

# EYDFA-40-4



## DEVICE

## Er/Yb Doped Fiber Amplifier +40 dBm

## OVERVIEW

The Optilab EYDFA-40-4 is a high-power, reliable optical amplifier with up to +40 dBm total power output and up to 4 output ports. Utilizing an integrated pre-amplifier which increase optical gain to 50dB, EYDFA-40-4 is ideal for Pulsed laser, LIDAR, HFC and Free space communication. The EYDFA-40-4 uses multimode laser pumping, all-fiber combiner and Er/Yb double-clad, fiber technologies to achieve high output power in conjunction with excellent reliability. Constructed with long term uninterrupted service in mind, the Optilab EYDFA-40-4 features a space saving 3U rackmount housing that is easy to install. Contact Optilab for more information.

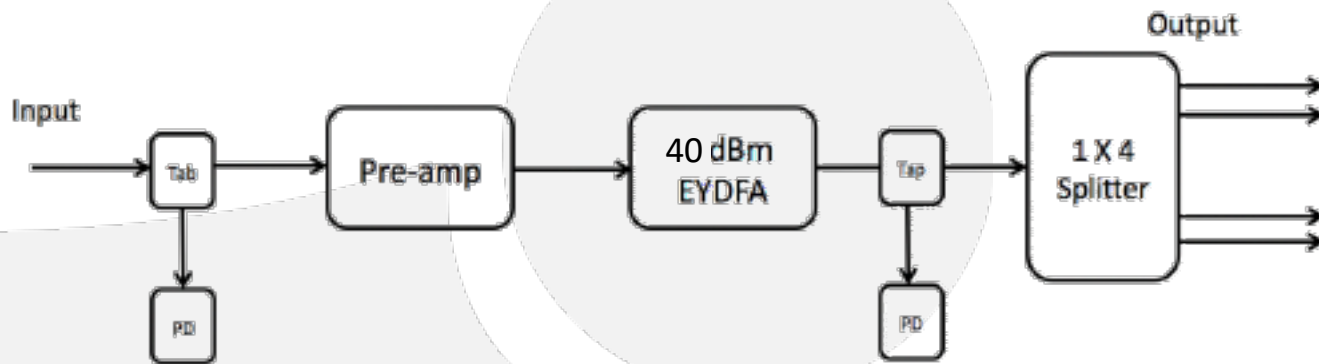
## FEATURES

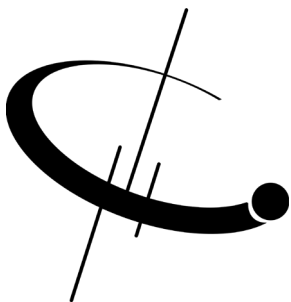
- Optical gain up to 50 dB
- Up to 40 dBm total power
- Noise figure of 5 dB
- Touch Screen LCD Control
- Remote interface, LabVIEW
- 3U housing rackmount

## USE IN

- Free space communication
- Research and development
- LIDAR
- Pulsed Laser System
- HFC networks

## FUNCTIONAL DIAGRAM





# EYDFA-40-4

## ORDERING OPTIONS

### EYDFA-xx-y

**xx** 37, 40, 43 dBm

**y** 2, 4 output

## SPECIFICATIONS

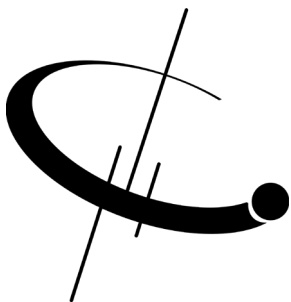
Operating Wavelength Range	1540 nm to 1570 nm
EDFA Output Power Level	+37, +40, +43 dBm available
EDFA Input Power	-20 dBm to +5 dBm
Optical Gain	Up to 50 dB
Number of Output Ports	2, 4, or other available
Output Power per Port	See Chart Below
Port to Port Variation	± 0.3 dB max.
Noise Figure (NF)	5.0 dB typ.
Input/Output Optical Isolation	30 dB min.
Output Power Stability	± 0.2 dB over 8 hours max.
Input/Output Fiber Type	Corning SMF-28

## GENERAL

## MECHANICAL

Operating Temperature Range	-10°C to +60°C
Storage Temperature Range	-40°C to +70°C
Power Supply	110 - 220 V AC, 43 - 63 Hz AC, 2A
Cooling Requirements	Air Cooling
Optical Connectors	FC/APC or coordinating lense
Power Consumption	100 W max.
Housing Dimensions	3RU: 19" (W) x 17.5" (D) x 3.5" (H)
Weight	Laser Temperature, Output Power
Control/Monitoring	Current
Remote Interface	LabVIEW, USB





# EYDFA-40-4

## COLLIMATING LENS

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 CONNETOR

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

EYDFA Configuration			
Part Number	Total Power	Number of Ports	Output Power Per Port*
EYDFA-37-2	+37 dBm	2	+34 dBm
EYDFA-40-2	+40 dBm	2	+37 dBm
EYDFA-40-4	+40 dBm	4	> 36.5 dBm
EYDFA-43-4	+43 dBm	4	> 36.5 dBm

\* After Splitter

