EDFA-PA-L-M

DEVICE

25 dB Gain Pre-Amp EDFA Module, L-band

OVERVIEW

The Optilab EDFA-PA-L-M Pre-Amp EDFA is a module for amplifying low input level signals that is an easy-to-use and cost-efficient solution for photonic subsystems, OEM integration, and fiber optic system integration. Using a high gain design, this module provides over 25 dB gain with a 4.5 dB noise figure and is designed to amplify signal with a low input level as low as -40 dBm. Software control is standard via an RS- 232 port for status monitoring and pump current adjustments, and pump laser protection and alarms are equipped to ensure the reliability and safety of the device. The EDFA-PA-L-M requires a single ±5 Volt DC power supply for operation that comes included with each unit. Contact Optilab for more information.
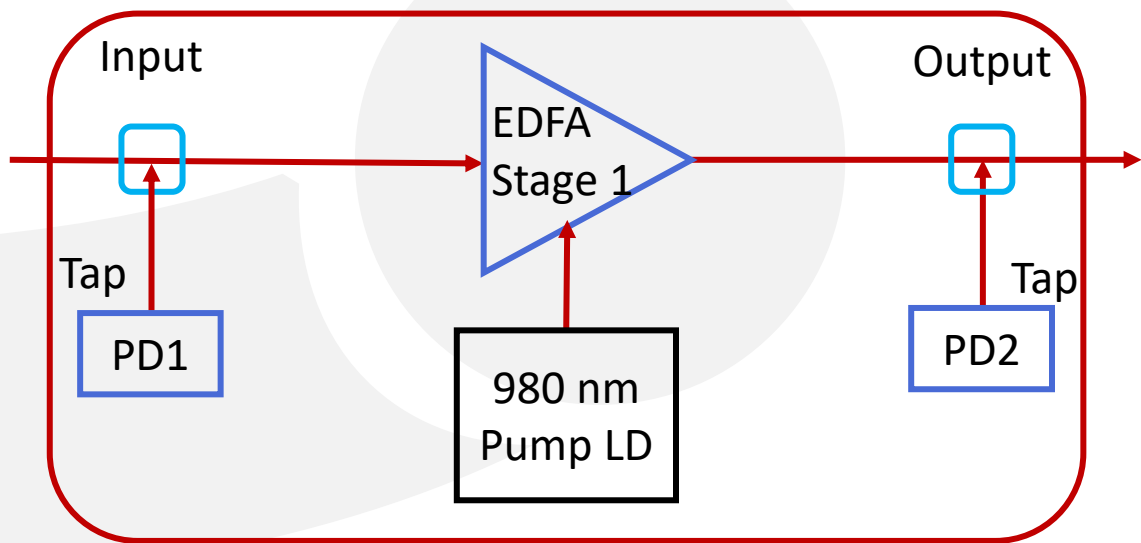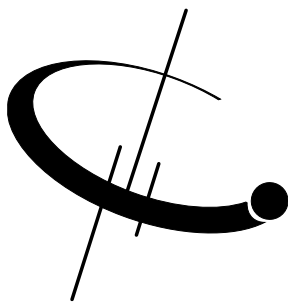
FEATURES

- High gain of more than 25 dB
- Low noise figure
- Designed for low input level
- RS-232 standard for remote control
- Wide wavelength operation range
- ±5 V power supply
- 10+ years of operation life

USE IN

- OEM integration for
  - Optical Networks
  - Research and Development
  - RF over Fiber
- Pulse Amplification

FUNCTIONAL DIAGRAM
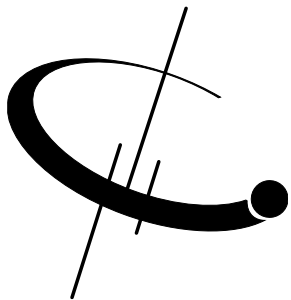
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SPECIFICATIONS

GENERAL

Operating Range	1568 nm – 1605 nm
Output Power Levels	+14 dBm @ 0 dBm typ.
Input Power Range	-40 dBm to +5 dBm
Optical Gain	25 dB min. @ -40 dBm input
Noise Figure	4.5 dB typ. 5.0 dB max.
Optical Return Loss	50 dB min
Input Optical Isolation	30 dB min.
Output Optical Isolation	30 dB min.
Polar. Mode Dispersion	0.1 ps max.
Polar. Dependent Gain	0.1 dB max.
Output Power Stability	0.15 dB over 8 hours
Input/Output Fiber Type	Corning SMF-28

MECHANICAL

Operating Temperature	-10 ºC to +70 ºC
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
Connector (power & control)	DB-25 Male
Display	LEDs for On/Off, Power
Remote Control	RS-232 for laser control, status monitoring
Dimensions	210mm x 135.2mm x 28 mm

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MECHANICAL DRAWING