

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 self contained design**
- **USB Interface**
- **Optional MZI Clock output**

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 design challenges 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 package.

Product Description

The AXSUN 1310nm swept source provides high power, wide tuning range, and unprecedented sweep speed and coherence length, in a convenient bench-top 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 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 (208 x 152 x 76 mm) housing and is straightforward to set up and evaluate. The universal AC Power adaptor, simple key on/off switch and optional 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 ¹			50	kHz
Coherence Length (3dB) ¹	12			mm
Output Connector		FC/APC		
Sweep Trigger Level		LVDS/ TTL		
Sweep Trigger Connector		SMA		
Clock Output Level		LVDS/ TTL		
Clock Connector (Frequency Variable)		SMA		
Laser Drive		Sine or Linear		
Power input	110		220	50/60Hz Wall Plug
Power Consumption (~25C)		12		W
Mechanical Dimensions	~208 X 152 X 76 mm ~ 8.2 X 6 x 3 inches			

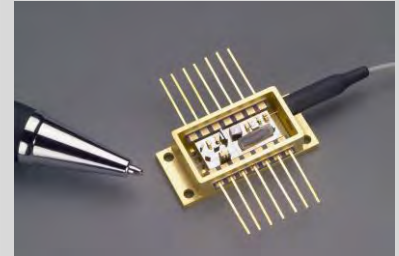
Interfaces

USB	USB-B
Optical	FC/APC
Trigger/Clk output	SMA

Notes

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

Axsun Patented Swept Source



For more information

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Axsun MEMs Tunable Filter

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