

EYDFA-43-4



DEVICE

EYDFA, 4 Output Ports, up to 43 dBm

OVERVIEW

The Optilab EYDFA-43-4 series are high-power, reliable optical amplifiers with up to +43 dBm total power output and up to 4 output ports. Utilizing an internal splitter enclosed in a single 3RU housing, EYDFA-43-4 is ideal for PF over fiber, LIDAR, HFC, Free space, and Communication. The EYDFA-43-4 series 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-43-4 series features a space saving 3U rackmount housing that is easy to install and maintenance.

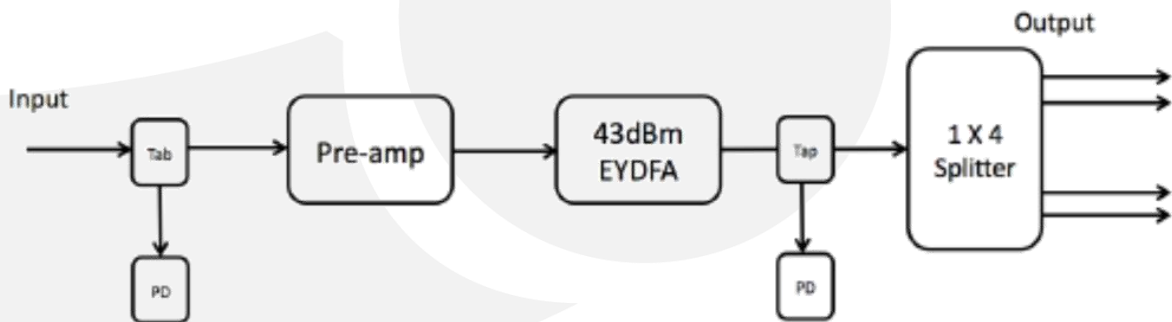
FEATURES

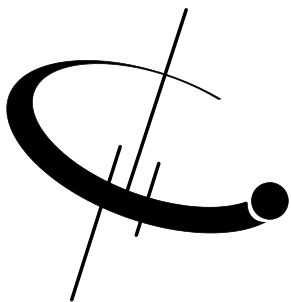
- Optical gain up to 50 dB
- Up to 43 dBm total power
- Noise figure of 5 dB
- Touch Screen LCD Control
- Remote interface, Lab view
- 3U housing rackmount

USE IN

- LIDAR
- Pulsed Laser System
- HFC networks
- Free space communication
- Research & Development

FUNCTION DIAGRAM





EYDFA-43-4

OPTIONS

EYDFA-xx-y
XX: 37, 40, 43 dBm
Y: 2, 4 output

SPECIFICATIONS

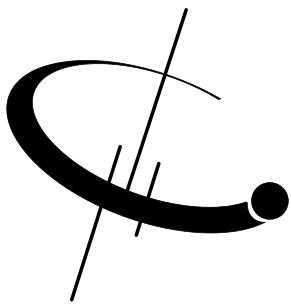
Operating Wavelength Range	1540nm to 1570nm
EDFA Output Power Level	+37, +40, +43 dBm available
EDFA Input Power	-20 to +5 dBm
Optical Gain	Up to 50 dB
Number of Output Ports	2, 4, or other available
Output Power Per Port	See below
Port to Port Variation	± 0.3 dB Max
Noise Figure (NF)	5.0 dB Typ.
Input/Output Optical Isolation	30 dB Min.
Output Power Stability	±0.2 dB Over 8 Hours Max.
Input/Output Fiber Type	Corning SMF-28

GENERAL

Operating Temperature Range	-10 °C to +60 °C Standard
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

MECHANICAL





EYDFA-43-4

COLLIMATING LENS SPECIFICATIONS

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	10 W
Connector Type	FC/APC

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

