



DFB-B



DEVICE

DFB Laser Source, Benchtop

OVERVIEW

The Optilab DFB-B is a Distributed Feedback (DFB) laser source in a benchtop unit designed for general laboratory applications and is a reliable and cost-effective DFB laser source for providing up to 4 DFB wavelengths. With Optilab's comprehensive inventory of high quality lasers, the DFB-B source can be ordered from a large variety of wavelengths, and is constructed with Telcordia-qualified lasers to ensure 15+ years of operating life. The DFB laser's operating temperature and drive current are precisely monitored by a micro-controller to ensure constant output power and emission wavelength stability. Using its intuitive touch screen LCD display or an optional USB interface, the user can control the DFB output power level by adjusting the laser drive current and emission wavelength. Contact Optilab for more information.

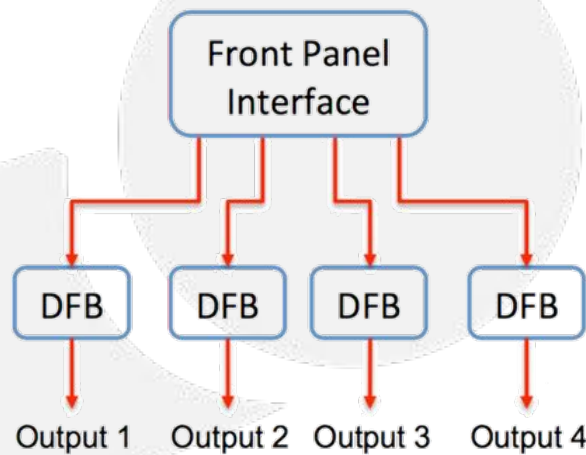
FEATURES

- Up to 4 Wavelength DFB sources
- DFB with up to 50 mW output
- Stability wavelength to +/- 5 pm
- Wavelength tuning range: +/- 1 nm
- Over 80 DWDM Wavelengths available
- Polarization Maintaining (PM) output available
- LCD touch screen and USB interface

USE IN

- DWDM Networks
- Seed Laser
- Fiber Sensors
- Laboratory Testing and Measurement
- Fiber Optics Components Testing

FUNCTIONAL DIAGRAM





DFB-B

SPECIFICATIONS

Number of DFB	Up to 4 Laser in One Unit
Available Wavelength Range	All C-Band DWDM wavelengths; Custom L-Band upon request. 1310 ± 5 nm, 1510 ± 5 nm, 1600 ± 5 nm
Wavelength Accuracy for Customization	±0.05 nm
Wavelength Tuning Range	±1.0 nm
Output Power	10 mW, 20 mW, 40 mW, 50 mW on select wavelengths
Output Power Stability	±0.1 dB over 8 hours
Wavelength Accuracy	±0.005 nm over 8 hours
Standard Laser Linewidth	2 MHz typ.
Narrow Laser Linewidth	< 1 MHz DFB available
Side Mode Suppression Ratio	45 dB typ.
Optical Isolator	30 dB min.
Relative Intensity Noise	-145 dB/Hz max.
Polarization Extinction Ratio	20 dB typ. (with PM fiber option)

GENERAL

ADJUSTABLE FEATURES/OUTPUT

Channel Output Control	On/Off
DFB Power Output	Up to 6 dB adjustment of peak power output
DFB Wavelength Tuning	±1.0 nm from the center of the wavelength

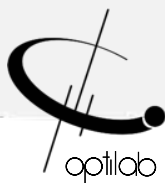
MECHANICAL

Operation Temperature	10°C to +50°C
Storage Temperature	-10°C to +70°C
Operating Humidity	0% to 85% Relative Humidity
Power Supply	80 - 240 V, 43 - 63 Hz AC or 40 - 58 V DC (optional)
Power Consumption	50 W max.
Housing Dimensions	Benchtop, 16" x 13.5" x 6.5"
Control/Monitoring	LD Current, Output Power, Laser wavelength
Remote Control	RS-232 via USB Connector
Display	LD Current, Laser Wavelength
Optical Connectors	FC/APC, other options are available
Optical Fiber Type	SMF-28 (standard), PANDA for PM Output

ORDERING OPTIONS

DFB-w-B-xx-y-z

- w** Number of Lasers up to 4
- xx** Optical Power Level (mW): 10, 20, 40, or 50 (depending on wavelength)
- y** Fiber Type S, SM, P, PM
- z** All C-band DWDM Wavelengths





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LABVIEW SOFTWARE INTERFACE



SPECTRUM DATA

