

0.13 Numerical Aperture Fiber Optic Spectrometer 90% Reduced Dark Current and 200nm 1100nm Spectral Range

Our Product Introduction

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Basic Information

- Place of Origin: CHINA
- Brand Name: JINSP
- Certification: ISO9001 CE
- Model Number: SR100Z
- 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
- Fiber Interface: SMA905, Free Space
- Numerical Aperture: 0.13
- Focal Length: 100mm
- Dimensions: 180mm*120mm*50mm
- Weight: 1.2kg
- Highlight: **0.13 Numerical Aperture Fiber Optic Spectrometer**
, Reduced Dark Current Fiber Spectrometer



More Images



Product Description

0.13 Numerical Aperture Fiber Optic Spectrometer

UV-VIS 200nm-1100nm Wide Wavelength Range Fiber Optic Spectrometer

The ultimate spectral workhorse: Combining 1100nm NIR reach with UV-enhanced sensitivity. The SR100Z's quantum efficiency curve is meticulously optimized - peaking at 70% for 250-400nm detection while maintaining >45% through visible spectrum.

Smart features include automatic dark correction and TEC power adjustment based on ambient conditions. Whether integrated into OEM systems or used standalone for material characterization, its 14μm pixel granularity ensures reliable detection of subtle spectral features.

Product Attributes

Attribute	Value
Spectral Range	200nm - 1100nm
Effective pixels	2048*64
Pixel Size	28.672*0.896mm
Fiber Interface	SMA905, free space
Numerical Aperture	0.13
Focal Length	100mm
Dimensions	180mm*120mm*50mm
Weight	1.2kg

Product Parameters

Detector	Chip Type	Back-illuminated TE-cooling Hamamatsu S11850
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°C ~ 40°C	
Storage Temperature	-20°C ~ 60°C	
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)
SR100Z-G21	200~1100	2.2nm 1.5nm 1.0nm	50μm 25μm 10μm
SR100Z-G23 SR100Z-G24	200~875 350~1025	1.6nm 1.0nm 0.7nm	50μm 25μm 10μm
SR100Z-G28	200~345	0.35nm 0.2nm 0.14nm	50μm 25μm 10μm
SR100Z-G25	532~720(4900cm-1*)	13cm-1	50μm
SR100Z-G26	638~830(3200cm-1)	10cm-1	25μm
SR100Z-G27	785~1080(3200cm-1)	11cm-1	50μm

*Note: These models are primarily designed for Raman applications, with the corresponding Raman.

Technical Characteristics

- High sensitivity: 78% peak quantum efficiency, UV band optimization
- High resolution: Realize resolution <1.0nm@25um (200~875nm)
- High flexibility: 200nm~1100nm, compatible with multiple interfaces including USB3.0, RS232 and RS485

Typical Applications

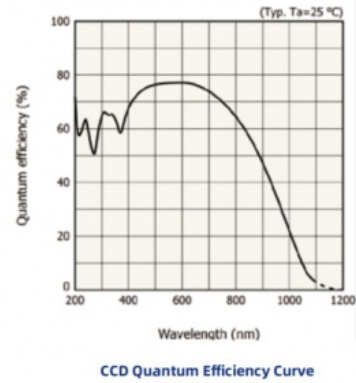
- Detect absorption, transmittance and reflection Spectrum
- OEM product module: Fluorescence spectrum, Raman spectrum, etc.

Technical Characteristics

- ✓ **High sensitivity:** 78% peak quantum efficiency, UV band optimization
- ✓ **High resolution:** Realize resolution $<1.0\text{nm}/25\mu\text{m}$ (200~875nm)
- ✓ **High SNR:** Integrated with TE-cooling
- ✓ **High flexibility:** 200~1100nm, compatible with multiple interfaces including USB3.0, RS232 and RS485

Typical Applications

- ◆ **Detect absorption, transmittance and reflection spectrum**
- ◆ **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 your 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

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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