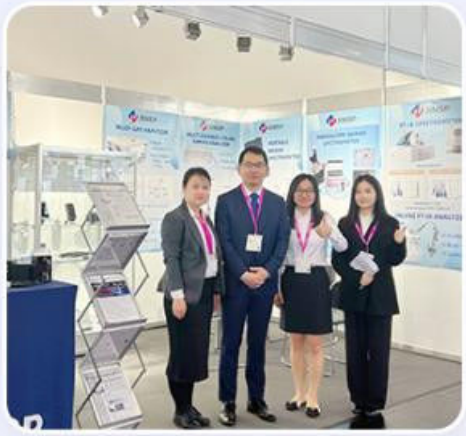
JINSP Company Limited has won the National Science and Technology Commission's Scientific and Technological Achievement Appraisal Certificate and the China Patent Excellence Award, and related products have been obtained has won authoritative awards such as the Geneva International Invention Award, the Beijing New Technology and New Product Certificate, and the "Innovation Achievement Award" of the Zhu Liangyi Analytical Instrument Innovation Award.GB/T 40219-2021 "General Specification for Raman Spectrometer".

JINSP Company received ISO9001:2015, ISO14001:2015, and ISO45001:2018 certifications. JINSP can provide required certifications, such as certification by the Ministry of Public Security or National Institute of Metrology, Environmental Level Certification, IP Level Certification, CE Certification, Transport Identification Report, EU ECAC certification, German ICT Security Testing, etc.

We uphold the core value of "customer-centric" to ensure that every customer can enjoy unprecedented flexibility and personalized experience. From the initial concept to the final product, we work closely together to ensure that every detail is accurately aligned with customer expectations, and together create exclusive products that exceed expectations.

Company Profile

Exhibition



Certifications

FAQ:

Q: What is the brand name of this fiber spectrometer?

A: JINSP is the brand name of this fiber spectrometer.

Q: What is the model number of this fiber spectrometer?

A: The model number of this fiber spectrometer is SR50C.

Q: What certification does this fiber spectrometer have?

A: This fiber spectrometer has CE certification.

Q:Where is this fiber spectrometer made?

A:This fiber spectrometer is made in China.

Q:What are the payment terms for this product?

A:The payment terms for this product are T/T and Western Union. Prices are negotiable.

JINSP Company Ltd.

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