



JINSP Company Ltd.
spectralanalyser.com

Compact CMOS Spectrometer Accurate Measurements with 650 1 Signal-to-Noise Ratio 4ms and 200-1100 nm Spectral Range

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: **4ms Compact CMOS Spectrometer, 200-1100 nm Compact CMOS Spectrometer**



More Images



Product Description

Compact Modular Fiber Optic Spectrometer 200nm - 1100nm

Breakthrough UV-Vis-NIR spectroscopy meets environmental science in the SR50C. The proprietary temperature drift control ($<0.01^{\circ}\text{C}^{-1}$) enables reliable field deployment for 24/7 nutrient monitoring, particularly effective in tracking phosphorus variations during algal bloom seasons.

The spectrometer's optical throughput (f/2.0) combined with CMOS cooling technology achieves detection limits below 10ppb for most contaminants. Municipal water authorities can now replace lab-based digestion processes with immediate in-situ measurements, significantly improving response time to pollution incidents.

Technical Parameters:

Detector	Chip Type	Linear array CMOS, Hamamatsu S11639
	Effective Pixel	2048
	Pixel Size	14 μm *200 μm
	Sensing Area	28.7mm *0.2mm
Optical Parameters	Numerical Aperture	0.14
	Focal Length	$\leq 50\text{mm}$
	Entrance Slit Width	10 μm , 25 μm , 50 μm , 100 μm , 200 μm
	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	$< 500\text{mA}$
Others	Operating Temperature	10 $^{\circ}\text{C}$ ~ 40 $^{\circ}\text{C}$
	Storage Temperature	-20 $^{\circ}\text{C}$ ~ 60 $^{\circ}\text{C}$
	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	200~550(UV) 350~700(VIS) 780~1050(NIR)	1.8	50
SR50C-G07		1.3	25
		SR50C-G08	0.8
SR50C-G09			200~450(UV)
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

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

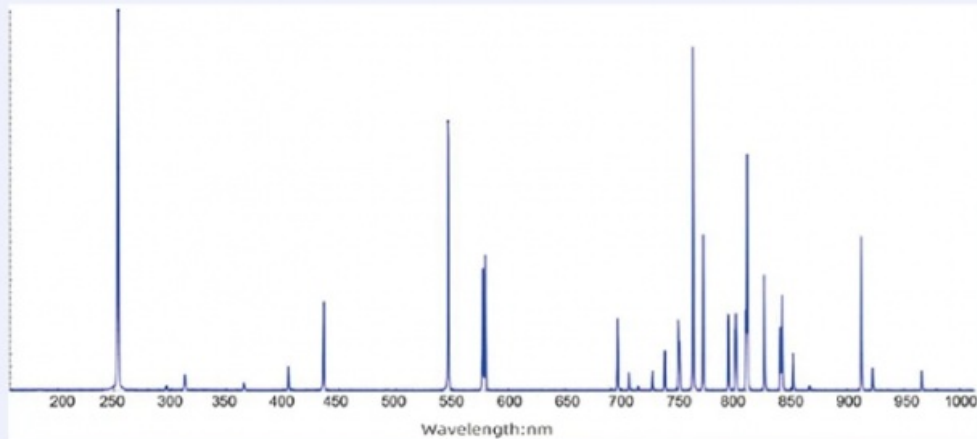


Technical Characteristics



Wide Spectral Range

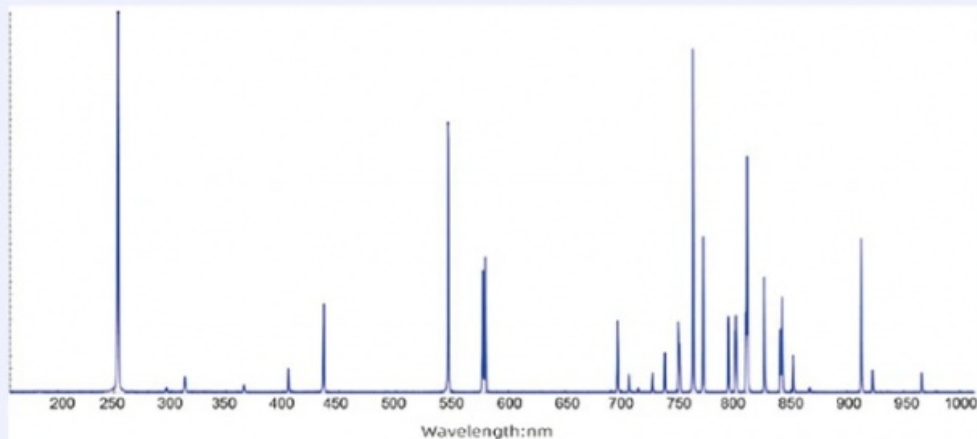
Customized spectral range supporting 200-1100nm



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

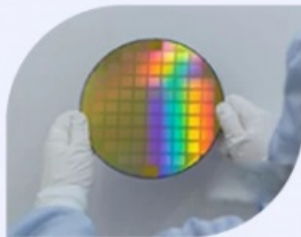
High Signal-to-Noise Ratio

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

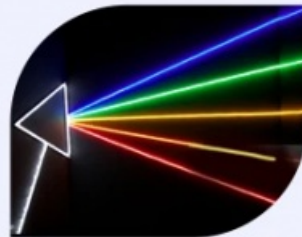


Low Noise: Dark noise standard deviation is approximately 20 for 10ms

Typical Applications



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



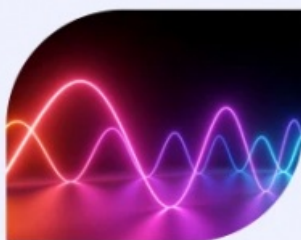
Light source and laser wavelength identification



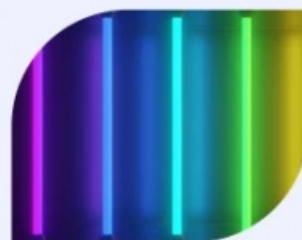
Environmental protection industry (smoke and water quality monitoring)



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.



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