

CA92050-KT 2 kHz C Band Fast Swept Tunable Laser Source CA92050-KT 2 KHz C Band (1528 -1568 nm) Tunable Laser Source

(Version 2.01)

Technical Specifications Ver 2.01
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 UC INSTRUMENTS CORP.

www.ucinstruments.com

CA92050-KT 2 kHz Fast Swept Tunable Laser Source

The CA92050-KT 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-KT 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.

The CA92050-KT swept lasers are widely deployed in FBG sensing systems and passive component test systems.

1. Key Features

- Wavelength Range C-band
- High Output Power
- Low Power Consumption
- Wide Operating Temperature Range
- Fast Swept Speed
- Simple Interface
- High Stability



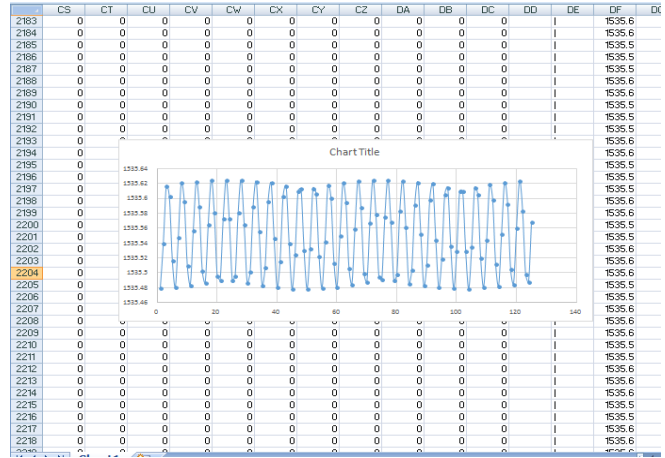
2. Applications

- Fiber Grating Sensor Interrogator System
- Optical Passive Components test system
- Scanning Spectrometer
- Laser Ranging

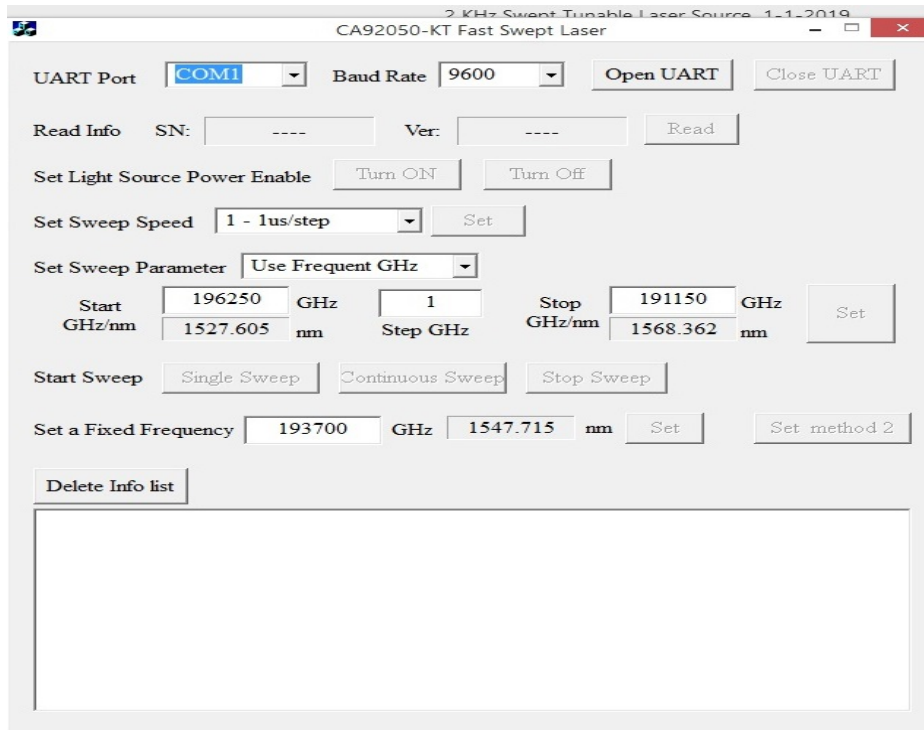
3. Technical Specifications

Model No.	CA92050-KT
Wavelength Range	40 nm for C-band (From 1528 – 1568 nm)
Optical Power	20 mW
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(-5 to 55 °C)	<+/-2 pm
Sweep Speed	2KHz(Max)
Default Sweep Step	1 GHz
Power Stability	+/- 0.05 dB
Spectral Flatness	<0.5 dB
SMSR	>40 dB
RIN	< -135 dB/Hz
Power Supply	+5 V / 3 A
Linewidth	<5 MHz Typ 1 MHz
Trigger Interface	LVTTTL
Communication Interface	RS232 or TTL
Dimension	235mm W, 45mm H, 310 mm D
Fiber Adaptor	FC/UPC
Working Temperature Range	-10 to 55 °C

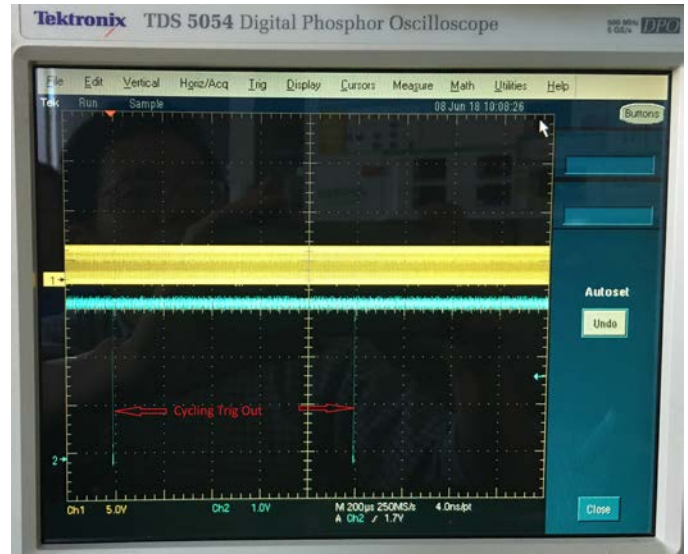
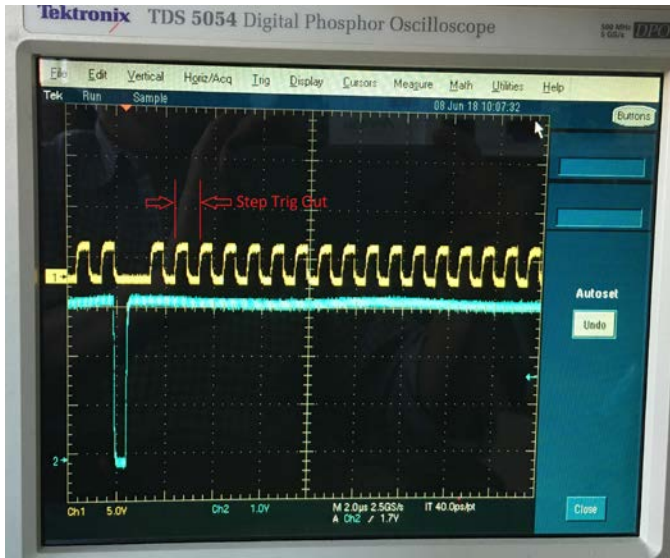
Vibration Fiber Sensing Test Data Sample (Cell Phone Ring Tone):



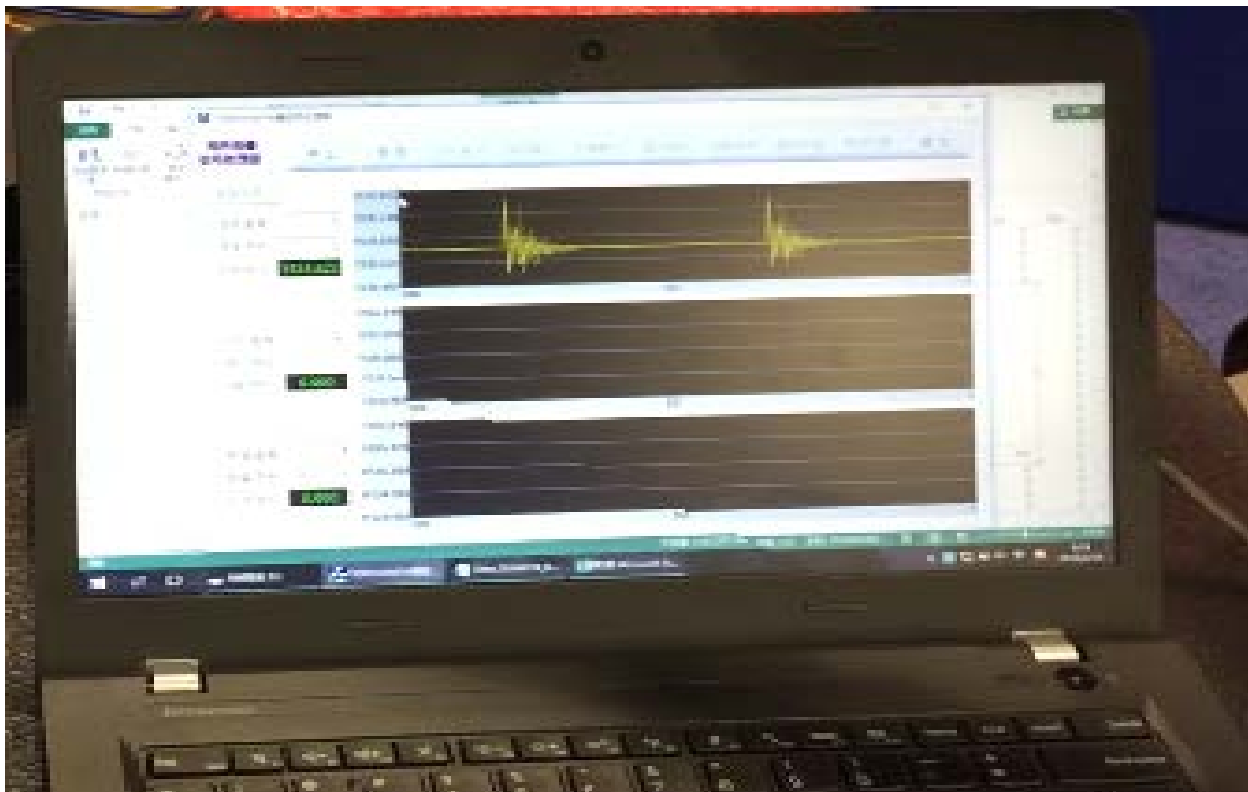
Computer GUI Interface:



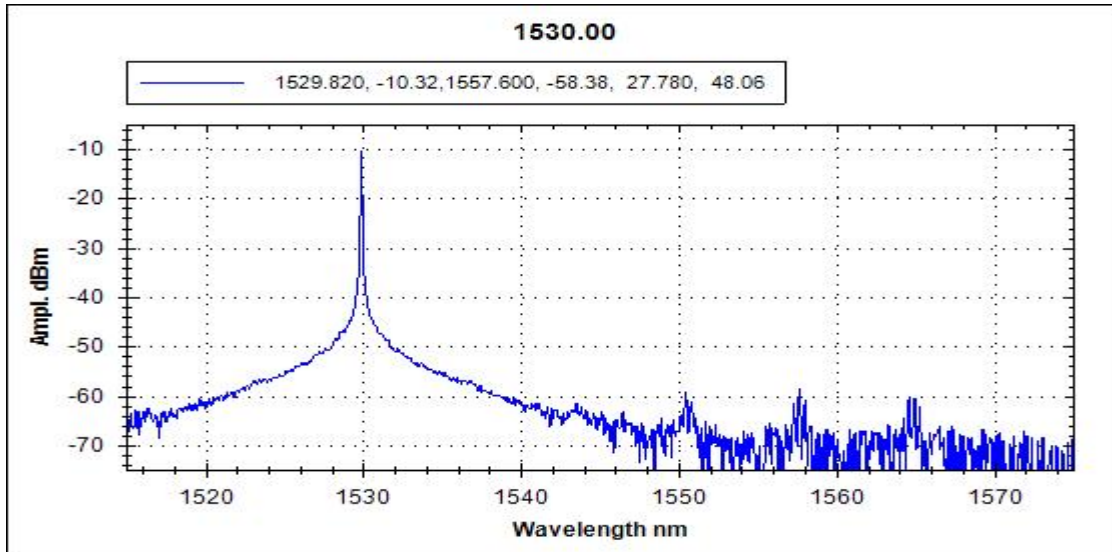
Trig Out Signal:



Ring Tone Vibration Signal (Application Sample):



Typical Output Optical Spectrum



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