

DFB-CWDM-M



CWDM DFB Laser Module

The Optilab DFB-CWDM-M series of products are CWDM Distributed Feedback (DFB) laser sources in a module housing, designed for general laboratory applications. The DFB-CWDM-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.

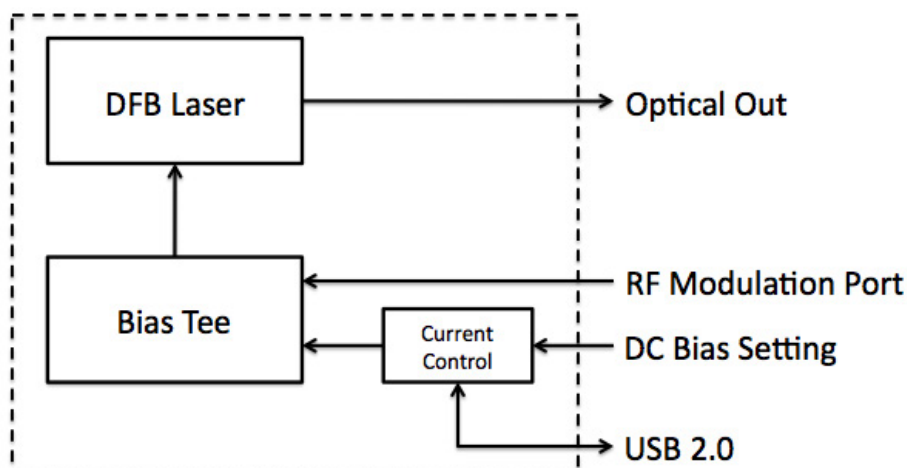
Features

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

Applications

- Long wave (L) RFoF link
- Laboratory test and measurement
- CWDM component qualification

Functional Diagram



CWDM DFB Laser Module | DFB-CWDM-M

OPTIONS

DFB-CWDM-xxxx-M

xxxx Wavelength

TECHNICAL INFO

For technical info and support:

sales@optilab.com

www.optilab.com

WEB ORDER

To order, please visit OEQuest.com.

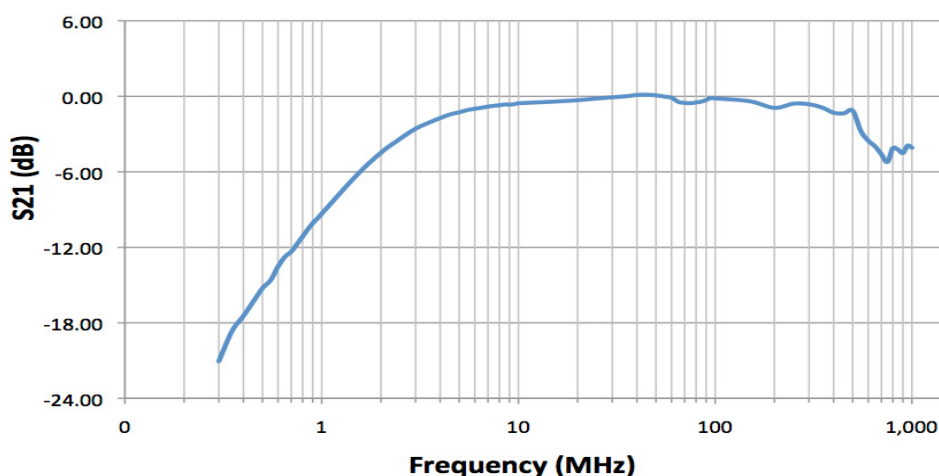


Optilab Advantage

- Innovation
- Performance
- Quality
- Customization
- Warranty

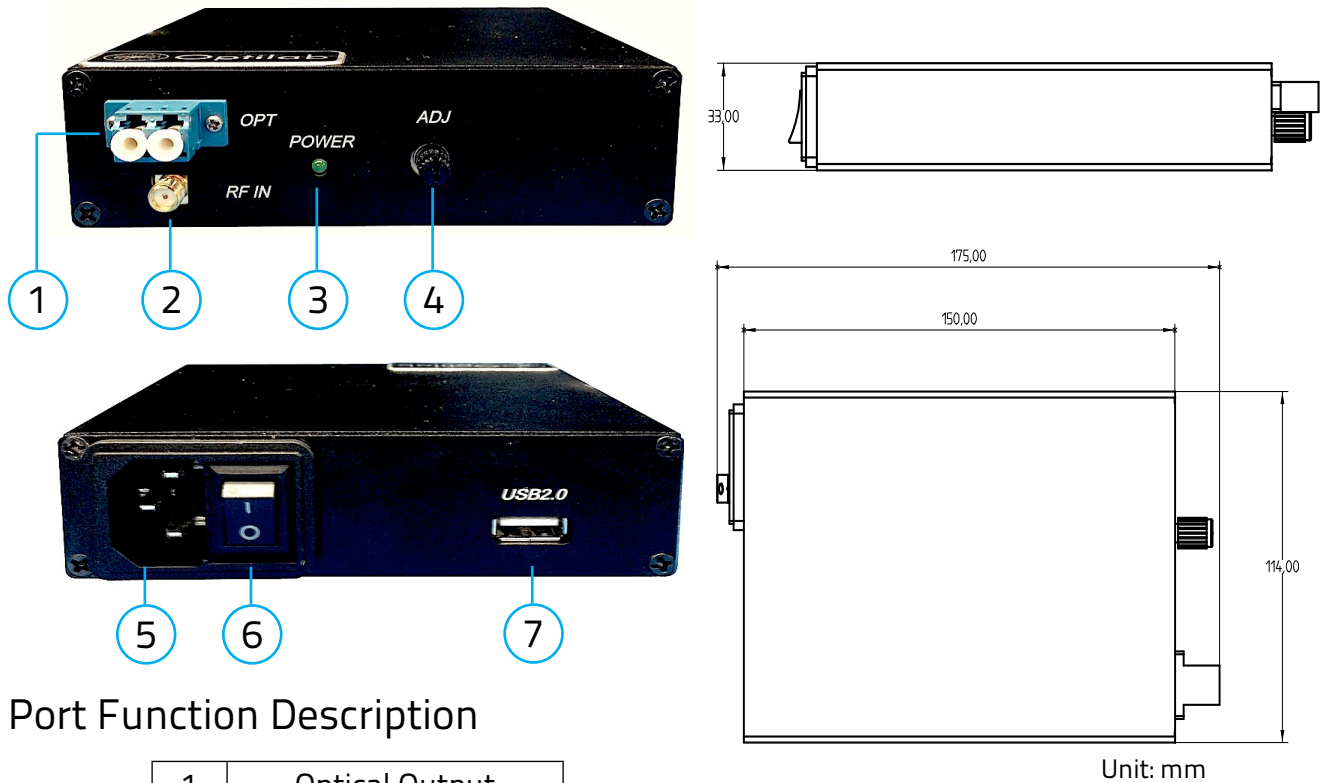
Technical Specifications	
Available Wavelength Selection	CWDM, 1270 nm - 1610 nm See attached table 1.0
Center Wavelength Accuracy	±2.5 nm
Output Power Level	2 mW typ.
Output Power Stability	±0.3 dB over 8 hours
Wavelength Stability	±200 pm over 8 Hours
Laser Linewidth	2 MHz typ., < 1 MHz is available
Side Mode Suppression Ratio	40 dB typ.
Optical Isolation	30 dB typ.
Relative Intensity Noise (RIN)	-145 dB/Hz typ. max.
Polarization Extinction Ratio	20 dB typ.
Additional Features	
DFB Power Output	10 -100% adjustable range
RF Modulator Bandwidth	1 GHz typ., 2 GHz useable
Mechanical Specifications	
Operating Temperature	10 °C to +50 °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

S21 Modulation Bandwidth, Normalized



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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