



**JINSP Company Ltd.**  
spectralanalyser.com

## 2048\*64 Effective Pixel Size and 14\*14 $\mu\text{m}$ Pixel Size for High Sensitivity Fiber Optic Spectrometer

Our Product Introduction

for more products please visit us on [spectralanalyser.com](http://spectralanalyser.com)

### 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



### More Images



## Product Description

### Cooled Detector 200nm ~ 1100nm Wide Range Modular Spectrometer

Engineered for spectral excellence, the SR100Z features breakthrough CCD technology with dual cooling-performance advantages. The integrated TE cooling system not only extends sensor lifespan but also enables consistent 70% UV quantum efficiency - critical for precise fluorescence measurements and UV-Vis spectroscopy.

Beyond raw sensitivity, its 2048-pixel spatial resolution and proprietary noise reduction algorithms ensure lab-grade results across applications. Whether analyzing thin-film reflections or capturing weak Raman signals, this spectrometer delivers unmatched SNR through intelligent hardware-software integration.

#### 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 <sup>-1</sup> )*	13cm <sup>-1</sup>	50μm
SR100Z-G26	638~830(3200cm <sup>-1</sup> )*	10cm <sup>-1</sup>	25μm
SR100Z-G27	785~1080(3200cm <sup>-1</sup> )*	11cm <sup>-1</sup>	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

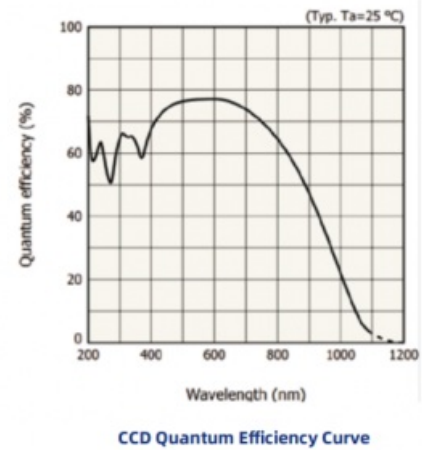
OEM product module: Fluorescence spectrum, Raman spectrum,etc.

## Technical Characteristics

- ✓ **High sensitivity:** 78% peak quantum efficiency, UV band optimization
- ✓ **High resolution:** Realize resolution  $<1.0\text{nm}@25\mu\text{m}$  (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 you 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](http://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

JINSP Company Ltd.



8618620854039



[phoebeyu@jinsptech.com](mailto:phoebeyu@jinsptech.com)



[spectralanalyser.com](http://spectralanalyser.com)

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