High resolution 2048 Pixel Miniature Fiber Optic Spectrometer with 200nm ~ 1000nm

Our Product Introduction

Basic Information

- Place of Origin: CHINA
- Brand Name: JINSP
- Certification: CE
- Model Number: SR75C
- 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

- Wavelength Range: 200nm-1100nm
- Detector Type: Linear Array CMOS, Hamamatsu S11639
- Optical Design: Type M C-T Light Path
- Grating Slits: 10μm, 25μm, 50μm, 100μm, 200μm (customizable)
- Weight: 310g
- Dimension: 110mm*95mm*43mm
- Interface: USB 2.0
- Optical Interface: FC/PC Or SMA905
- Highlight: **2048 Pixel Miniature Fiber Optic Spectrometer**, **High resolution Miniature Fiber Optic Spectrometer**

More Images

Our Product Introduction

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Product Description

Miniature Fiber Optic Modular Spectrometer JINSP SR75C

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 200nm 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.

The internal integrated temperature sensor can monitor the ambient temperature in real-time. Combined with the internal temperature drift compensation algorithm, it can achieve the smallest temperature drift within the operating temperature range.

No	Item	Description
1	Chip Type	Linear array CMOS, Hamamatsu S11639
2	Effective Pixel	2048

3	Sensing Area	28.7mm *0.2mm
4	Optical Design	M Type C-T light path
5	Numerical Aperture	0.085
6	Entrance Slit Width	10μm, 25μm, 50μm, 100μm, 200μm (customizable)
7	Dimensions	110mm*95mm*40.5mm
8	Weight	310g

Typical Applications

Absorption, transmittance, and reflectance detection In ultraviolet, visible, and near-infrared range;

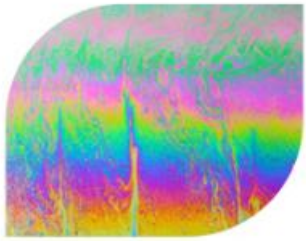
Detection of light source and laser wavelength;

OEM product module:
LIBS – analysis of soil and minerals for geological testing and mining-related work
Online monitoring of water quality and environmental protection - organic matter and oxygen content in water
Flue gas - Monitoring and identification of flue gas emission components

Typical Applications

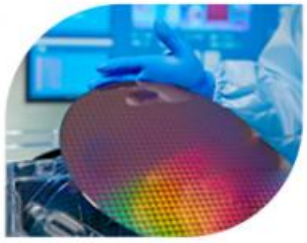
Flue Gas: Monitoring and identification of components in flue gas emissions.

Detection of absorptance, transmittance, and reflectance in ultraviolet, visible, and near-infrared spectra



LIBS: Used for analyzing soil and minerals in geological detection and mining-related work.

Water Quality and Environmental Protection: Online monitoring of organic substances and dissolved oxygen levels in environmental water.



Light source and laser wavelength identification

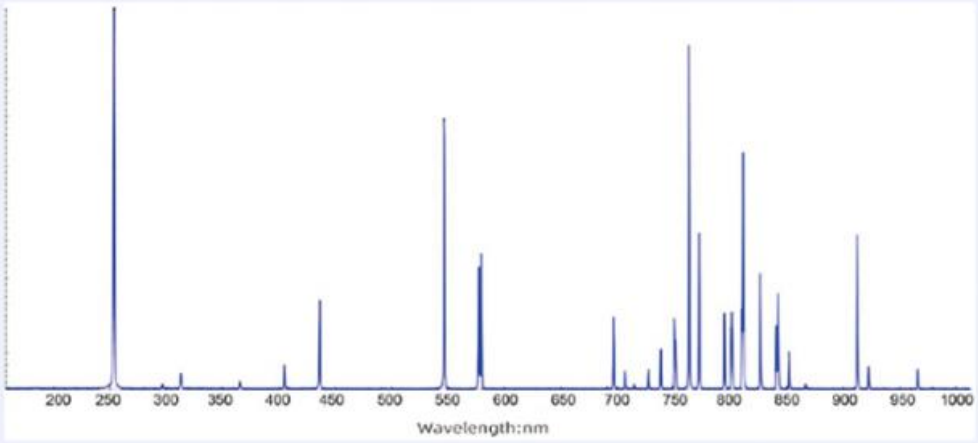
Technical Characteristics

- **Wide Spectral Range Supports customized spectrum range of 200-1000nm**
- **High Signal-to-Noise Ratio Low-noise CMOS signal processing circuit, with excellent signal-to-noise ratio**
- **High Resolution M-shape C-T optical design**

Technical Characteristics

Wide Spectral Range

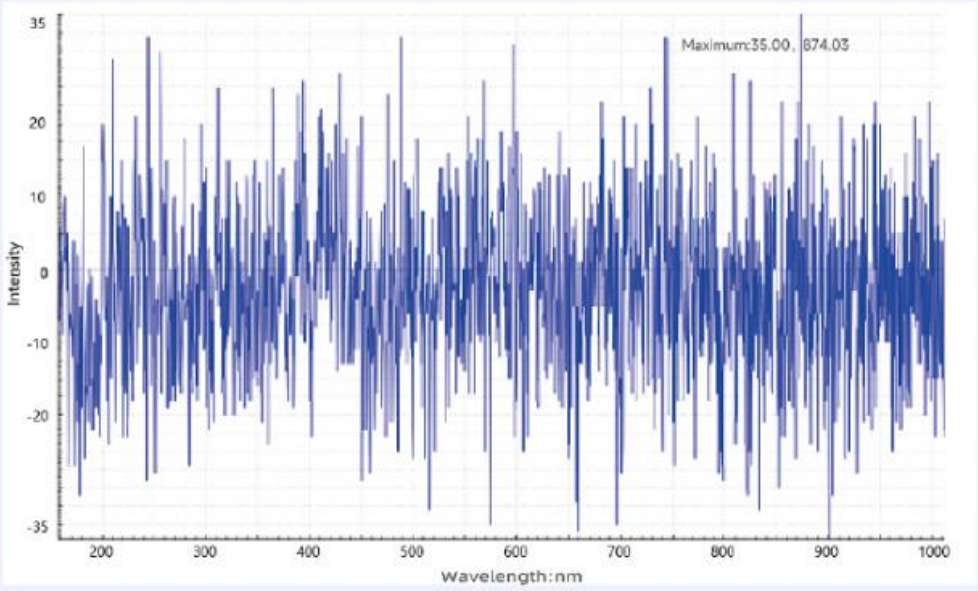
Supports customized spectrum range of 200-1000nm



Test results and applications in the range of 200~1000nm

High Signal-to-Noise Ratio

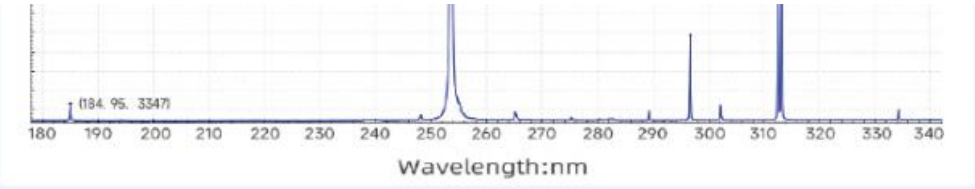
Low-noise CMOS signal processing circuit, with excellent signal-to-noise ratio



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

High Resolution

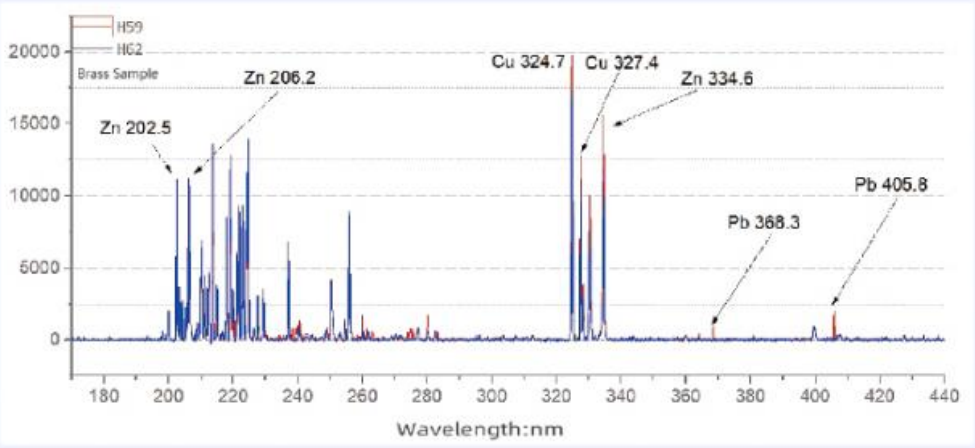
M-shape C-T optical design



Mercury-Argon Lamp Spectrum (UV 180340nm, Resolution 0.15nm)

Flexible Application

Supports output of spectrum data via USB and serial port, to integrate the applications

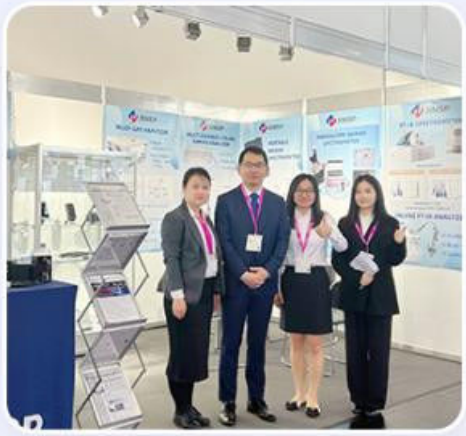


LIBS Mineral User Test Results

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

Q1: Is the price of this product negotiable?
A1: Yes, the price of this product is negotiable.
Q2: What are the payment terms for this product?
A2: The payment terms for this product are T/T and Western Union.
Q3: What is the supply ability for this product?
A3: The supply ability for this product is 100 PCS/70-90 days.
Q4: How long does it take to deliver this product?
A4: The delivery time for this product is 30-50 working days.
Q5: How is this product packaged?
A5: This product is packaged according to customized packaging.

JINSP Company Ltd.

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