

## 180mm\*120mm\*50mm Size Back-illuminated Fiber Spectrometer with Integration Time 4ms-900s

### Our Product Introduction

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#### 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
- Highlight: Back-illuminated Fiber Spectrometer,  
4ms-900s Fiber Spectrometer,  
900s Fiber Spectrometer



## Product Description

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

Introducing the SR100B, a cutting-edge spectrometer designed for industrial, laboratory, and scientific research needs. With its high-performance back-illuminated CCD sensor and rapid USB connectivity, this device ensures precise spectral analysis across a broad range.

The SR100B features a Hamamatsu S10420 CCD chip, offering an expansive sensing area and exceptional spectral stability. Its 2048x64 pixel array and 14x14 $\mu$ m pixel size deliver superior quantum efficiency and sensitivity, making it ideal for applications spanning 200nm to 1100nm. Customizable gratings and slit widths allow for tailored spectral resolution and sensitivity, while the high-resolution light path and advanced FPGA signal processing ensure impeccable spectrum signals and dependable performance.

#### 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)
	Fiber Interface	SMA905,free space
Electrical Parameters	Integration Time	4ms~900s
	Data Output Interface	USB3.0,RS232,RS485,20pin connector
	ADC Bit Depth	16-bit
	Power Supply	5V
	Operating Current	<3.5A
Physical Parameters	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@10 $\mu$ m (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:

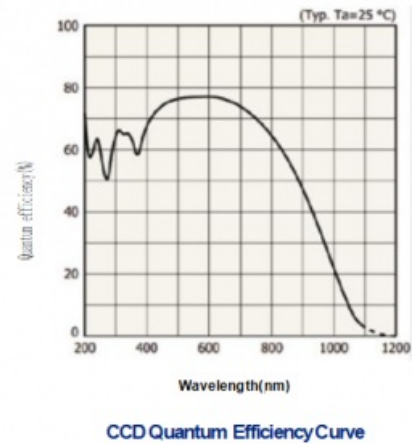
Detect absorption, transmittance and reflection Spectrum  
 Light source and laser wavelength characterization  
 OEM product module:Fluorescence spectrum,Raman spectrum,etc.

## Technical Characteristics

- ✓ High sensitivity-Fitted with area array back-illuminated detector with high quantum efficiency, optimizable ultraviolet band
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## Typical Applications

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- ◆ Light source and laser wavelength characterization
- ◆ OEM product module: Fluorescence spectrum, Raman spectrum, etc.



### 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.



JINSP

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