Linear Array CMOS OCT Imaging Spectrometer Optic Spectrometer 2048pixels

Our Product Introduction

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

- Type: CMOS
- Effective Pixels: 2048pixels
- Photosensitive Area: 20.52*0.2mm
- Cell Size: 10*200um
- Maximum Line Sweep Speed: 130kHz/250kHz
- Wavelength Range: Customized In The Range Of 790-930nm
- Optical Resolution: 0.07nm
- Imaging Depth: 2.4mm
- Highlight: **OCT imaging spectrometer**, **linear array CMOS imaging spectrometer**, **2048pixels optic spectrometer**

Our Product Introduction

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Product Description

linear array CMOS OCT imaging spectrometer optic spectrometer

JINSP ST830E/ST850E series spectrometer is dedicated to the OCT system. It is an important device in thespectral domain OCT (SD-OCT) system, which determines important performance indicators such as the imaging speed and the signal-to-noise ratio (SNR fall-off) of the OCT system.

ST830/850O series spectrum realizes wavenumber linear spatial dispersion through special optical pathdesign 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. In addition, this product also adopts volume phase holographic grating (VPH), which has high efficiency and can reach 110dB signal-to-noise ratio in SD-OCT experimental system (7mW light source power, 120kHz line imaging speed), and obtain high-quality OCT/OCTA in vivo biological image.

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.
5.USB3.0 interface can realize 20-130kHz scanning rate, OEM is more efficient and simple.
6.Wavelength range and camera can be customized according to requirements.
7.Stable and mature process, no need for frequent calibration.

Technical Characteristics

Deep Imaging

Excellent roll-off performance enables imaging at deeper layers.

Wavenumber Linearity

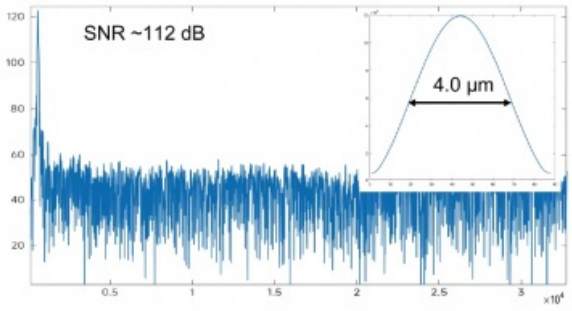
Special optical path design allows for equidistant wavenumber sampling on the hardware. Direct FFT (Fast Fourier Transform) is possible, significantly reducing data processing complexity.

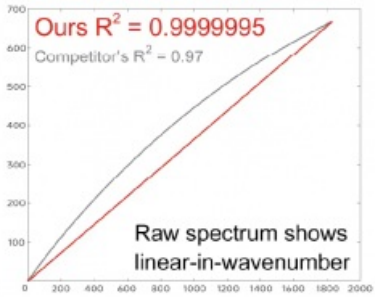
Fast Processing

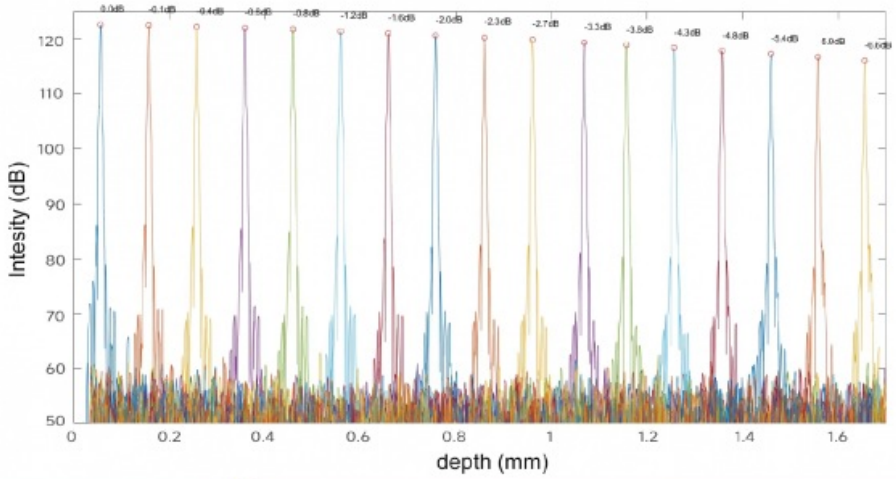
The USB3.0 interface allows for a scanning speed of 20-130kHz, making OEM processes more efficient and straightforward.

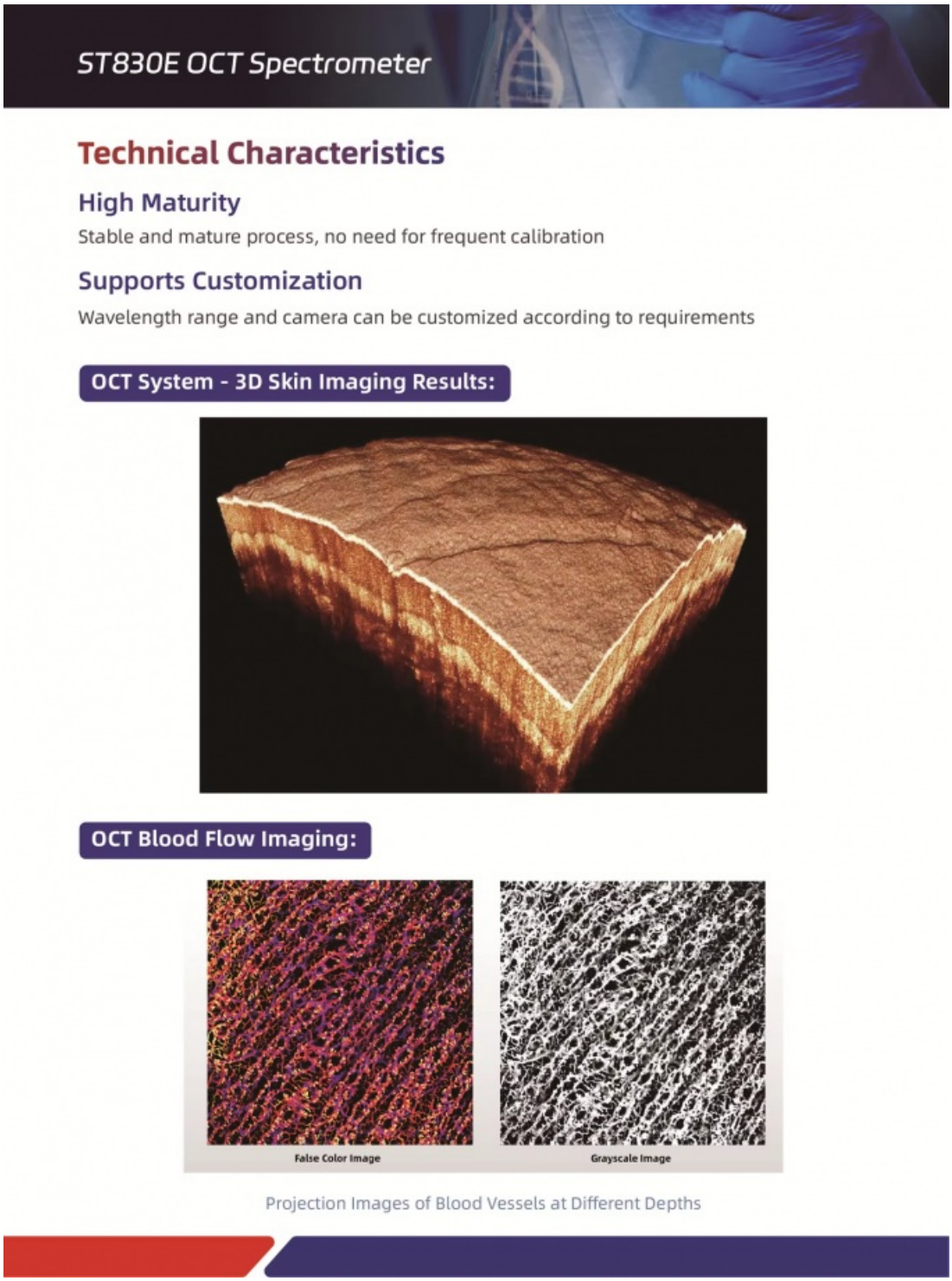
High Signal-to-Noise Ratio, High Resolution

Efficient VPH grating, optical resolution approaching the diffraction limit.









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 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:How to receive a best price in the shortest time?
A3:When you send us an inquiry,please kindly offer details with wavelength,detector,effective pixels,focal length and so on.We will send you quotation with details soon to your email.

Q4:If the spectrometer has problem in my place,how could I do?
A4:The spectrometer has one year warranty.If it breaks down,our technician will figure out what the problem maybe, according to client's feedback.We can repair for free within one year warranty.

Q5:Which payment can be acceptable ?
A5:We could accept the payment by T/T, Paypal, Western Union,L/C, etc.

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