

# CA92050 2 kHz Fast Swept Tunable Laser Source

(Version 1.01)

Technical Specifications Ver 1.01  
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 UC INSTRUMENTS CORP.

[www.ucinstruments.com](http://www.ucinstruments.com)

## **CA92050 2 kHz Fast Swept Tunable Laser Source**

The CA92050 2 kHz fast swept tunable laser modules offer superior performance for the test of Fiber Vibration Sensing, DWDM components, AWG , WSS, OPM components, Fiber sensing( especially for vibration fiber sensing application) , optical amplifiers, and other general purpose of fiber optical test and measurement with high wavelength resolution applications.

Each of CA92050 tunable laser modules is connected to a PC with RS232 cable. It becomes a High Accuracy, High Power, Small Dimension, Fast Startup, Affordable Tunable Laser Source system. It provides C band tunable laser sources options. UC Instruments also provide modules control software. The module also can be integrated into customers' products system with RS232 interface control.

### **Features**

- High accuracy wavelength tracking swept: +/- 10 pm
- Quick startup: Less than 2 minutes;
- High output power: +13 dBm
- Small dimension
- C band , L band option

### **Applications**

FBG Interrogation System, especial for vibration fiber sensing application

Passive Test System

Scanning Spectrometer

Laser Ranging

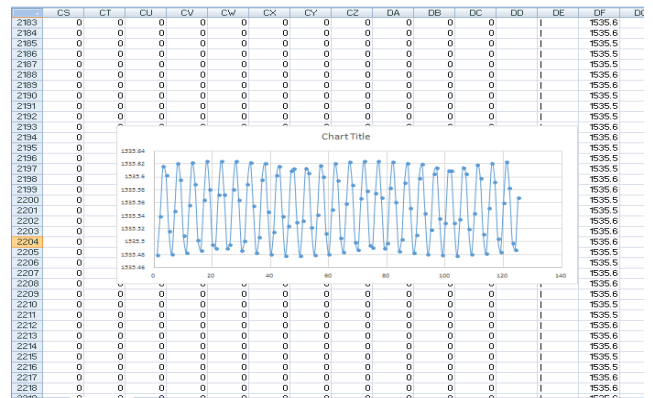
WDM PON field installation testing

Fiber Optical , Telcom R & D lab test and system integration

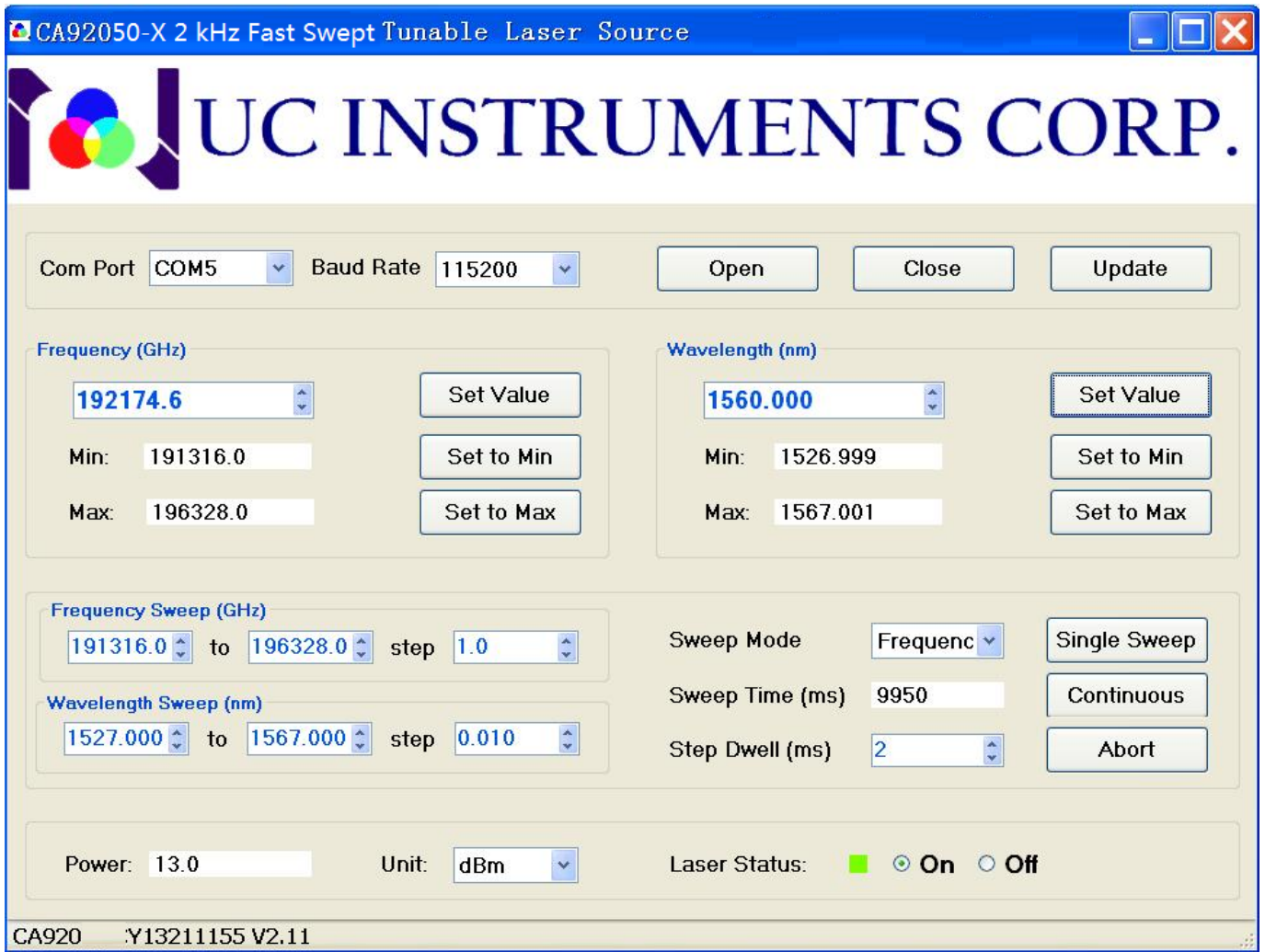
### **Specification:**

Model No.	CA92050-C	CA92050-L
Wavelength Range	1528 ~ 1568 nm	1569~1609 nm
Optical Power	> 10 mW	
Working Temperature Range	-15 ~ 55 °C	
Resolution	1 GHz	
Absolute Wavelength Accuracy	+/-10 pm Typ< 5 pm	
Relative Wavelength Accuracy	+/-5 pm Typ+/-2 pm	
Wavelength Repeatability	+/-2 pm Typ+/-1 pm	
Wavelength Stability	< +/-2 pm	
Swept Speed	2 kHz (1 GHz Step , 100 ns/Step)	
Default Swept Step	1 GHz	
Power Stability	+/- 0.05 dB	
Power vs Wavelength Flatting	<0.5 dB	
SMSR	>40 dB	
RIN	< -135 dB/Hz	
Power Supply	+5V / 4A	
Linewidth	< 5 MHz, Typ 1 MHz	
Trigger Interface	LVTTTL (SMA)	
Communication Interface	RJ45	
Dimension	224×133×43 mm	
Fiber Adapter	FC/UPC or Specify	

### Vibration Fiber Sensing Test Data Sample (Cell Phone Ring Tone):



### Computer GUI Interface:



(interface reference)

## Module Outlook



Front Panel

## Contact Information

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