

EDFA-PA-LN-W-M



DEVICE

Low Noise, Dual Stage High Gain Pre-Amp EDFA Module

OVERVIEW

The Optilab EDFA-PA-LN-W-M Pre-Amp EDFA is a Dual Staged low noise with wideband filter and high-gain module for amplifying low input level signals that is an easy-to-use and cost-efficient solution for photonic subsystems, OEM integration, free space communication, and satellite/ground link. Using a dual stage design, this module provides over 50 dB gain with maximum 4.5 dB noise figure and is designed to amplify signal with a low input level as low as -60 dBm. Software control is standard via an RS-232/485 port for status monitoring and pump laser protection are designed to ensure the reliability of the device. The EDFA-PA-LN-W-M requires a single ± 5 Volt DC power supply for operation. Due to low- noise filter, it is the best for the user to specify operating wavelength before proceeding order. Contact Optilab for more information.

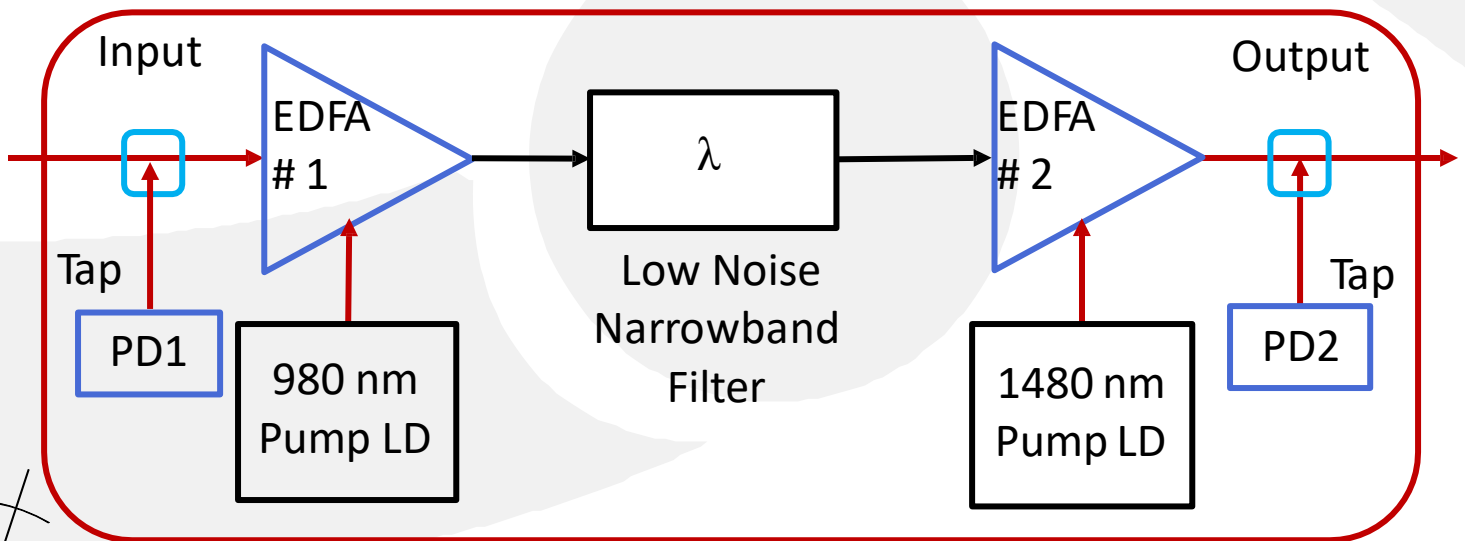
FEATURES

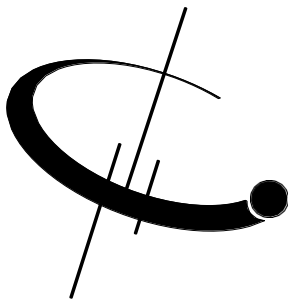
- Optical gain up to 50 dB
- Low noise figure < 4.5 dB
- Low input Level to -60 dBm
- RS-232/485 for remote control
- Wideband filter

USE IN

- Subsystem Integration for optical links
- Free Space Communication
- Satellite/Ground Link
- Research Development

FUNCTIONAL DIAGRAM





EDFA-PA-LN-W-M

SPECIFICATIONS

Center Wavelength	1530nm to 1560nm
Amplification Window	7 nm typ.
Output Power Levels	10 dBm max.
Optical Gain	40 dB typ.
Noise Figure	4.0 dB typ.
Optical Return Loss	50 dB min
Input/Output Optical Isolation	30 dB min.

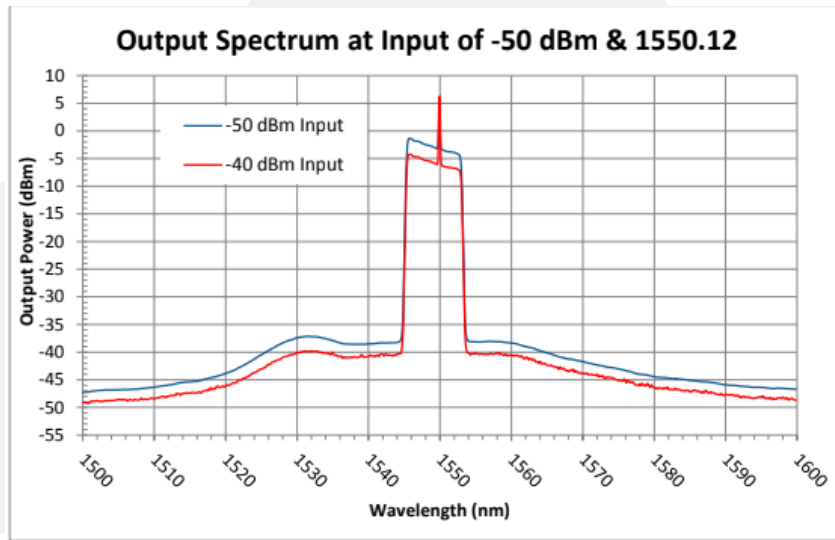
GENERAL

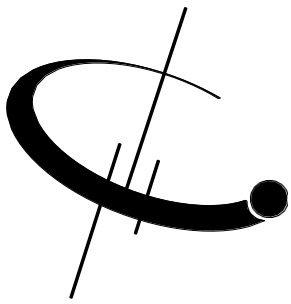
Polar. Mode Dispersion	0.1 ps max.
Polar. Dependent Gain	0.1 dB max.
Input Power Range	-60 dBm to -25 dBm
Output Power Stability	0.1 dB over 8 hours

MECHANICAL

Operating Temperature	-10 °C to +70 °C
Storage Temperature	-45 °C to +85 °C
Operating Humidity	90%, non-condensing
Power Supply	+5 V DC, 5.0 A max.
Power Consumption	2.0 W max.
Fiber Type	SMF-28
Fiber Jacket	900µm
Connector Type	FC/APC or others
Connector (power & control)	DB-25 Male
Display	LEDs for On/Off, Power
Remote Control	RS-232/485
Dimensions	135.2mm x 210mm x 28mm

Sample Test Data





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MECHANICAL DRAWING

