

## Water Characterization with Miniature Fiber Optic Spectrometer Spectral Range 200-1100 nm and Signal-to-Noise Ratio 650 1

Our Product Introduction

for more products please visit us on [spectralanalyser.com](http://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: **miniature fiber optic spectrometer for sale, Miniature Fiber Optic Spectrometer, 200-1100 nm Fiber Optic Spectrometer**



### More Images



## Product Description

### Compact Modular Fiber Optic Spectrometer 200nm - 1100nm

Experience lab precision in field conditions with SR50C's environmental-optimized spectroscopy. The active temperature regulation ( $\pm 0.1^{\circ}\text{C}$ ) maintains wavelength calibration better than 0.05nm/hour, essential for detecting subtle phosphorus concentration changes in dynamic water systems.

The spectrometer's multi-exposure fusion technology extends effective dynamic range to 106:1, simultaneously capturing strong absorption peaks and weak spectral features. Environmental researchers can now perform comprehensive water characterization with single measurements instead of multiple diluted tests.

#### 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        | $\leq 50\text{mm}$   |
| 6  | Numerical Aperture  | 0.14   |
| 7  | Entrance Slit Width | 10 $\mu\text{m}$ , 25 $\mu\text{m}$ , 50 $\mu\text{m}$ , 100 $\mu\text{m}$ , 200 $\mu\text{m}$<br>(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:

Environmental protection industry (smoke and water quality monitoring),

LIBS, fluorescence spectrum,

Raman spectrum.



# 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        |
| SR50C-G10 | 525~700(VIS)        | 0.6             | 25        |
|           |                     | 0.3             | 10        |

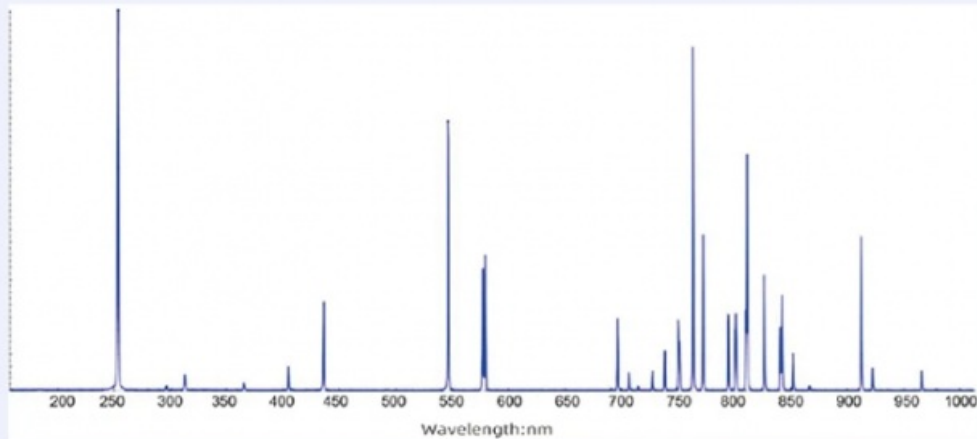
\* Customization available for other ranges

# Technical Characteristics



## Wide Spectral Range

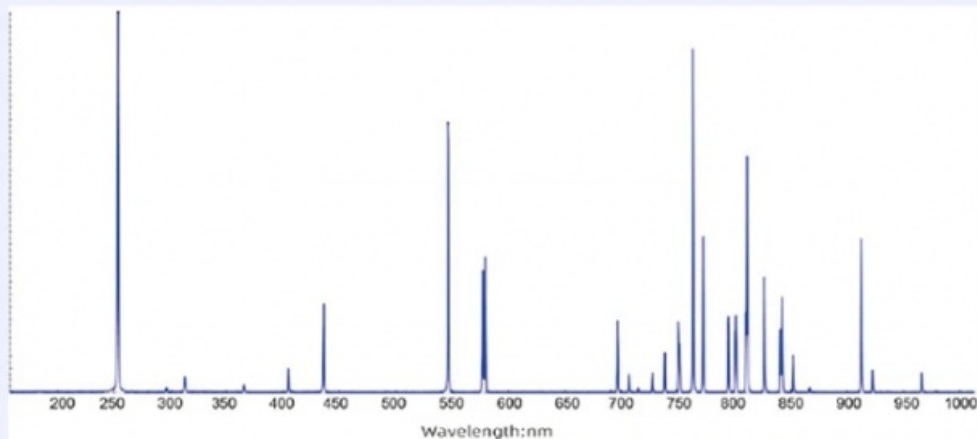
Customized spectral range supporting 200-1100nm



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

## High Signal-to-Noise Ratio

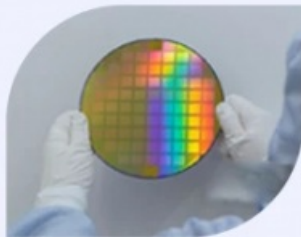
Low-noise CMOS signal processing circuit, with excellent signal-to-noise ratio



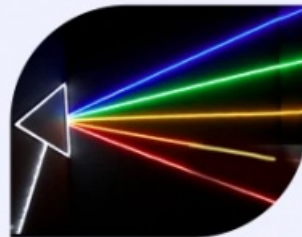
Low Noise: Dark noise standard deviation is approximately 20 for 10ms



# Typical Applications



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



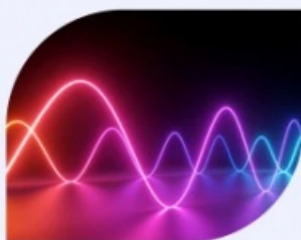
Light source and laser wavelength identification



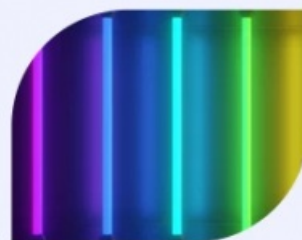
Environmental protection industry (smoke and water quality monitoring)



LIBS



Fluorescence spectrum



Raman spectrum

## Company 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

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