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

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

• Spectrual Range: 200nm - 1100nm

• Effective Pixels: 2048*64

Pixel Size: 28.672*0.896mmFiber Interface: SMA905, Free Space

Numerical Aperture: 0.13Focal Length: 100mm

• Dimensions: 180mm*120mm*50mm

• Weight: 1.2kg



More Images



Cooled Detector Low Noise High Sensitivity Modular Spectrometer

The JINSP SR100Z fiber optic spectrometer redefines precision with its Hamamatsu S11850 back-illuminated CCD and advanced thermal regulation. Its TE-cooled sensor maintains 5 stability, delivering 2x enhanced quantum efficiency (200nm ~ 1100nm) compared to linear arrays, while achieving 70% UV sensitivity for superior low-light performance.

Ideal for demanding applications from Raman spectroscopy to fluorescence analysis, this system combines a 2048x64 pixel array with FPGA-optimized signal processing. The expanded 14µm² pixel area ensures exceptional light capture, making it a versatile solution for both research labs and industrial spectral measurement needs.

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 |
| | Integration Time | 4ms~900s |
| | Data Output Interface | USB3.0, RS232, RS485, 20pin connector |
| Electrical Parameters | ADC Bit Depth | 16-bit |
| r dramotoro | 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) |
|--------------------------|---------------------|-----------------|----------|
| | | 2.2nm | 50μm |
| SR100Z-G21 | 200~1100 | 1.5nm | 25µm |
| | | 1.0nm | 10µm |
| SR100Z-G23 SR100Z-G24 | 200~875 | 1.6nm | 50μm |
| | | 1.0nm | 25µm |
| 511100 <u>2</u> 6.21 | 350~1025 | 0.7nm | 10µm |
| | | 0.35nm | 50μm |
| SR100Z-G28 | 200~345 | 0.2nm | 25µm |
| | | 0.14nm | 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:The*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

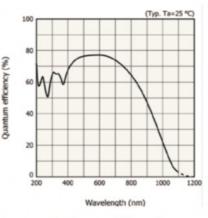
OEM product module: Fluorescence spectrum, Raman spectrum,etc.

Technical Characteristics

- High sensitivity: 78% peak quantum efficiency, UV band
- ✓ High resolution: Realize resolution <1.0nm@25um (200~875nm)</p>
- 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.



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

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.



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