The Optilab EYDFA-PA-37-PM-R Erbium Ytterbium Doped Fiber Amplifier (EYDFA) Rackmount Pre-Amp is a high-power, versatile amplifier designed for pulse laser CATV/PON networks, optical communication and other general-purpose optical amplification applications. Based on multi-mode pumping Er/Yb double clad fiber technology, EYDFA-PA-37-PM-R is designed to produce high output power up to 37 dBm. By using a dual stage design, EYDFA-PA-37-PM-R provides optical gain of up to 50 dB (with optional Pre-Amp), while maintaining low noise figure (NF) below 5 dB. Contact Optilab for more information.

**Features**
- Up to +37 dBm output power
- Input power level range: -20 (w/ PA)
- Optical gain up to 50 dB (with PA)
- 200 W Peak Power (Pulse) mode
- Automatic Current Control (ACC) standard
- LCD digital display and LED status indicators
- Software control through USB

**Use In**
- Pulsed Laser amplifier
- CATV/PON Networks
- Optical Communication
- Test and Measurement
- General-Purpose Optical Amplifier

**Functional Diagram**

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Product specifications and description are subject to change without notice. © 2019 Optilab, LLC. EYDFA-PA-37-PM-R. Feb 2019 Rev. 1.0
### SPECIFICATIONS

#### GENERAL

- **Operating Range**: 1528 nm to 1564 nm
- **Output Power Levels**: +33 dBm to +37 dBm
- **Input Power Range**: -12 dBm to +7 dBm, -20 dBm to +0 dB w/ optional PA
- **Optical Gain**: 40 dB max., 50 dB w/ optional PA
- **Noise Figure (NF)**: <5.0 dB typical @ -10 dBm Input
- **Number of Outputs**: 1 output standard, up to 32 ports
- **Optical Return Loss**: 50 dB min.
- **Input/Output Optical Isolation**: 30 dB min.
- **Polarization Mode Dispersion**: 1.0 ps max.
- **Polarization Dependent Gain**: 0.10 dB max.
- **Output Power Stability**: 0.10 dB over 8 hours
- **Input/Output Fiber Type**: Corning SMF-28
- **Operating Temperature**: -10°C to +60 °C
- **Storage Temperature**: -40 °C to +70 °C
- **Power Supply Requirements**: 80 – 240 V, 43 – 63 Hz AC
- **Power Consumption**: 60 W max.
- **Output Level Control**: Pump Lasers Current Adjustment
- **Monitoring**: Pump Laser Temperature
- **Computer Interface**: LabVIEW via USB
- **Display**: Input/Output Power Level, TEC Temperature
- **Alarms**: Temperature and Input Power
- **Optical Connectors**: FC/APC, SC/APC, Other type optional

#### MECHANICAL

32 OUTPUT PORTS

**OPTIONS:** EYDFA-xx-yy-zz-R

- **xx**: Pre-Amp (PA)
- **yy**: Output power level 33, 34, 35, 36, 37 dBm
- **zz**: PM for PM, None for SM