Compact and Lightweight Miniature Fiber Optic Spectrometer Module JINSP SR50C with 200-1100 nm 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: Customized Packaging
- Delivery Time: 30-50 working days
- Payment Terms: T/T, Western Union
- Supply Ability: 100 PCS/70-90 days

Product Specification

- Spectral Range: 200-1100 Nm
- Fiber Interface: SMA905, Free Space
- Integration Time: 1 Ms - 60 S
- Signal-to-Noise Ratio: 650:1(4ms
- Weight: 220g
- Dimensions: 76mm*65mm*38mm
- Highlight: **Compact Miniature Fiber Optic Spectrometer Module** , **Lightweight Miniature Fiber Optic Spectrometer Module**

More Images

Our Product Introduction

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Product Description

High cost performance 200nm - 1100nm Miniature Fiber Optic Spectrometer Module JINSP SR50C

The compact and high-performing JINSP SR50C Miniature Fiber Optic Spectrometer is perfect for achieving reflection, transmission, and absorption spectra in the 200–1100nm range. It enables high-resolution spectral detection in the UV, Visible, and near-Infrared spectrum by varying the grating line density, which can be further improved with interchangeable grating slits.

Equipped with a fast, low-noise signal acquisition and processing circuit, the spectrometer ensures obtaining spectra with the highest signal-to-noise ratio (SNR). Its excellent optical design and blazed diffraction grating ensure a high luminous flux and enhance sensitivity to weak signals.

The spectrometer features an internal integrated temperature sensor capable of real-time monitoring of ambient temperature. Combined with an internal temperature drift compensation algorithm, it can achieve the minimum temperature drift within the working temperature range.

Technical Parameters:

No	Item	Description
1	Name	**SR50C Fiber Optic Spectrometer**
2	Chip Type	Linear array CMOS, Hamamatsu S11639
3	Effective Pixel	2048
4	Sensing Area	28.7mm *0.2mm
5	Focal Length	≤ 50mm
6	Numerical Aperture	0.14
7	Entrance Slit Width	10μm, 25μm, 50μm, 100μm, 200μm (customizable)
8	Dimensions	79mm*68mm*42mm
9	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	200~550(UV)	1.8	50
SR50C-G07	350~700(VIS)	1.3	25
SR50C-G08	780~1050(NIR)	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

Features:

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

High Luminous Flux

Integrated with cylindrical mirror to improve the luminous flux

Low Temperature Drift

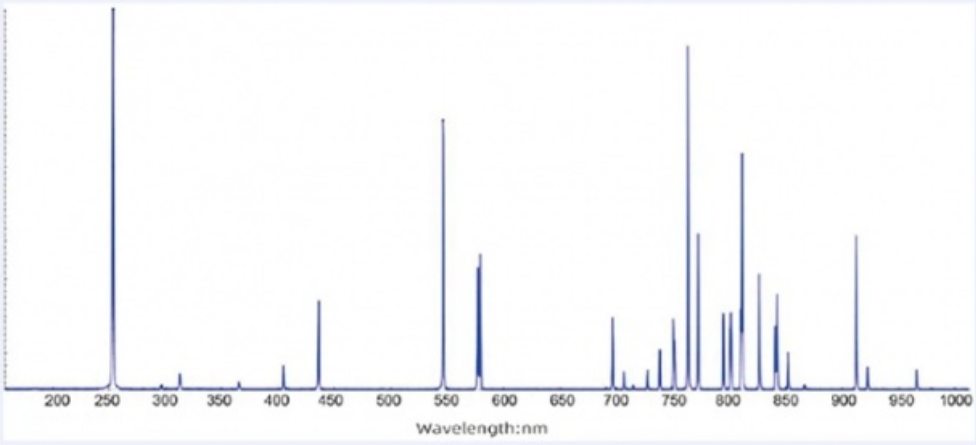
Integrated Temperature Sensor and Temperature Drift

Compensation Algorithm

Technical Characteristics

Wide Spectral Range

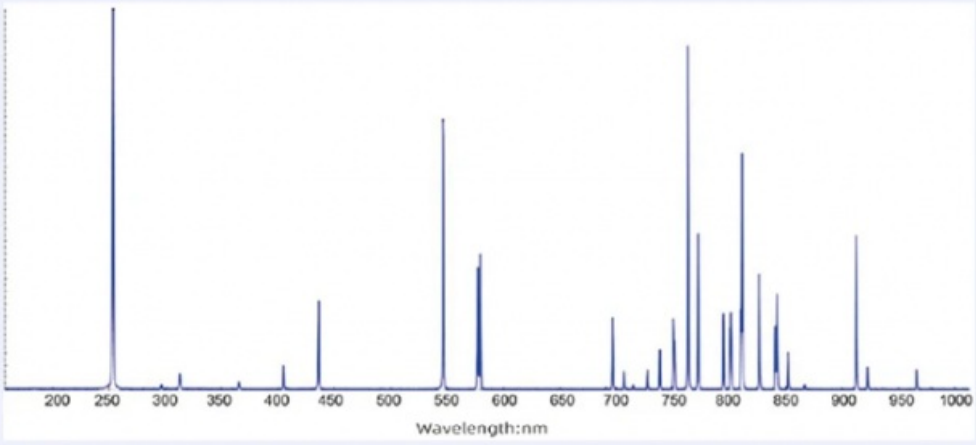
Customized spectral range supporting 200-1100nm



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

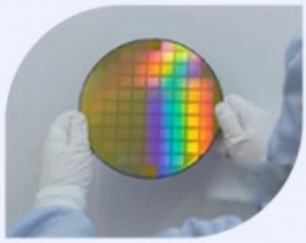


Low Noise: Dark noise standard deviation is approximately 20 for 10ms

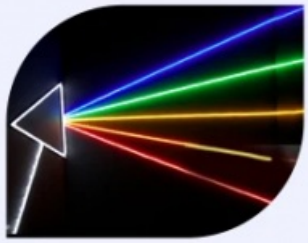
Applications:

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.

Typical Applications



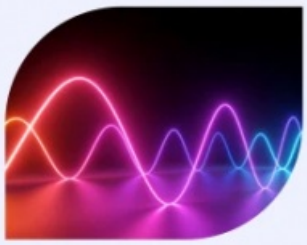
Supports detection of absorption, transmittance and reflectivity of ultraviolet, visible and near infrared radiations



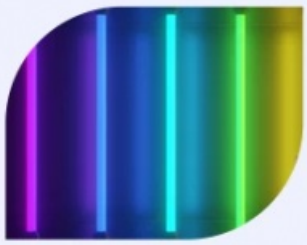
Light source and laser wavelength identification

Environmental protection industry (smoke and water quality monitoring)

LIBS



Fluorescence spectrum

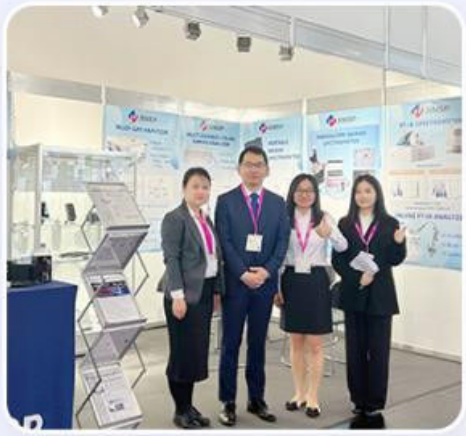


Raman spectrum

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".

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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