

EDFA-PA-LN-N-M



DEVICE

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

OVERVIEW

The Optilab EDFA-PA-LN-N-M Pre-Amp EDFA is a Dual Staged low noise with narrowband 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 -50 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-N-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.

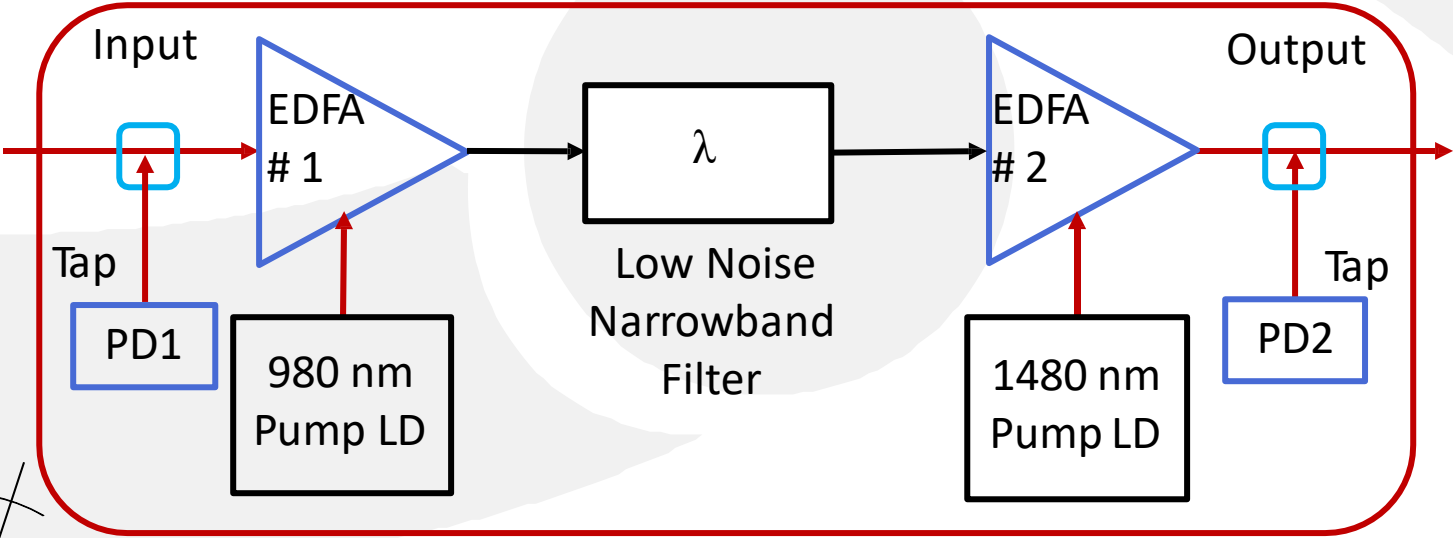
- FEATURES
- Optical gain up to 50 dB
 - Low noise figure < 4.5 dB
 - Low input Level to -50 dBm

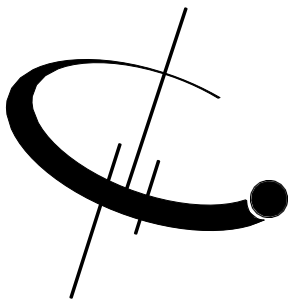
- RS-232/485 for remote control
 - Narrowband filter

- USE IN
- Subsystem Integration for optical links
 - Free Space Communication

- Satellite/Ground Link
 - Research Development

FUNCTIONAL DIAGRAM





EDFA-PA-LN-N-M

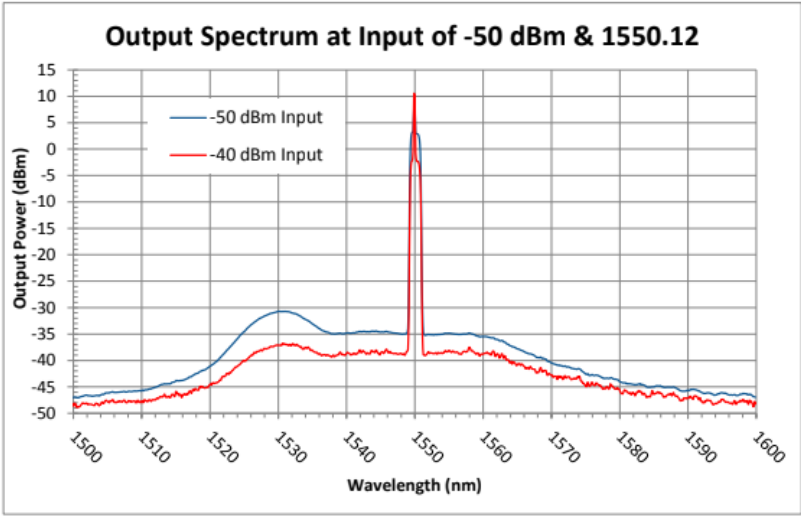
SPECIFICATIONS

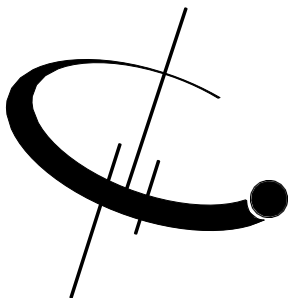
GENERAL

Center Wavelength	1530nm to 1560nm
Amplification Window	1.0 nm typ.
Output Power Levels	10 dBm max.
Optical Gain	50 dB typ.
Noise Figure	4.0 dB typ.
Optical Return Loss	50 dB min
Input/Output Optical Isolation	30 dB min.
Polar. Mode Dispersion	0.1 ps max.
Polar. Dependent Gain	0.1 dB max.
Input Power Range	-50 dBm to -25 dBm
Output Power Stability	0.1 dB over 8 hours
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	20 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

MECHANICAL

SAMPLE TEST DATA





EDFA-PA-LN-N-M

MECHANICAL DRAWING

