

# EYDFA-42-PM-P-R



## DEVICE

## +42 dBm Pulsed EYDFA Amplifier, Rackmount, PM Output

## OVERVIEW

The Optilab EYDFA-42-PM-P-R is designed to amplify optical signals up to 42 dBm average power for high power applications at 1550 nm wavelength range. The EYDFA-42-PM-P-R incorporates two stages of amplification based on multi-mode pumping technology using Er/Yb double clad fiber. The optical gain of the amplifier exceeds 50 dB via the EDFA pre-amplifier, which allows a low input signal level of -20 dBm. The EYDFA-42-PM-P-R utilizes large core fiber technology to remove Raman scattering, which causes nonlinear amplification and is equipped with LabVIEW user interface and remote control. The EYDFA-42-PM-P-R can be ordered with an SMF collimator, PM output, and other options. Contact Optilab for more information.

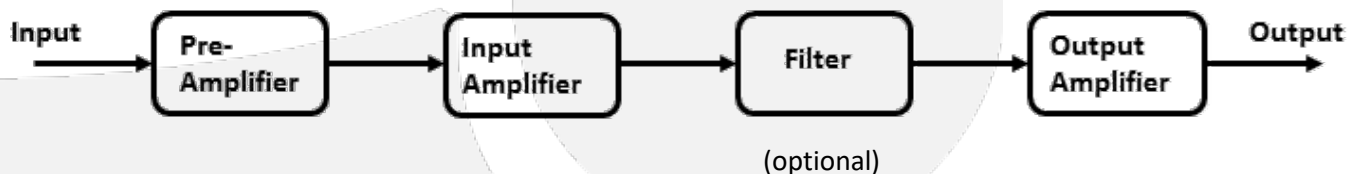
## FEATURES

- Amplifies from 1540 nm to 1564 nm
- High Gain of 50 dB with Pre-amp
- Up to 5 W CW output power
- Polarization Maintaining Output
- Pulsed Amplification up to kW level
- Large Core Fiber Technology
- Mid-stage Filter (optional)
- Fully integrated with power supply

## USE IN

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

## FUNCTIONAL DIAGRAM





# EYDFA-42-PM-P-R

## SPECIFICATIONS

Operating Wavelength	1540 nm to 1564 nm
CW Output Power	Up to 42 dBm
Optical Gain	> 50 dB @ -15 dBm input
Optical Input Level	-20 to +6 dBm (with Pre-amp)
Output Stability (short term)	± 0.2 dB
Control Mode	ACC (Adjustable Current)
Noise Figure	< 5 dB typ.
Amplifying Medium	Large core Er/Yb doped, double clad fiber

## OPTICAL

Operating Temperature	0°C to +50°C
Storage Temperature	-40°C to +70°C
Humidity	10% to 90%
Power Supply, Internal	95V-125 V AC, 2.8 A
Controls/Monitoring	LCD Display
Communication Interface	USB/Labview
Dimensions	420 (L) x 163 (W) x 68 (H) (mm)
Power Consumption	< 150 W
Cooling Ventilation	Air cool
Fiber Type	SMF-28
Input Fiber	FC/APC input
Output Fiber	Bare Fiber (standard), Collimator (optional), High Power Connector (optional)

## MECHANICAL

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

## COLLIMATING LENS (EXAMPLE)

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

## HIGH POWER CONNECTOR

