



EYDFA-XX-PA-BM



DEVICE

Up to +37 dBm Integrated Pre-Amp EYDFA, Big Module

OVERVIEW

The Optilab EYDFA-XX-PA-BM is designed to amplify optical signals up to 37 dBm average power for high power applications at 1550 nm wavelength range. The EYDFA-XX-PA-BM incorporates two stages of amplification based on multi-mode pumping technology using Er/Yb double clad fiber. The optical gain of the amplifier exceeds 35 dB via the EDFA pre-amplifier, which allows a low input signal level of -20 dBm. The Preamplifier is connected via external patchcord, allowing filters to be used as well. The EYDFA-XX-PA-BM utilizes large core fiber technology to remove Raman scattering, which causes nonlinear amplification and is equipped with a 5 inch touchscreen interface and remote control. The EYDFA-XX-PA-BM can be ordered with an SMF collimator and other options. Contact Optilab for more information.

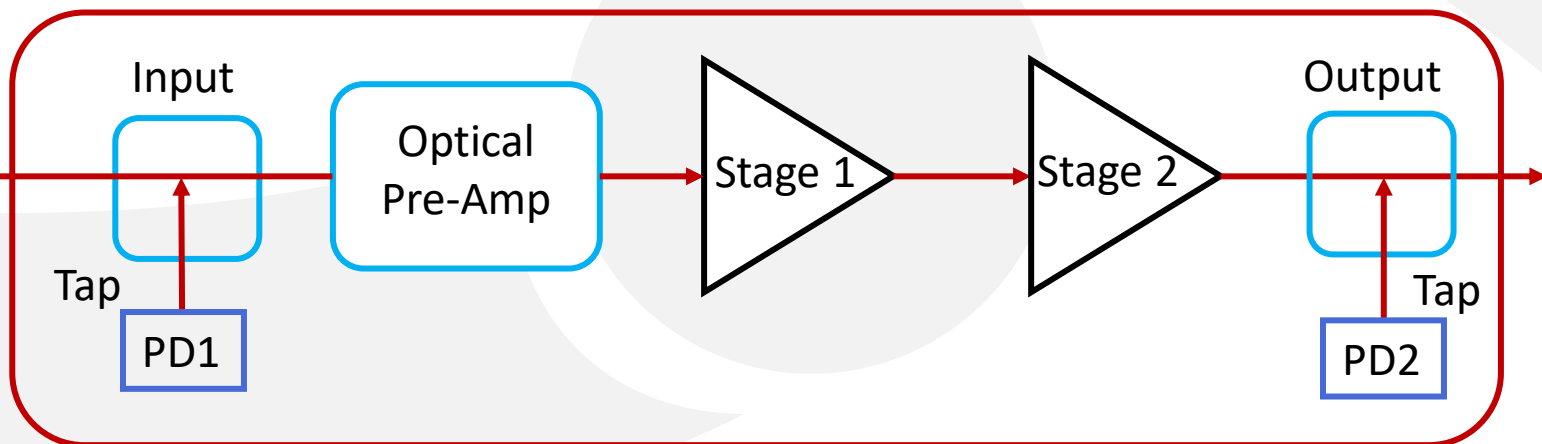
FEATURES

- Amplifies from 1540 nm to 1570 nm
- Up to 5 W CW output power
- Pulsed Amplification up to kW level
- Large Core Fiber Technology
- Mid-stage Filter (optical)
- 5 inch Touchscreen Control
- Interlock Safety Feature

USE IN

- Free Space Communications
- Optical Network Amplification
- LIDAR Source
- Research and Development
- Second Harmonic Generation
- Test and Measurement

FUNCTIONAL DIAGRAM





EYDFA-XX-PA-BM

SPECIFICATIONS

Operating Wavelength	1540 nm to 1570 nm
CW Output Power	Up to 37 dBm
Optical Gain	> 35 dB @ 0 dBm Input
Optical Input Level	-20 to +3 dBm (with Pre-amp)
Output Stability (short term)	± 0.2 dB
Control Mode	ACC (adjustable current)
Noise Figure	5 dB typical
Amplifying Medium	Large core Er/Yb doped, double clad fiber

GENERAL

Operating Temperature	0°C to +50 °C
Storage Temperature	-40 °C to +70 °C
Humidity	10% to 90%
Power Supply	100 to 240 VAC
Controls/Monitoring	Touch Screen or USB
Computer Communication Interface	RS-232 via USB
Dimensions	380(L) x 190(W) x 95(H) (mm)
Touch Screen	5 inch LCD
Power Consumption	< 100 W
Cooling Ventilation	Air Cool
Input Fiber	FC/APC input
Output Fiber	Bare Fiber (standard), Collimator (optional), High Power Connector (optional)

MECHANICAL

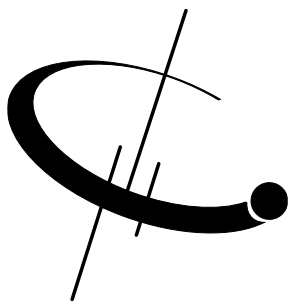
COLLIMATING LENS SPECIFICATIONS (EXAMPLE)

Nominal Beam Diameter	0.45 mm
Working Distance	10 mm
Typical Insertion Loss	0.25 dB
Max. Optical Power Handling	20 W
Input Fiber Type	SMF 28

HIGH POWER CONNECTOR

Input Fiber Type	SMF 28
Max. Optical Power Handling	10W
Connector Type	FC/APC





EYDFA-XX-PA-BM

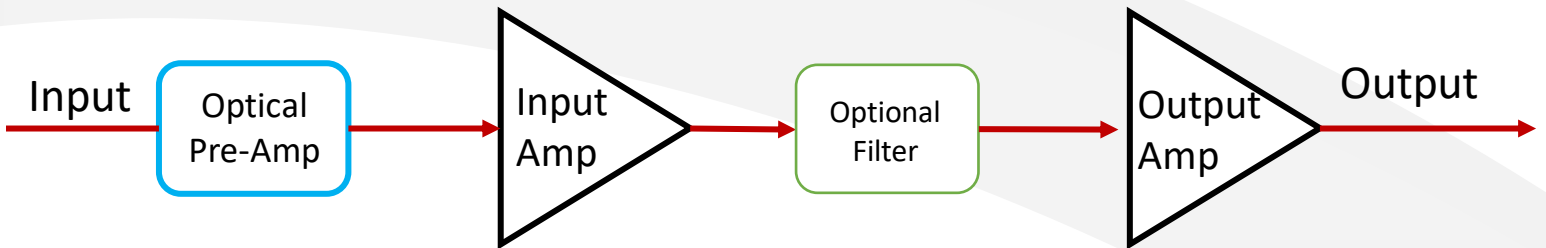
ORDERING OPTIONS

EYDFA-XX-PA-BM

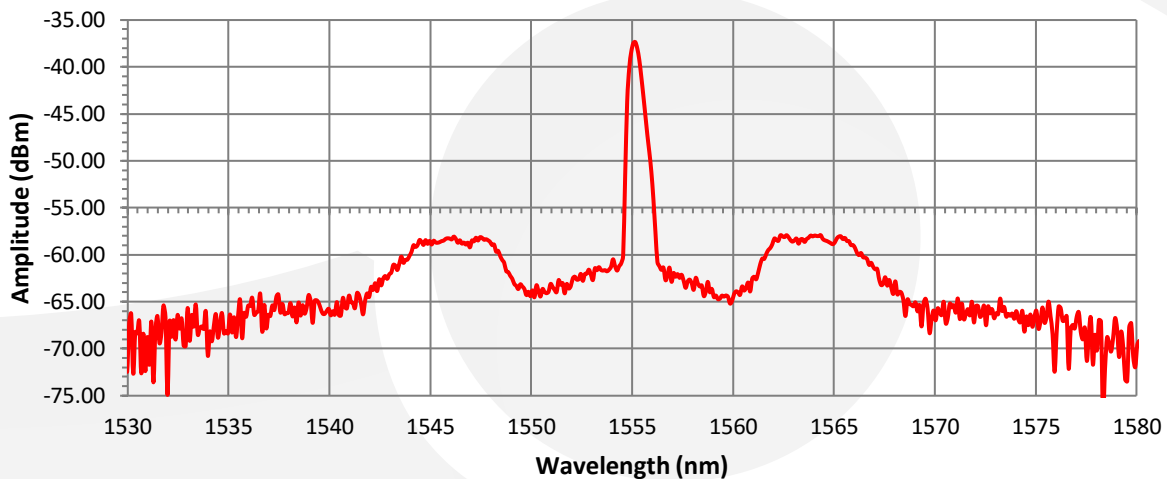
XX Output power level 33 ~ 37 dBm

PULSE VERSION SPECIFICATION

The Pulse EYDFA is designed to amplify optical signals up to 37 dBm average power for high power applications. Pulse version can be used in the range of 1540nm to 1564nm and it will amplify pulse up to kW level. There will be Mid-stage access with optional filter depending on the requirements. Please see following functional diagram for more details.



Attenuated Optical Output Spectrum



*Taken at Settings: Pulse Width: 100 ns / Repetition Rate: 100 kHz





EYDFA-XX-PA-BM

RELATED RACKMOUNT

- **EYDFA-XX-PA-R**



The Optilab EYDFA-XX-PA-R is a High Output Optical Amplifier in an easy to use 3U rackmount form factor with touch screen control

