



### **DEVICE**

# Erbium Ytterbium Doped Fiber Amplifier, Up to 37 dBm

The Optilab EYDFA-XX-PM-R Erbium Ytterbium Doped Fiber Amplifier (EYDFA) is a high-power, versatile amplifier designed for MOPA, optical communication and other general-purpose optical applications. Based on multi-mode pumping Er/Yb double clad fiber technology, EYDFA-XX-PM-R is designed to produce high output power up to 37 dBm. By using a dual stage design, EYDFA-XX-PM-R provides optical gain of up to 50 dB (with optional Pre- Amp), while maintaining low noise figure (NF) of 5 dB. The EYDFA-XX-PM-R amplifier produces optical output level of +37 dBm with an input power level range from -3 dBm to +7 dBm. Featuring adjustable output level power via ACC through the front panel and software control through USB. Contact Optilab for more information.

## OVERVIEW

## **FEATURES**

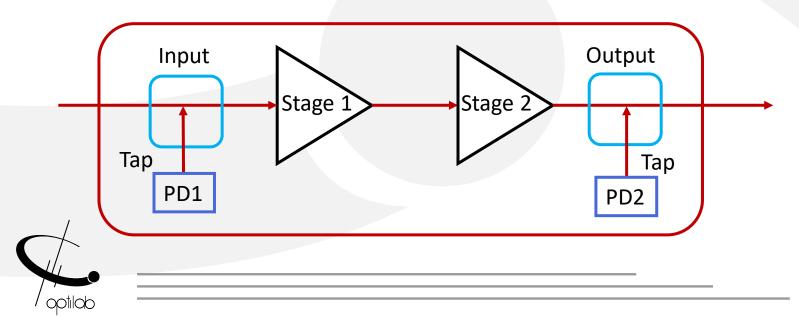
- Dual stage multi-mode 980 nm pump design
- Input power level range: -3 dBm to +7 dBm
- Automatic Current Control (ACC) standard
- LCD digital display and LED status indicators
- Up to +37 dBm output power
- Reliable Er/Yb technology
- Optical gain up to 50 dB
- Software control through USB

**USE IN** 

- General-purpose optical amplifier
- MOPA

- Optical Communication
- Test and measurement

#### **FUNCTIONAL DIAGRAM**





**SPECIFICATIONS** 

1545 nm to 1565 nm Operating Wavelength Up to 37 dBm **CW Output Power** Optical Gain > 26 dB @ 10 dBm Input **Optical Input Level** +10 dBm (typical) Output Stability (short term) ± 0.2 dB Control Mode ACC (adjustable current) Noise Figure 5 dB typical **Amplifying Medium** > 1 GHz

**GENERAL** 

Humidity	5% to 40%
AC/DC Power Supply	110 to 240 V, 50 to 60 Hz
Controls/Monitoring	Touch Screen or USB
Computer Communication Interface	RS-232 via USB
Touch Screen	5 inch LCD
Power Consumption	< 100 W
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0°C to +50°C

-40 °C to +70 °C

Cooling Ventilation
Input Fiber
FC/APC input
Bare Fiber (standard), Collimator (optional),

Output Fiber High Power Connector (optional)

COLLIMATING LENS SPECIFICATIONS (EXAMPLE)

**MECHANICAL** 

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	PANDA PM

HIGH POWER CONNECTOR

Input Fiber Type	PM-1550
Max. Optical Power Handling	10W
Connector Type	FC/APC



Operating Temperature

Storage Temperature



ORDERING OPTIONS

#### EYDFA-XX-PM-R-YY

**XX** Output power level 30 ~ 37 dBm

YY Number of Outputs up to 32

#### **RELATED MODULE**

• EYDFA-XX-PM-BM



The Optilab EYDFA-XX-BM is a High Output Optical Amplifier in an easy to use module form factor with touch screen control

