Cooled Detector Fiber Optic Spectrometer with SMA905 Fiber Interface 200-1100nm Pixel Size 28.672*0.896mm

Our Product Introduction

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*0.896mm
- Fiber Interface: SMA905, Free Space
- Numerical Aperture: 0.13
- Focal Length: 100mm
- Dimensions: 180mm*120mm*50mm
- Weight: 1.2kg
- Highlight: **Fiber Optic Spectrometer with SMA905**, **Cooled Detector Fiber Optic Spectrometer**

Product Description

Cooled Detector Low Noise High Sensitivity Modular Spectrometer

The JINSP SR100Z spectrometer is equipped with a Hamamatsu S11850 area array back-illuminated CCD chip.The thermoelectric cooler attached to the CCD keeps chip temperature constant (approximately 5), improves spectrum SNR, and enhances durability. With a 2048*64 pixel number and a 14*14μm pixel size, it receives more optical signals and exhibits quantum efficiency 2 times that of a linear array sensor in the 200~1100 nm spectral range; the quantum efficiency in the ultraviolet band is as high as 70%.

For excellent spectrum signals, stable, and reliable performance SR100Z is integrated with a high-resolution imaging path and an advanced FPGA low-noise and high-speed signal processing circuit. With its enhanced sensitive area, it is well-suited for a wide range of spectral applications, including fluorescence, transmission/reflection, and Raman spectra.

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	50μm
		1.5nm	25μm
		1.0nm	10μm
SR100Z-G23 SR100Z-G24	200~875 350~1025	1.6nm	50μm
		1.0nm	25μm
		0.7nm	10μm
SR100Z-G28	200~345	0.35nm	50μm
		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:

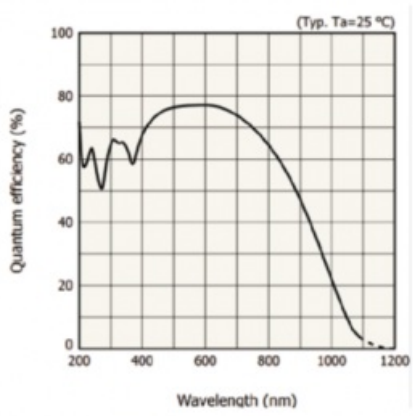
Detect absorption, transmittance and reflection Spectrum
OEM product module: Fluorescence spectrum, Raman spectrum,etc.

Technical Characteristics

- **High sensitivity:** 78% peak quantum efficiency, UV band optimization
- **High resolution:** Realize resolution <1.0nm@25um (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.**



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.

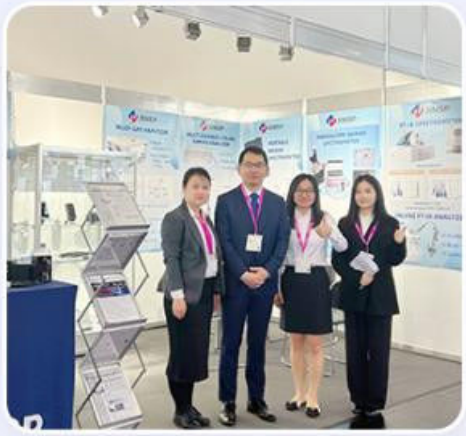
In addition to its main headquarters located in the bustling city of Beijing, JINSP has established a fully owned subsidiary manufacturing facility situated in the province of Jiangsu, China.

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

Q1:This is the first time I use,is it easy to operate?

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.

JINSP Company Ltd.

8618620854039 phoebeyu@jinsptech.com spectralanalyser.com

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