CA9812 O Band Tunable Laser Source

CA9812 O Band(1265.00 ~ 1365.00 nm) Tunable Laser Source

Technical Specifications Ver 5.00
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UC INSTRUMENTS CORP.

www.ucinstruments.com

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(1265.00 ~ 1365.00 nm)

The CA9812 O Band tunable laser integrates a widely tunable laser with a semiconductor optical amplifier (SOA). The tunable laser is electronically tuned and can address any wavelength from 1265.00 nm to 1365.00nm. The integrated SOA facilitates flexible control of the output power and acts as a shutter when reverse biased, enabling dark tuning between channels. The device is packaged into a standard module box package, with an internal optical isolator and a polarization maintaining fiber output.

1. Key Features

High Wavelength Accuracy Tuning

100 nm Wind Tuning Range(1265.00 ~ 1365.00 nm)

Narrow Linewide

Integrated SOA

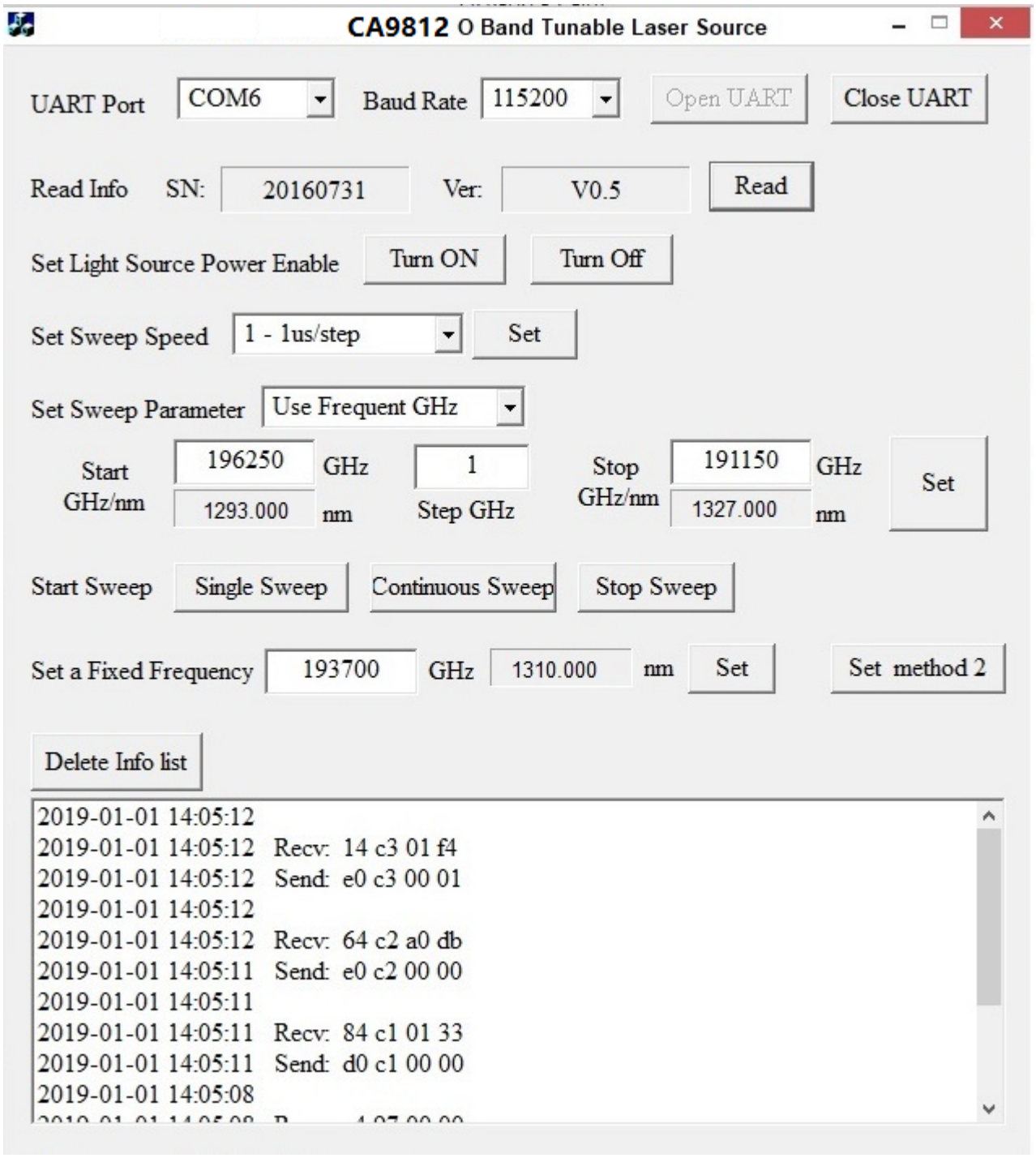
2. Applications

- O Band CWDM Filter Spectrum Swept Testing
- O Band CWDM Components Testing
- O Band LanWDM Transceiver and Receiver Channel Verify
- O Band LanWDM Transceiver and Receiver System Field Construction Verify.
- OCT application
- Fiber Sensing Application

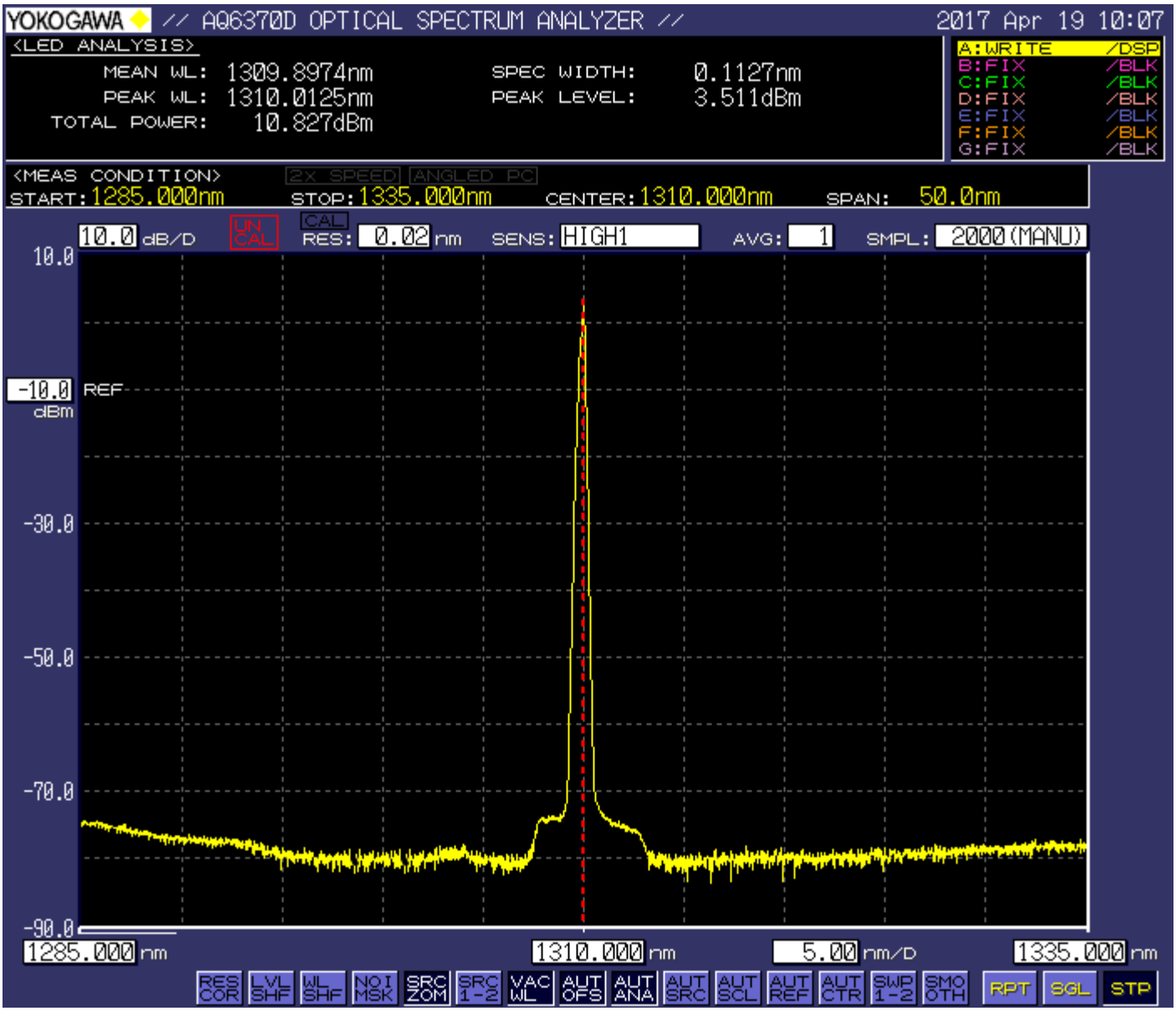
3. Technical Specifications

Model No.	CA9812
Wavelength Range	100 nm for O-band (From 1265.00 – 1365.00 nm)
Optical Power	>3 dBm
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 ℃)	<+/-2 pm
Sweep Speed	100 Hz(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	LVTTL
Communication Interface	RS232 or TTL
Dimension	235mm W, 45mm H, 310 mm D
Fiber Adaptor	FC/UPC
Working Temperature Range	-10 to 55 ℃

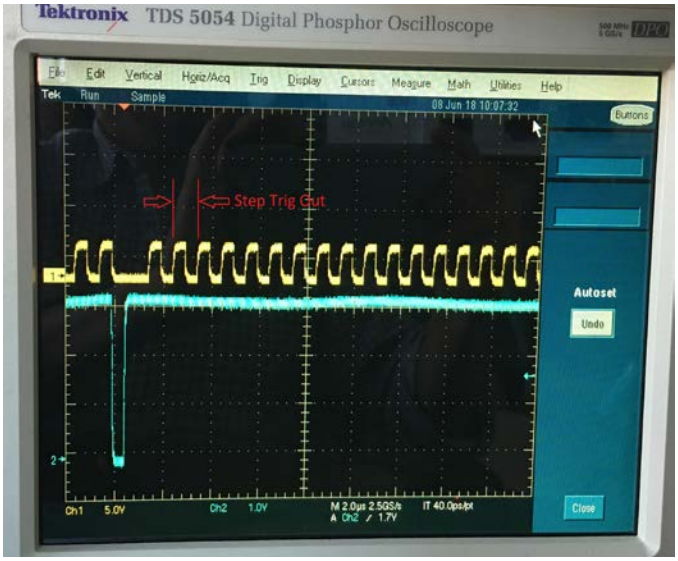
4. CA9812 GUI

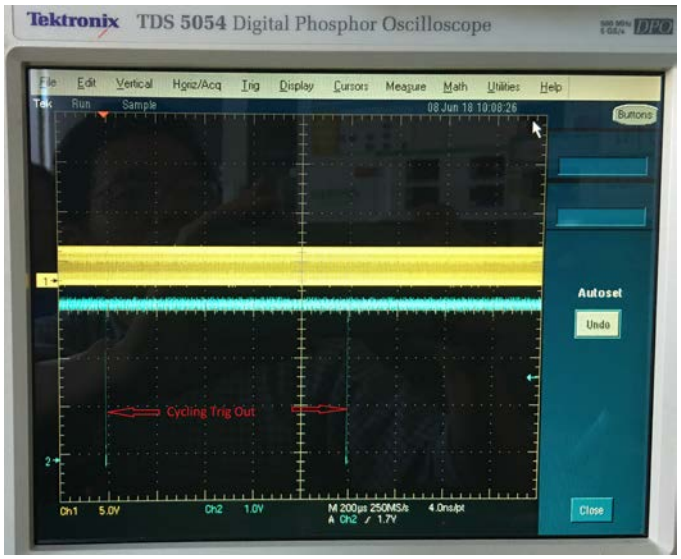

CA9812 O Band Tunable Laser Source
UART Port
COM6
Baud Rate
115200
Open UART
Close UART
Read Info
SN:
20160731
Ver:
V0.5
Read
Set Light Source Power Enable
Turn ON
Turn Off
Set Sweep Speed
1 - 1us/step
Set
Set Sweep Parameter
Use Frequent GHz
Start GHz/nm
196250
GHz
1293.000
nm
1
Step GHz
Stop GHz/nm
191150
GHz
1327.000
nm
Set
Start Sweep
Single Sweep
Continuous Sweep
Stop Sweep
Set a Fixed Frequency
193700
GHz
1310.000
nm
Set
Set method 2
Delete Info list
2019-01-01 14:05:12
2019-01-01 14:05:12 Recv: 14 c3 01 f4
2019-01-01 14:05:12 Send: e0 c3 00 01
2019-01-01 14:05:12
2019-01-01 14:05:12 Recv: 64 c2 a0 db
2019-01-01 14:05:11 Send: e0 c2 00 00
2019-01-01 14:05:11
2019-01-01 14:05:11 Recv: 84 c1 01 33
2019-01-01 14:05:11 Send: d0 c1 00 00
2019-01-01 14:05:08

CA9812 O Band TLS Typical Output Optical Spectrum

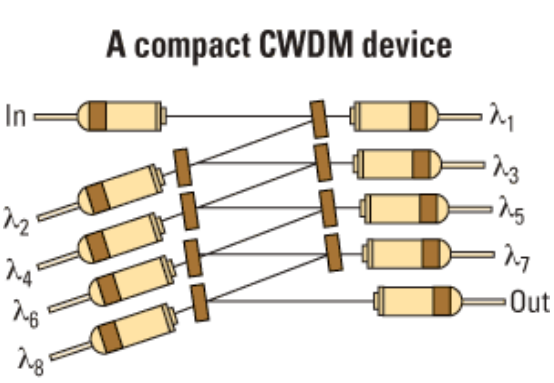


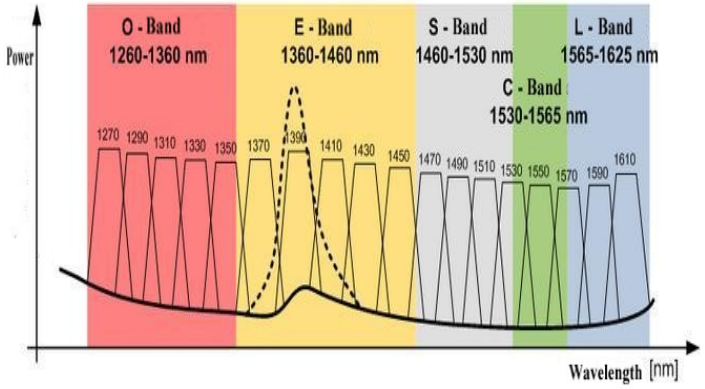
Trig Out Signal:

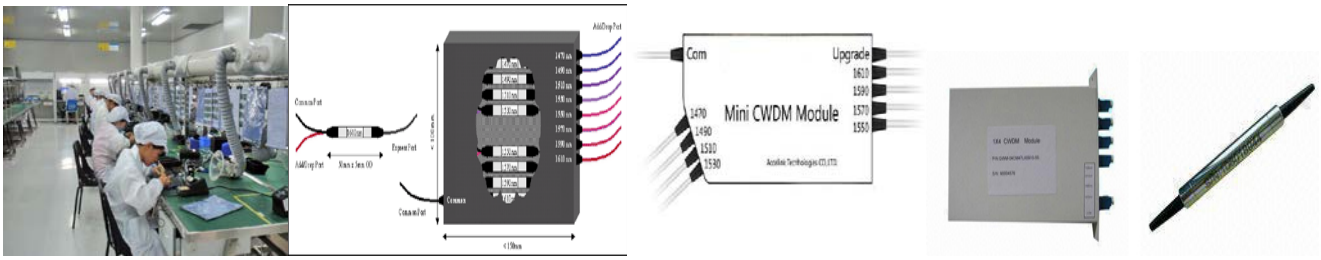




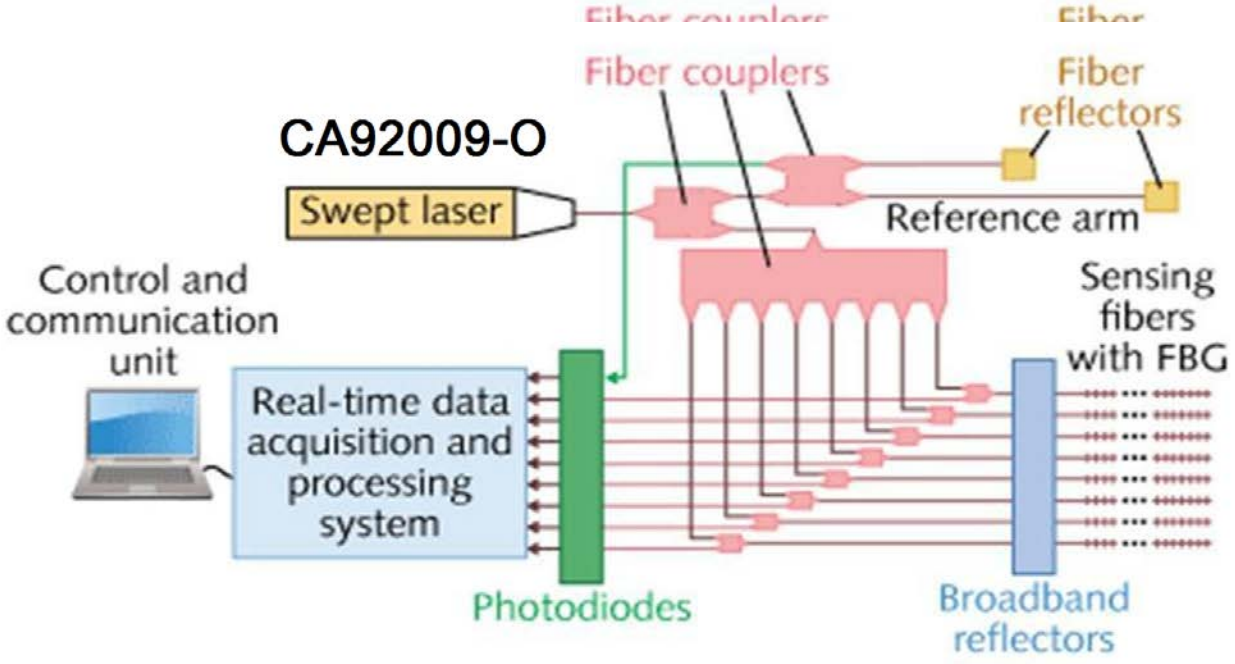
Tunable Laser Source for WDM Components Testing Application

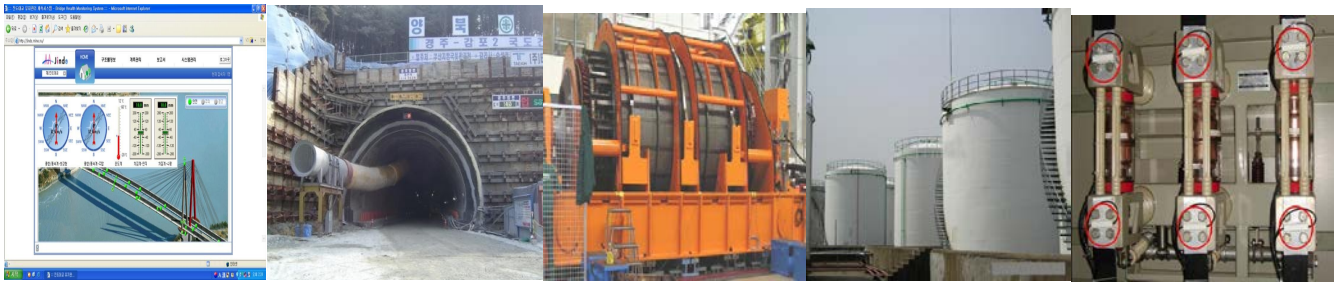






O Band Tunable Laser Source for Fiber Sensing Application





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Product specifications and descriptions in this documentation subject to change without notice.