

LT-CWDM-1-M



DEVICE

CWDM DFB Laser Module with 1 GHz Bandwidth

OVERVIEW

The Optilab LT-CWDM-1-M series of products are CWDM Distributed Feedback (DFB) laser sources in a module housing, designed for general laboratory applications. The LT-CWDM-1-M is a reliable and cost effective DFB laser source for providing a variety of CWDM wavelengths, from 1270nm up to 1610nm. With its simple and intuitive panel interface, the user can control the DFB light source output power level by adjusting the laser drive current, with USB monitoring, as well as provide up to 1 GHz direct modulation RF signal, all enclosed with its inclusive AC/DC power supply. Contact Optilab for more information.

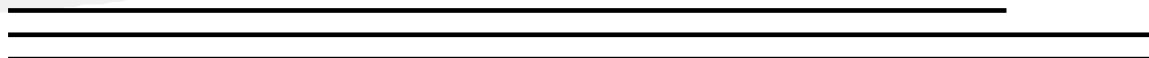
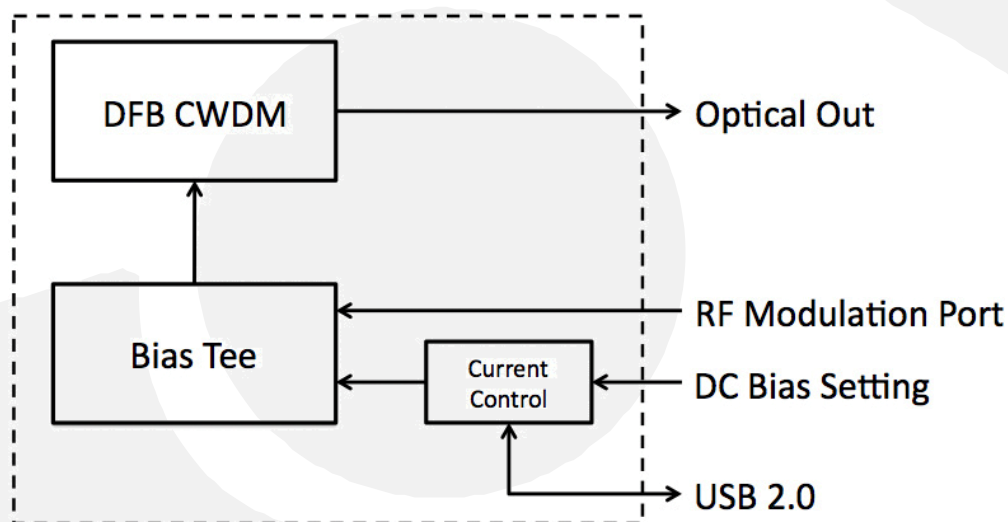
FEATURES

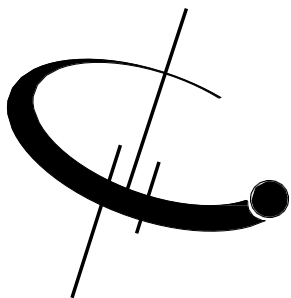
- Modulation RF Signal up to 1 GHz
- Wavelengths from 1270nm up to 1610nm
- Adjustable laser drive current
- USB interface remote monitoring

USE IN

- L-Band RFoF Link
- CWDM component qualification
- Laboratory test and measurement
- Multiple wavelength CWDM RFoF

FUNCTIONAL DIAGRAM





LT-CWDM-1-M

SPECIFICATIONS

Available Wavelength Selection	CWDM, 1270 nm - 1610 nm, See attached Table 1.0
Center Wavelength Accuracy	± 2.5 nm
Output Power Level	2 mW typ.
Output Power Stability	± 0.3 dB over 8 hours
Wavelength Stability	± 200 pm over 8 hours
Laser Linewidth	3 MHz typ.
Side Mode Suppression Ratio	30 dB typ.
Optical Isolator	30 dB typ.
Relative Intensity Noise (RIN)	-143 dB/Hz max.

GENERAL

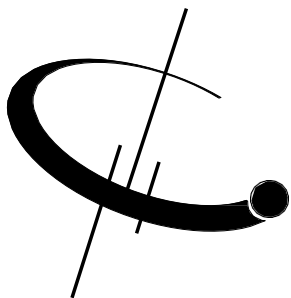
ADDITIONAL FEATURES

DFB Power Output	10 - 100% adjustable range
RF Modulator Bandwidth	1 GHz max.

MECHANICAL

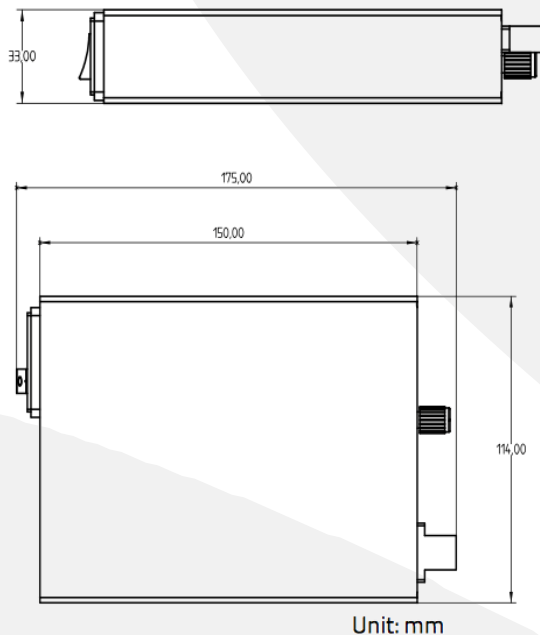
Operation Temperature	10°C to +60°C
Storage Temperature	-65°C to +85°C
Operating Humidity	0% to 85% Relative Humidity
Power Supply	120/220 VAC, 50/60 Hz
Power Consumption	5 W max.
Dimensions	150 x 114 x 30 (mm)
Control/Monitoring	LD Current, Output Power
Remote Control	USB
Optical Connectors	FC/APC, other options are available
Optical Fiber Type	SMF-28
RF Connector	SMA Female
Accessories Included	USB cable





LT-CWDM-1-M

MECHANICAL DRAWING



PORT FUNCTION DESCRIPTION

1	Optical Output
2	RF In
3	Power LED
4	DC Current Adjust
5	AC Power Socket
6	AC Power Switch
7	USB 2.0

TABLE 1.0 AVAILABLE CWDM WAVELENGTHS

Wavelength	
1270 nm	1450 nm
1290 nm	1470 nm
1310 nm	1490 nm
1330 nm	1510 nm
1350 nm	1530 nm
1370 nm	1550 nm
1390 nm	1570 nm
1410 nm	1590 nm
1430 nm	1610 nm

