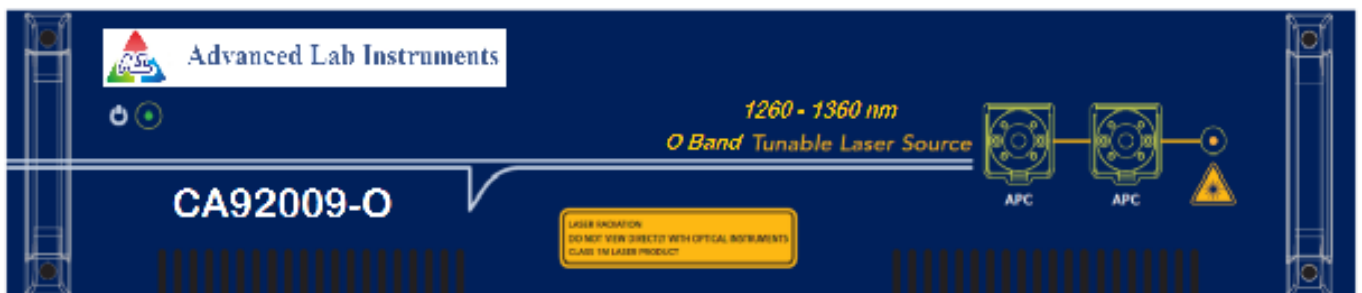




## CA92009-O O Band (1260 ~ 1360 nm) Tunable Laser Source

Specification Ver 1.00

(Nov. , 2016)



[www.ali-us.com](http://www.ali-us.com)



## Product Description

This specification describes and defines Advanced Lab Instruments CA92009-O O band CW tunable lasers with applications to test and measurement equipment. It provides fast wavelength tuning, high power output, and high power stability. Advanced Lab Instruments tunable laser products support O-band, and other single-band operation. A full-band tunable laser is also available, covering 1250~1660 nm wavelength range, with seamless tuning.

The Advanced Lab Instruments O band tunable lasers are a new-generation high performance continuous wave (CW) tunable laser source for use in various single band or combined band windows, ranging from 1260 nm to 1360 nm. The innovative design employs the state-of-the-art tunable technology and gain continuation in wide wavelength range. With no moving parts, the voltage-controlled wavelength tuning enables rapid wavelength switching over the whole operating wavelength window.

System control and communication is provided through the RS232 interface, which allows users to dynamically set operating wavelength and power with ease. Wavelength stability is guaranteed by an internal wavelength reference. Long-term power stability is achieved through close-loop feedback control.

## Key Feature

- Full O band continue tuning from 1260 ~ 1360 nm
- High power stability
- High wavelength stability
- Fast swept speed 20 ms
- RS232 communication port with PC control



## Application

- CWDM device testing and system testing
- Fiber sensing system fast swept tunable light source
- Fiber optic components testing light source
- Photonic material characterization
- Bench top testing instruments tunable light source engine
- Interferometry
- Optical spectroscopy
- BioMedical imaging tunable light source

## Specification

Parameters	Unit	Specification
Operating Wavelength Range	nm	1260 ~ 1360
Power Output Port Number	#	1
Fixed Output Power (1270~1340 nm)	mW	≥ 3
Power Stability <sup>1</sup>	dB	≤ □0.1
Wavelength Stability <sup>2</sup>	nm	≤ 0.1
Wavelength Tuning Resolution	nm	≤ 0.01
SMSR	dB	≥ 40
Linewidth (FWHM)	nm	≤ 0.2
Tuning Speed	ms	20



## Environmental Conditions

Parameters	Units	Specifications
Operating Temperature	°C	15 ~ 35
Storage Temperature	°C	-40 ~ +85
Operating Relative Humidity	%	5 ~ 85 (non-condensing)
Storage Relative Humidity	%	5 ~ 95

## Mechanics

CA92009-O O-band tunable laser is packaged in a 2RU rack mount chassis. FC/APC port on front panel is used.

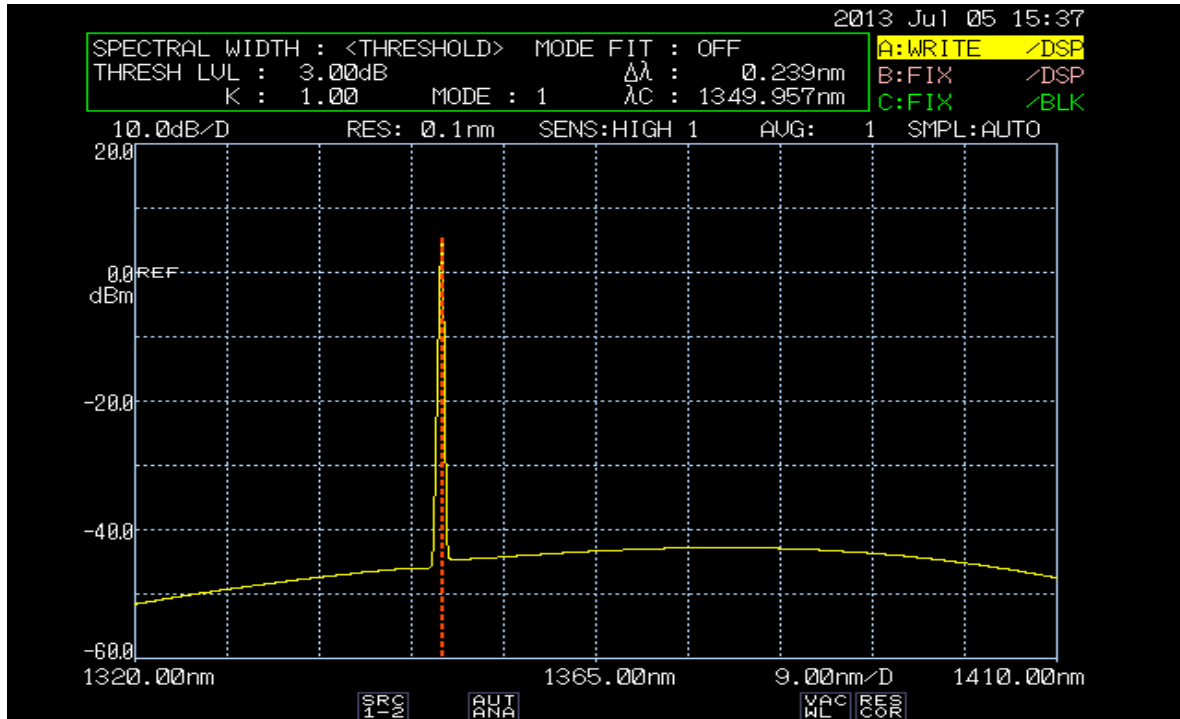


## Electrical Specifications

Electrical Parameters	Specification
Supply Voltage	110/220 V (AC)
Supply Frequency	50/60 Hz



## O Band Swept Light Source Typical Spectrum



## Communication Protocol

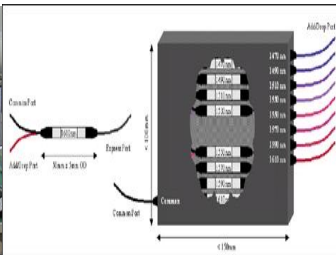
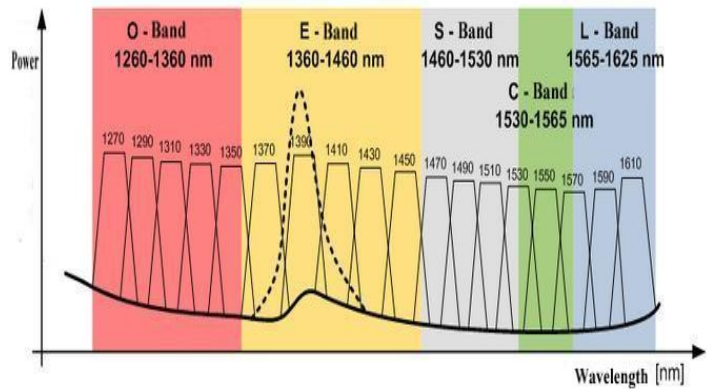
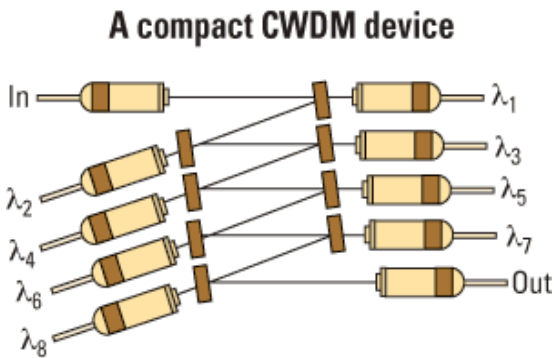
CA92009-O O Band tunable laser provides RS232 communications.



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CA92009-O O Band (1260 ~ 1360 nm) Tunable Laser Source V1.00

## Tunable Laser Source for WDM Components Testing Application

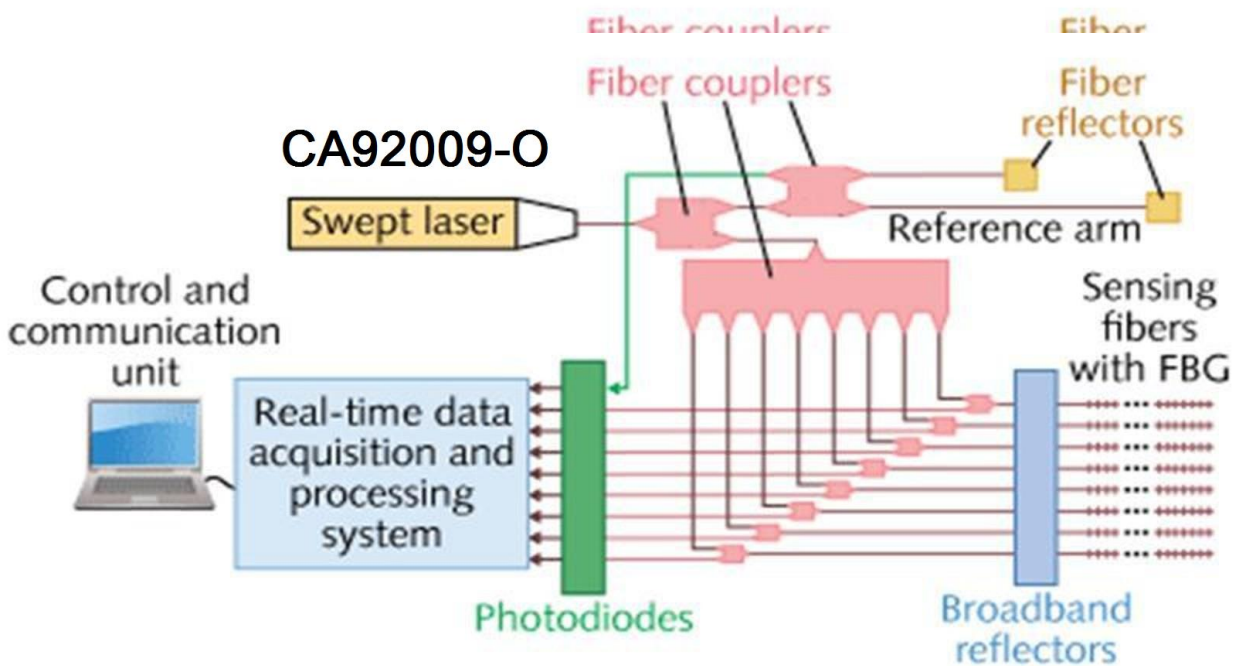




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## O Band Tunable Laser Source for Fiber Sensing Application





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CA92009-O O Band (1260 ~ 1360 nm) Tunable Laser Source V1.00

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