

## JINSP ST830E OCT Spectrometer Imaging Spectrometer with Customized Wavelength Range

Our Product Introduction

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### Basic Information

- Place of Origin: CHINA
- Brand Name: JINSP
- Certification: CE
- Model Number: ST830E
- Minimum Order Quantity: 1
- Price: Negotiable
- Packaging Details: Carton Packing
- Delivery Time: 80-90 WORKING DAYS
- Payment Terms: T/T, Western Union
- Supply Ability: 10PCS/MONTH



### Product Specification

- Photosensitive Area: 20.52\*0.2mm
- Cell Size: 10\*200um
- Wavelength Range: Customized In The Range Of 790-930nm
- Optical Resolution: 0.07nm
- Imaging Depth: 2.4mm
- Effective Pixels: 2048
- Highlight: **compact high resolution imaging spectrometer , Customized Wavelength Range OCT Spectrometer , OCT Spectrometer**



## Product Description

ST830E series spectrum realizes wavenumber linear spatial dispersion through special optical path design and directly realizes equal interval sampling of wavenumber on hardware. The acquired interference spectrum can be directly subjected to FFT without a wavenumber resampling algorithm, which greatly reduces the complexity of data processing and improves the signal-to-noise ratio of the system.



Detector	Line array CMOS
Effective pixels	2048
Cell size	10*200um
Photosensitive area	20.52*0.2mm
Wavelength range	Customized in the range of 790-930nm
Optical resolution	0.07nm
Optical design	VPH raster & wave ridge linear design
Maximum line sweep speed	130kHz/250kHz
Incident optical interface	FC/APC fibre optic interface

### TECHNICAL HIGHLIGHTS

1. Special optical path design, hardware can realize equal interval sampling of wave number.
2. The interference spectrum can be directly FFT without wavenumber resampling algorithm, which greatly reduces the complexity of data processing and improves the signal-to-noise ratio of the system.
3. High-efficiency VPH gratings with near-diffraction-limited optical resolution.
4. Industry-leading line scan rate: up to 250kHz.

# ST830E OCT Spectrometer

## Technical Characteristics

### Deep Imaging

Excellent roll-off performance enables imaging at deeper layers.

### Wavenumber Linearity

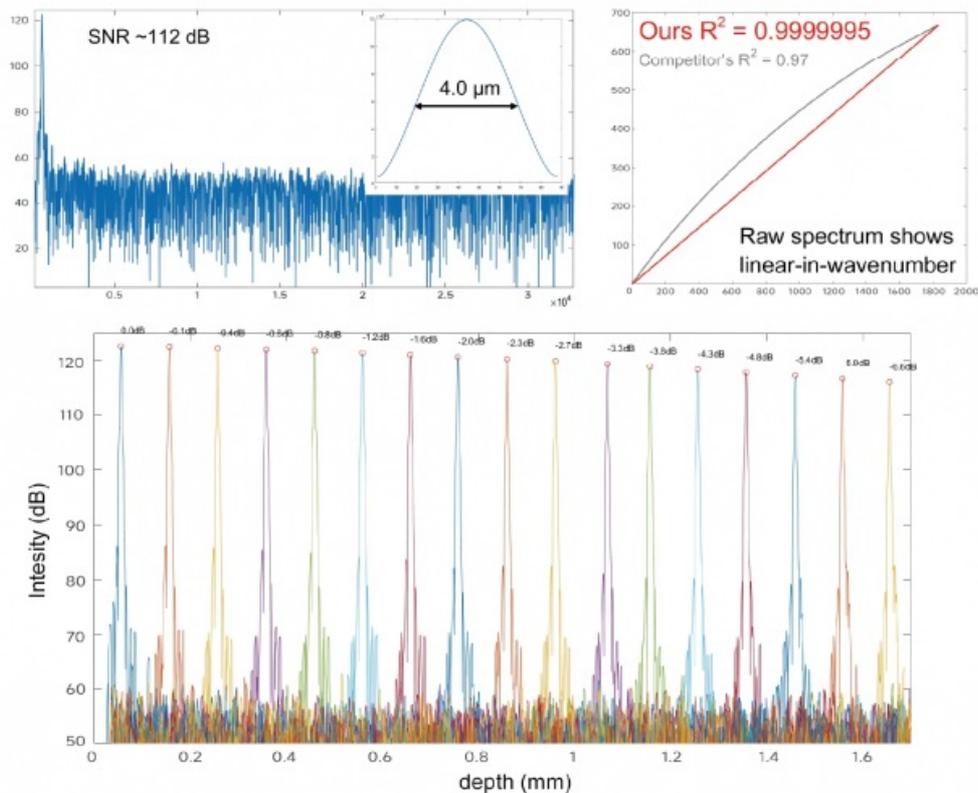
Special optical path design allows for equidistant wavenumber sampling on the hardware. Direct FFT (Fast Fourier Transform) is possible, significantly reducing data processing complexity.

### Fast Processing

The USB3.0 interface allows for a scanning speed of 20-130kHz, making OEM processes more efficient and straightforward.

### High Signal-to-Noise Ratio, High Resolution

Efficient VPH grating, optical resolution approaching the diffraction limit.



## Applications:

The OCT spectrometer is a vital component of optical coherence tomography (OCT), which is a non-invasive imaging technology used to visualize internal structures in biological tissues. The ST830E model has a line scan rate of up to 250kHz and a cell size of  $10^{\circ}200\mu\text{m}$ , making it suitable for high-speed and high-resolution imaging. The product uses a direct FFT without wavenumber resampling algorithm for interference spectrum processing, resulting in high-quality images. The VPH gratings of the OCT spectrometer are high-efficiency with near-diffraction-limited optical resolution. These gratings make the spectrometer suitable for various applications that require high-speed and high-quality imaging, such as ophthalmology, dermatology, and cardiology. The product is not certified, but it meets all quality standards set by the manufacturer.

## FAQ:

**Q1: What is the brand name of the OCT Spectrometer?**

A1: The brand name of the OCT Spectrometer is JINSP.

**Q2: What is the model number of the OCT Spectrometer?**

A2: The model number of the OCT Spectrometer is ST830E.

**Q3: Where is the OCT Spectrometer manufactured?**

A3: The OCT Spectrometer is manufactured in China.

**Q4: What are the payment terms for purchasing the OCT Spectrometer?**

A4: The payment terms for purchasing the OCT Spectrometer are T/T and Western Union.



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