

# CA92051-LanWDM O Band LanWDM Tunable Laser Source

## CA92051-LanWDM O Band(1293.00 ~ 1327.00 nm) Tunable Laser Source

Technical Specifications Ver 1.01  
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# CA92051-LanWDM O Band LanWDM Tunable Laser Source

(1293.00 ~ 1327.00 nm)

The CA92051-O O Band LanWDM 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 1293.00 nm to 1327.00nm. 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

- Up To +13 dBm Optical Power Output
- 34nm Tuning Range(1293.00 ~ 1327.00 nm)
- PM Fiber Output
- Integrated SOA



## 2. Applications

- O Band LanWDM Filter Spectrum Swept Testing
- O Band LanWDM Components
- O Band LanWDM Transceiver and Receiver Channel Verify
- O Band LanWDM Transceiver and Receiver System Field Construction Verify.

### 3. Technical Specifications

Model No.	CA92051-LanWDM
Wavelength Range	34 nm for O-band LanWDM(From 1293.00 – 1327.00 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	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 °C

## 4. CA92051-LanWDM GUI

CA92051-LanWDM O Band LanWDM Tunable Laser Source

UART Port:  Baud Rate:

Read Info SN:  Ver:

Set Light Source Power Enable

Set Sweep Speed:

Set Sweep Parameter:

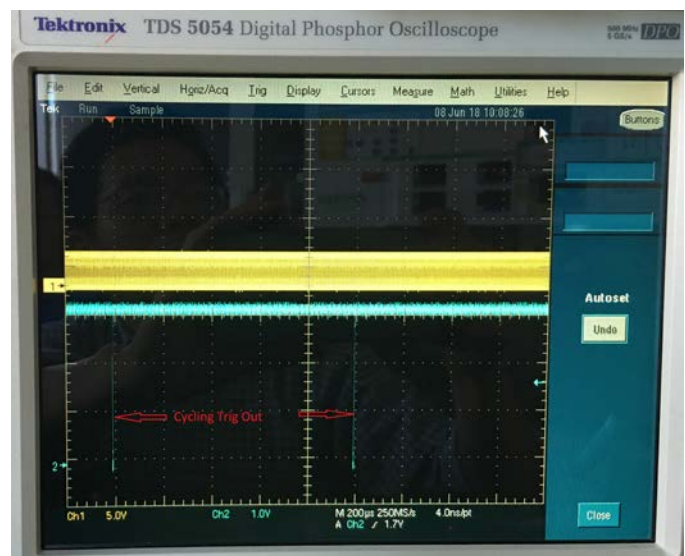
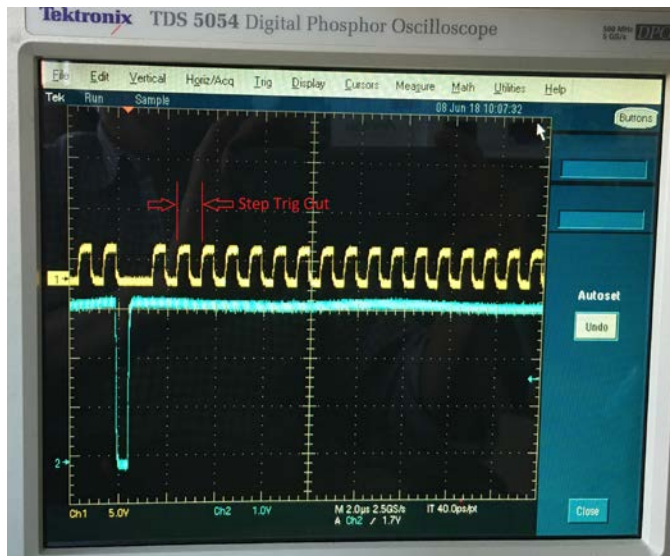
Start:  GHz  Stop:  GHz   
GHz/nm:  nm Step GHz:  nm

Start Sweep:

Set a Fixed Frequency:  GHz  nm

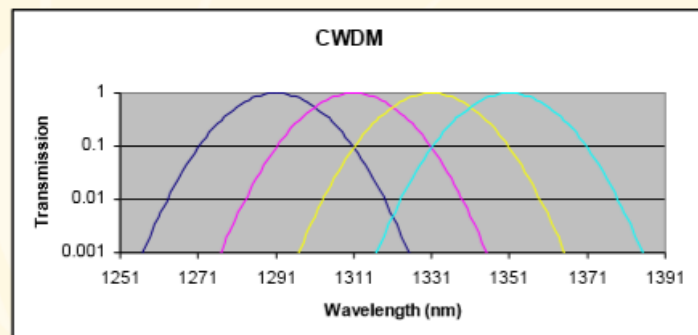
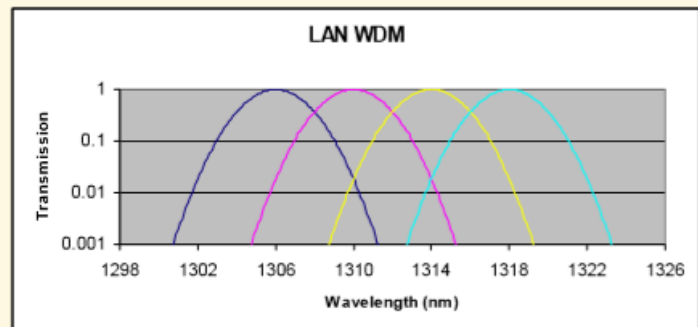
```
2019-01-01 14:05:12
2019-01-01 14:05:12 Recv: 14 c3 01 f4
2019-01-01 14:05:12 Send: e0 c3 00 01
2019-01-01 14:05:12
2019-01-01 14:05:12 Recv: 64 c2 a0 db
2019-01-01 14:05:11 Send: e0 c2 00 00
2019-01-01 14:05:11
2019-01-01 14:05:11 Recv: 84 c1 01 33
2019-01-01 14:05:11 Send: d0 c1 00 00
2019-01-01 14:05:08
2019-01-01 14:05:08 Recv: 107 00 00
```

# Trig Out Signal:



## LanWDM Grid Alternatives

- Alt. 1: ITU G.694.1 widely spaced DWDM grid for LAN applications (LAN WDM)
  - 1306 – 1318nm (O band)
  - 193.1THz base
  - 400, 600, or 800GHz spacing (2, 3, or 4nm)
  - 1, 2, or 2.5nm width (requires cooling of TX optics)
- Alt. 2: ITU G.694.2 CWDM grid for LAN applications (CWDM)
  - 1291 – 1351nm (O band)
  - 20nm spacing
  - 13nm width (in principle does not require cooling of TX optics, although today feasible 25G TX optics require cooling)



# Contact Information

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