Backlit Array CCD Fiber Optic Spectrometer Module with 20pin Connector Data Output Interface and 28.672*0.896mm Pixel Size

Our Product Introduction

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

- Spectrual Range: 200nm - 1100nm
- Effective Pixels: 2048*64
- Pixel Size: 28.672*0.896mm
- Integration Time: 4ms~900s
- Dimensions: 180mm*120mm*50mm
- Weight: 1.2kg
- Numerical Aperture: 0.13
- Data Output Interface: USB3.0,RS232,RS485,20pin Connector
- Highlight: **20pin Connector CCD Fiber Optic Spectrometer**,
                                     Data Output CCD Fiber Optic Spectrometer

Product Description

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Product Attributes

Attribute	Value
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Backlit Array CCD UV Enhanced High Sensitivity Modular Spectrometer

The SR100B spectrometer features cutting-edge back-illuminated CCD technology that delivers exceptional performance. This versatile instrument is ideal for industrial processes requiring precise monitoring and scientific research demanding high accuracy. At its core is the Hamamatsu S10420 CCD chip with a large sensing area for comprehensive data collection and stable spectral readings. The chip's 2048x64 pixel format and 14x14μm pixel size provide remarkable quantum efficiency and sensitivity, accurately measuring light in the 200-1100nm wavelength range.

Product Parameters

Detector	
Chip Type	Back-illuminated cooling Hamamatsu S10420
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)
SR100B-G21	200~1100	2.2 1.5 1.0	50 25 10
SR100B-G23			
SR100B-G24	200~875 350~1025	1.6 1.0 0.7	50 25 10
SR100B-G28	200~345	0.35 0.2 0.14	50 25 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

Identify the absorption, transmission, and reflection spectra of materials

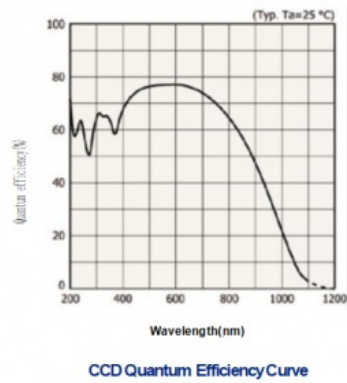Characterize the light source and laser wavelength properties

Customized OEM module options: Fluorescence and Raman spectra analysis

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.

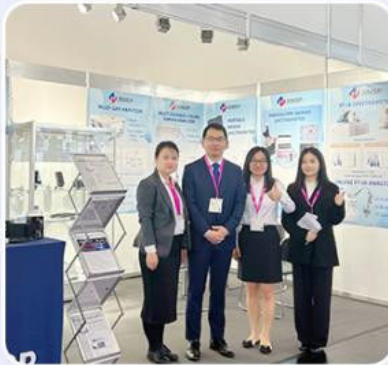CCD Quantum Efficiency Curve

Company Introduction

JINSP Company Limited ("JINSP") is a professional supplier with over 17 years of experience in spectral detection technology products, including Raman, FT-IR, LIBS technologies. After 17 years of technology accumulation, the company's core technologies have reached international leading levels, with over 200 patent applications.

Headquartered in Beijing, JINSP has a manufacturing facility in Jiangsu, China. The company holds ISO9001:2015, ISO14001:2015, and ISO45001:2018 certifications, and can provide various certifications including CE Certification, EU ECAC certification, and German ICT Security Testing.

Company Profile

Exhibition

Certifications

FAQ

Q1: This is the first time I use, is it easy to operate?
A1: We provide an English manual and guide video, plus professional technical operation meetings with our technicians.

Q2: Can you offer operation training?
A2: Your technicians can train at our factory, or our engineers can provide local support (installation, training, debugging,

maintenance).

Q3: What's your website?
A3: Visit: www.jinsptech.com

Q4: What about your quality assurance?
A4: Our quality inspection team checks all goods before shipment and can provide inspection photos.

JINSP Company Ltd.

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