

CA9813 Full Band (1200 ~ 1700 nm) Tunable Laser Source

Specification Ver 1.00

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www.ucinstruments.com

Product Description

This specification describes and defines Advanced Lab Instruments CA9813 full 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 full-band, and other single-band operation. A full-band tunable laser is also available, covering 1200 ~1700 nm wavelength range, with seamless tuning.

The Advanced Lab Instruments full 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 1200 nm to 1700 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 1200 ~ 1700 nm
- High power output;
- 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

Specification

Parameters	Unit	Specification
Operating Wavelength Range	nm	1200 ~ 1700
Power Output Port Number	#	1
Fixed Output Power (1270~1340 nm)	mW	≥ 3
Power Stability ¹	dB	≤ 0.01
Wavelength Stability ²	nm	≤ 0.1
Wavelength Tuning Resolution	nm	≤ 0.01
SMSR	dB	≥ 60
Linewidth (FWHM)	nm	≤ 0.2
Tuning Speed	ms	20

Environmental Conditions

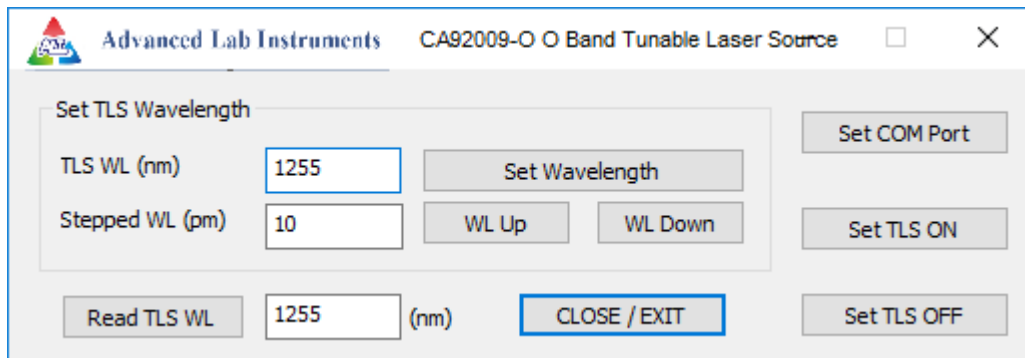
Parameters	Units	Specifications
Operating Temperature	°C	15 ~ 35
Storage Temperature	°C	-40 ~ +85
Operating Relative Humidity	%	5 ~ 85 (non-condensing)
Storage Relative Humidity	%	5 ~ 95

Electrical Specifications

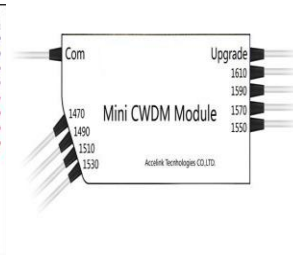
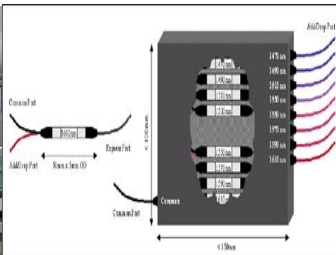
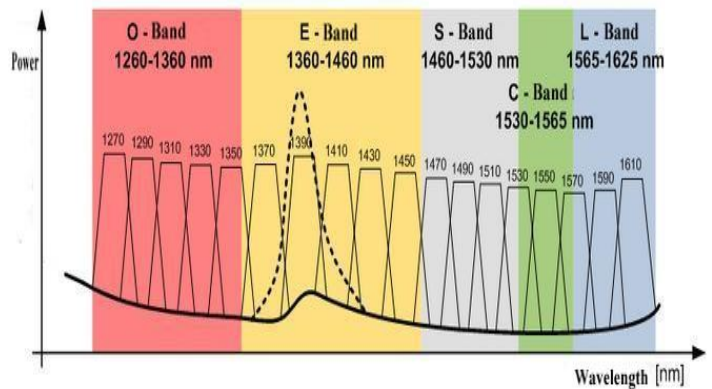
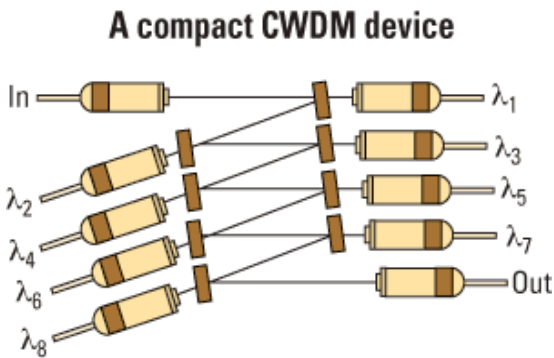
Electrical Parameters	Specification
Supply Voltage	110/220 V (AC)
Supply Frequency	50/60 Hz

Full Band Swept Light Source Typical Spectrum

Control GUI



Tunable Laser Source for WDM Components Testing Application



O Band Tunable Laser Source for Fiber Sensing Application

