

SR50C Miniature Fiber Optic Spectrometer Revolutionizes Water Quality Monitoring

Our Product Introduction

for more products please visit us on spectralanalyser.com

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: **SR50C Miniature Fiber Optic Spectrometer, Miniature Fiber Optic Spectrometer, water quality monitoring Fiber Optic Spectrometer**



More Images



Product Description

SR50C Miniature Fiber Optic Spectrometer Revolutionizes Water Quality Monitoring

Key Specifications

Spectral Range	200-1100 nm
Integration Time	1 ms - 60 s
Signal-to-Noise Ratio	650:1 (4ms)
Dimensions	76mm × 65mm × 38mm

Product Overview

The SR50C Miniature Fiber Optic Spectrometer revolutionizes water quality monitoring with its 200-1100nm full-spectrum detection. Its configurable grating system enables precise identification of total phosphorus and other eutrophication indicators without chemical digestion, eliminating secondary pollution risks.

The integrated temperature compensation technology ensures stable measurements across varying field conditions, making it ideal for continuous environmental monitoring stations. With superior SNR performance and blazed grating optics, this compact device detects trace contaminants at 0.3nm resolution.

Its rapid spectral acquisition (<10ms) paired with smart algorithms provides real-time water quality assessment - a game-changer for pollution early-warning systems and regulatory compliance verification.

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

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 for environmental protection industry (smoke and water quality monitoring)

LIBS, fluorescence spectrum, Raman spectrum applications

Product Images



Miniature Fiber Optic Spectrometer

Compact High Throughput Low Noise

SR50C



List of Product Models

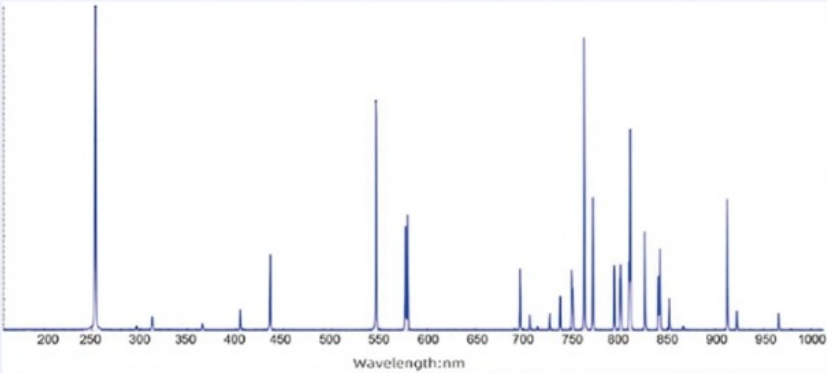
Model	Spectral Range (nm)	Resolution (nm)	Slit (μm)
SR50C-G01	200~1000 (UV-NIR)	3.5	50
		2.4	25
		1.5	10
SR50C-G03	350~870(VIS)	2.5	50
		2.0	25
		1.2	10
SR50C-G04	200~550(UV)	1.8	50
SR50C-G07	350~700(VIS)	1.3	25
SR50C-G08	780~1050(NIR)	0.8	10
SR50C-G09	200~450(UV)	1.0	50
		0.6	25
SR50C-G10	525~700(VIS)	0.3	10

* Customization available for other ranges

Technical Characteristics

Wide Spectral Range

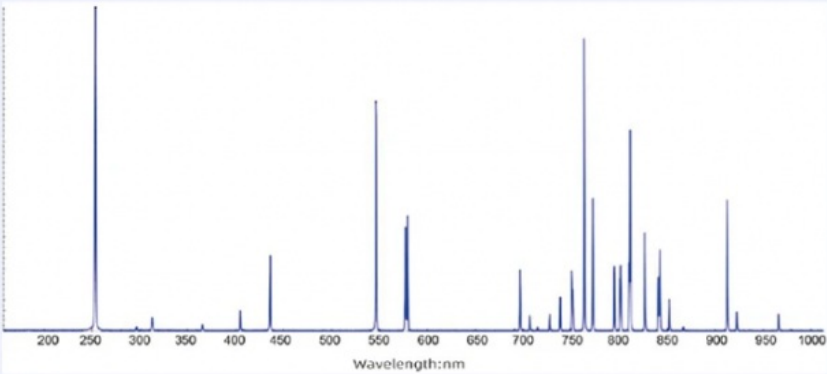
Customized spectral range supporting 200-1100nm



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

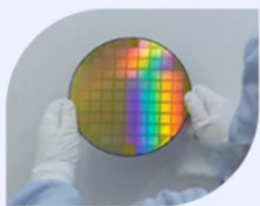
High Signal-to-Noise Ratio

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

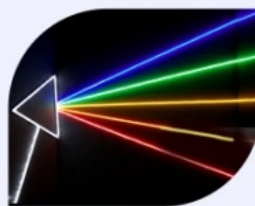


Low Noise: Dark noise standard deviation is approximately 20 for 10ms

Typical Applications



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



Light source and laser wavelength identification



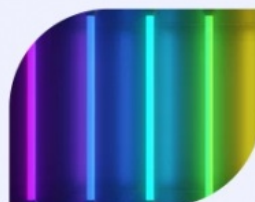
Environmental protection industry (smoke and water quality monitoring)



LIBS



Fluorescence spectrum



Raman spectrum

Company Information

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 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.

Frequently Asked Questions

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.



8618620854039



phoebeyu@jinsptech.com



spectralanalyser.com

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