



# EYDFA w/Output Power up to 43 dBm, 4 Output Ports

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 of 37dBm EYDFA. Utilizing an integrated pre-amplifier which increase optical gain to 50dB, EYDFA- 43-4 is ideal for Pulsed laser, LIDAR, HFC and Free space 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 3U rackmount housing that is easy to install.

#### FEATURES • Optical gain up to 50 dB

- Up to 43 dBm total power
- Noise figure of 5 dB

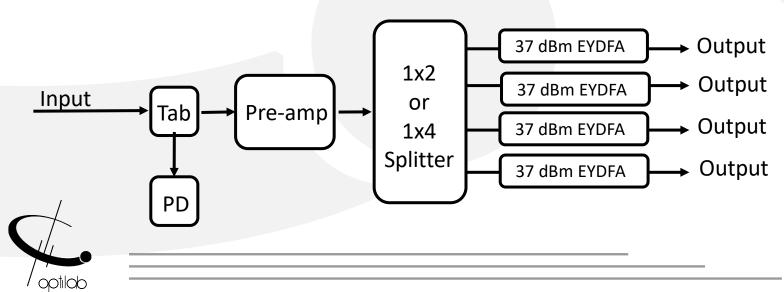
- Touch Screen LCD Control
- Remote interface, Lab view
- 3U housing rackmount

#### USE IN

- LIDAR
- Pulsed Laser System
- HFC networks

- Free space communication
- Research and development

### FUNCTIONAL DIAGRAM





EYDFA-43-4

# SPECIFICATIONS

Operating Wavelength	1540 nm to 1570 nm
EDFA Output Power Level	+37, each outputs, total of +43 dBm available
EDFA Input Power	-20 to +5 dBm
Optical Gain	Up to 50 dB
Number of Output Ports	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.
	30 dB min.
	±0.2 dB over 8 hours max.
Input/Output Fiber Type	Corning SMF-28
Operating Temperature Range	-10°C to +60 °C Standard
	-40 °C to +70 °C
	110-220 V AC, 43-63 Hz AC 2A
	Air Cooling
	FC/APC or coordinating lense
	100 W max.
	3 RU 19"(W) x 17.5"(D) x 3.5"(H)
	Laser Temperature, Output Power
	Current
Remote Interface	LabVIEW, USB
	EDFA Output Power Level EDFA Input Power Optical Gain Number of Output Ports Output Power Per Port Port to Port Variation Noise Figure (NF) Input/Output Optical Isolation Output Power Stability Input/Output Fiber Type Operating Temperature Range Storage Temperature Range Power Supply Cooling Requirements Optical Connectors Power Consumption Housing Dimensions Weight Control/Monitoring

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
	Working Distance Typical Insertion Loss Max. Optical Power Handling

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## ORDERING OPTIONS

#### EYDFA-XX-Y

- **XX** Output Power Level: +37 dBm, +40dBm, +43 dBm
- **Y** Number of Channels : 2, 4

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

