



**JINSP Company Ltd.**  
spectralanalyser.com

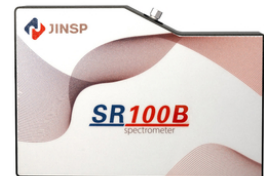
## 200nm-1100nm Versatile and Adaptable Fiber Optic Spectrometer for Various Scientific and Industrial Applications

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: ISO9001 CE
- Model Number: SR100B
- Minimum Order Quantity: 1
- Price: Negotiable
- Packaging Details: International Shipping Package
- Delivery Time: 30-400 working days
- Payment Terms: T/T, Western Union
- Supply Ability: 100PCS/30-40 days



### Product Specification

- Spectral Range: 200nm - 1100nm
- Effective Pixels: 2048\*64
- Pixel Size: 28.672\*0.896mm
- Integration Time: 4ms~900s
- Dimensions: 180mm\*120mm\*50mm
- Weight: 1.2kg



## Product Description

### Backlit array CCD UV enhanced High Sensitivity Modular Spectrometer

The SR100B spectrometer is a device that stands out for its high-performance capabilities, specifically designed to meet the rigorous demands of industrial, laboratory, and research environments. It incorporates the cutting-edge Hamamatsu S10420 CCD chip, which is renowned for its ability to offer a large sensing area, thereby facilitating comprehensive spectral analysis. This chip is pivotal in providing stable and consistent spectral readings, which are essential for accurate data acquisition in various scientific and industrial applications.

The spectrometer's sensor array consists of 2048x64 pixels, each with a size of 14x14 $\mu$ m, which is instrumental in achieving an exceptional quantum efficiency and sensitivity across the broad spectrum ranging from 200 to 1100nm. This wide range of sensitivity allows the SR100B to be versatile and adaptable to a multitude of applications that require precise spectral measurements.

One of the key features of the SR100B spectrometer is its ability to customize gratings and slit widths, which enables users to tailor the spectral resolution and sensitivity to their specific needs. This customization ensures that the spectrometer can be fine-tuned for different experiments or industrial processes, providing the flexibility to adapt to various measurement requirements.

Furthermore, the SR100B spectrometer boasts a high-resolution optical path that is complemented by advanced FPGA (Field-Programmable Gate Array) signal processing technology. This combination not only ensures impeccable spectrum signals but also contributes to the device's stable and reliable performance. The FPGA technology allows for real-time processing of spectral data, which is crucial for applications that require immediate and accurate results.

In summary, the SR100B spectrometer is a robust and versatile instrument that combines cutting-edge sensor technology with customizable features and advanced signal processing to deliver high-quality spectral analysis in a range of demanding environments.

#### Product Parameters:

Detector	Chip Type	Back-illuminated cooling Hamamatsu S10420
	Effective Pixel	2048*64
	Pixel Size	14*14 $\mu$ m
	Sensing Area	28.672*0.896mm
Optical Parameters	Optical Design	F/4 cross type
	Numerical Aperture	0.13
	Focal Length	100mm
	Entrance Slit Width	10 $\mu$ m,25 $\mu$ m,50 $\mu$ m,100 $\mu$ m,200 $\mu$ m (customizable)
Electrical Parameters	Fiber Interface	SMA905,free space
	Integration Time	4ms~900s
	Data Output Interface	USB3.0,RS232,RS485,20pin connector
	ADC Bit Depth	16-bit
	Power Supply	5V
Physical Parameters	Operating Current	<3.5A
	Operating Temperature	10 ~40
	Storage Temperature	-20 ~60
	Operating Humidity	<90%RH(no condensation)
	Dimensions	180mm*120mm*50mm
	Weight	1.2kg

#### List of Product Models:

Model	Spectral Range(nm)	Resolution(nm)	Slit( $\mu$ m)
SR100B-G21	200~1100	2.2	50
		1.5	25
		1.0	10
SR100B-G23	200~875	1.6	50
SR100B-G24	350~1025	1.0	25
		0.7	10
SR100B-G28	200~345	0.35	50
		0.2	25
		0.14	10
SR100B-G25	532~720(4900cm <sup>-1</sup> )*	13cm <sup>-1</sup>	50
SR100B-G26	638~830(3200cm <sup>-1</sup> )*	10cm <sup>-1</sup>	25
SR100B-G27	785~1080(3200cm <sup>-1</sup> )*	11cm <sup>-1</sup>	50

**Note:**The\*are primarily designed for Raman applications, with the corresponding Raman.

### Technical Characteristics:

High sensitivity-Fitted with area array back-illuminated detector with high quantum efficiency,optimizable ultraviolet band  
High resolution -Resolution<1.0nm@10μm (200~1100nm)  
High flexibility-180~1100nm,compatible with multiple interfaces including USB3.0,RS232 and RS485  
High reliability -Ultra-high SNR and excellent thermal

### Typical Applications:

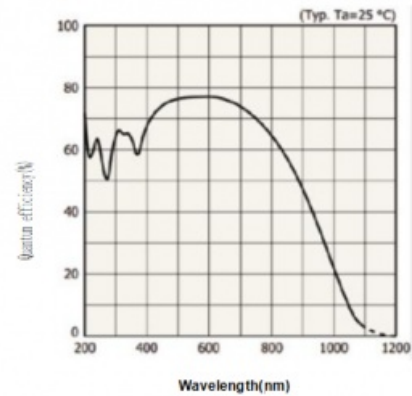
Detect absorption, transmittance and reflection Spectrum  
Light source and laser wavelength characterization  
OEM product module:Fluorescence spectrum,Raman spectrum,etc.

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CCD Quantum Efficiency Curve

### Company Introduction:

JINSP Company Limited, abbreviated as "JINSP", is a professional supplier with over 17 years of experience in spectral detection technology products, including Raman, FT-IR, LIBS technologies, etc. After 17 years of technology accumulation, the company's core key technologies have reached the international leading position at the level, and the cumulative number of patent applications exceeded 200.

In addition to its main headquarters located in the bustling city of Beijing, JINSP has established a fully owned subsidiary manufacturing facility situated in the province of Jiangsu, China.

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.

# Company Profile





# Exhibition



# Certifications



## FAQ

Q1: This is the first time I use, is it easy to operate?

A1:We will send you manual and guide video in English,it can teach you how to operate the spectrometer.Also our technicians will offer professional technical operation meetings.

Q2:Can you offer a operation training?

A2:Your technicians can come to our factory for a training. Jinsp engineers can go to your place for local support ( installation , training, debugging, maintenance ).

Q3:What's your website?

A3:You can visit:[www.jinsptech.com](http://www.jinsptech.com)

Q4:What about your quality assurance?

A4:We have a quality inspection team. All goods will go through quality inspection before shipment. We can send you pictures for inspection.



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