

HIGH SPEED 1310nm SWEPT SOURCE FOR OCT



Product Features & Benefits

- **High Speed (50kHz) Sweep Rate**
- **High Output Power (20mW Average)**
- **Wide (>100nm) Tuning Range**
- **>12 mm Coherence Length**
- **Sinusoidal or Linear Drive**
- **Enables High Resolution and Signal to Noise Ratio**
- **Compact OEM Module design**
- **USB Interface**
- **Optional MZI Clock output**
- **Optional Balanced detector**

Applications

- **Optical Coherence Tomography for**
 - **Ophthalmology**
 - **Gastrointestinal**
 - **Cancer Diagnosis**
 - **Pulmonary**
 - **Industrial Imaging**
 - **Research & Development**
- **Metrology**

Introducing the AXSUN 1310nm OCT Swept Source

To meet the performance needs of next-generation Optical Coherence Tomography systems, Axsun Technologies introduces a unique, patented Swept Source OCT Engine with superior optical performance, in a compact and cost-effective OEM package.

Product Description

The AXSUN 1310nm swept source engine provides high power, wide tuning range, and unprecedented sweep speed and coherence length, in a compact OEM design, controllable with an optional USB interface.

Unique Laser Design

Based on AXSUN Technologies' *optical integration* platform, and patented MEMS tunable optical filter, the Axsun swept source engine enables real time, high resolution OCT imaging at speeds and price points that were previously unattainable.

Speed & Reliability

The industry's highest speed Swept Source is enabled by a patented MEMS tunable filter design that has logged over 500 Million device hours in Optical Networks around the world since 2001. Axsun's optical platform has a well-deserved reputation for high reliability.

Convenient Form Factor

The Axsun Swept Source Engine resides in a compact (~114 x 177 x 52 mm) package and is straightforward to set up and integrate. The single DC supply, and USB interface allow the user to begin collecting data in a matter of minutes.

Swept Source OCT – Powered by Axsun!

PERFORMANCE SPECIFICATIONS FOR OCT SWEEP SOURCE

Parameter	SSOCT-1310			
	Min	Typ	Max	Units
Wavelength Range (-10dB) (100nm within this range)	1250		1360	nm
Center Wavelength		1310		nm
Average output power	18	20		mW
Sweep Rep Rate			50	kHz
Coherence Length (3dB) ¹	12			mm
Output Connector		FC/APC		
Sweep Trigger Level		LVDS		
Sweep Trigger Connector		SATA		
Clock Output Level		LVDS		
Clock Connector (Frequency Variable)		SATA		
Laser Drive		Sine or Linear		.
Power input	12		18	VDC
Power Consumption (~25C)		12		W
Mechanical Dimensions	~114 X 177X 52 mm ~ 4.5 X 7 x 2 inches			

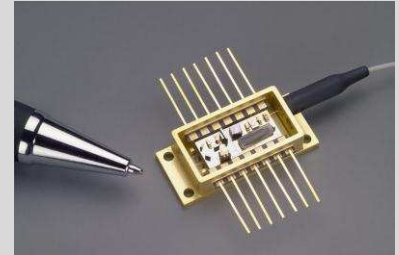
Interfaces

USB (optional)	USB-B
Optical	FC/APC
Trigger/Clk output	SATA

Notes

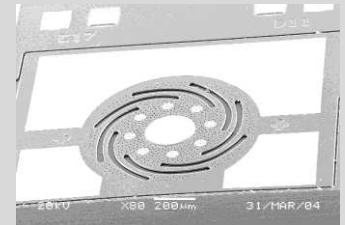
1. Coherence length is round trip up to maximum sweep rate, 3dB fringe depth
2. US Patent Application 60665716

Axsun Patented Swept Source



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Axsun MEMs Tunable Filter

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