State-of-the-Art Back-Illuminated CCD Fiber Optic Spectrometer for Industrial and Scientific Applications

Basic Information

Place of Origin: CHINA
Brand Name: JINSP
Certification: ISO9001 CE
Model Number: SR100B

Minimum Order Quantity:

• 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

• Spectrual Range: 200nm - 1100nm

• Effective Pixels: 2048*64

Pixel Size: 28.672*0.896mmIntegration Time: 4ms~900s

• Dimensions: 180mm*120mm*50mm

• Weight: 1.2kg



Backlit array CCD UV enhanced High Sensitivity Modular Spectrometer

The SR100B spectrometer is engineered for excellence in spectral analysis, featuring a high-performance back-illuminated CCD sensor that excels in industrial, laboratory, and scientific research environments. The Hamamatsu S10420 CCD chip provides a large sensing area and ensures stable spectral readings. The 2048x64 pixel array with 14x14µm pixels offers exceptional quantum efficiency and sensitivity in the 200-1100nm range. Customizable gratings and slit widths allow for optimized spectral resolution and sensitivity.

The SR100B's high-resolution optical path and advanced FPGA signal processing ensure noise-free, rapid signal processing, providing a stable and reliable performance.

Product Parameters:

	Chip Type	Back-illuminated cooling Hamamatsu S10420	
Detector	Effective Pixel	2048*64	
	Pixel Size	14*14µm	
	Sensing Area	28.672*0.896mm	
Optical Parameters	Optical Design	F/4 cross type	
	Numerical Aperture	0.13	
	Focal Length	100mm	
	Entrance Slit Width	10μm,25μm,50μm,100μm,200μm (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(µm)
		2.2	50
SR100B-G21	200~1100	1.5	25
		1.0	10
		1.6	50
SR100B-G23	200~875	1.0	25
SR100B-G24	350~1025	0.7	10
SR100B-G28		0.35	50
	200~345	0.2	25
		0.14	10
SR100B-G25	532~720(4900cm-1*)*	13cm-1	50
SR100B-G26	638~830(3200cm-1)*	10cm-1	25
SR100B-G27	785~1080(3200cm-1)*	11cm-1	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:

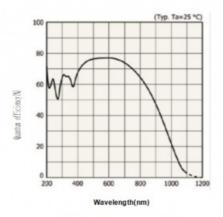
Detect absorption, transmittance and reflection Spectrum Light source and laser wavelength characterization OEM product module:Fluorescence spectrum,Raman spectrum,etc.

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CCD Quantum Efficiency Curve

Company Introduction:

JINSP Company 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.

JINSP offers over twenty spectroscopic products across various fields, including pharmaceutical and chemical industries, public security, and customs. Products are available nationwide and are exported to over 30 countries, with cumulative sales exceeding 3,000 units.

Benefit from 30+ R&D engineers, including 4 Ph.D., JINSP is deeply rooted in the field of personalized product customization, and is committed to meeting the diverse and unique needs of customers with excellent professional technology and innovative design capabilities.

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

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

Q2:Can your offer a operation traning?

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

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.



8618620854039

phoebeyu@jinsptech.com

spectralanalyser.com

21st Floor, Building D, Tsinghua Tongfang Science and Technology Plaza, Haidian District, Beijing China