

# EDFA-L-XX-PM-B



## DEVICE

## Erbium-Doped Fiber Amplifier, L-Band, Benchtop

## OVERVIEW

The Optilab EDFA-L-XX-PM-B Erbium-Doped Fiber Amplifier (EDFA) is a versatile amplifier designed for optical communication and other general-purpose optical applications. EDFA-L-XX-PM-B provides optical gain of up to 30 dB, while maintaining low noise figure (NF) of 5 dB. The EDFA-L-XX-PM-B amplifier produces optical output levels from +17 dBm to +21 dBm with an input power level range from -10 dBm to +7 dBm. This product features adjustable Polarization Maintaining (PM) output level power via ACC through the front panel and software control through USB. Contact Optilab for more information.

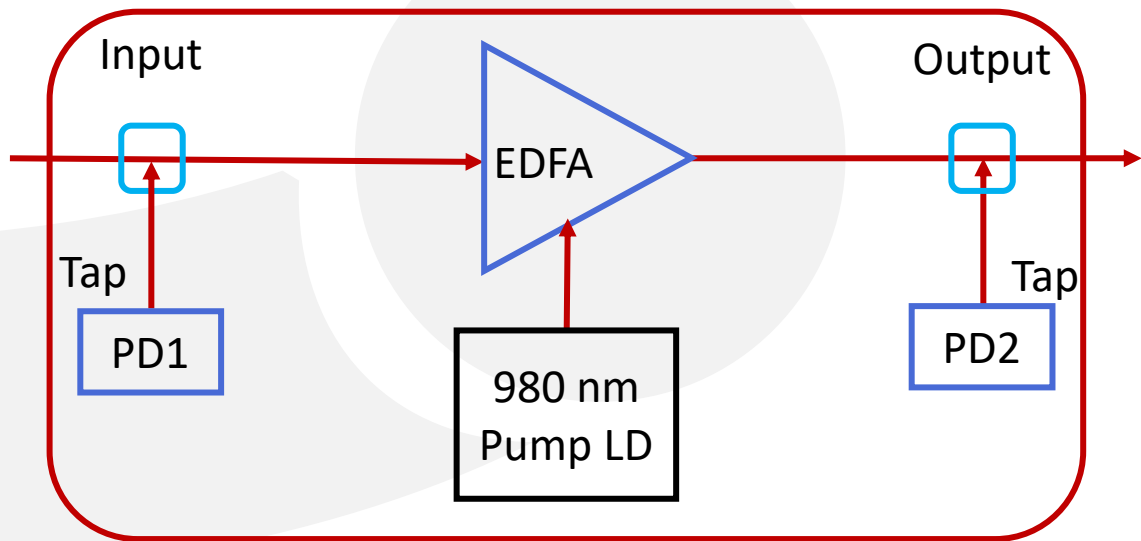
## FEATURES

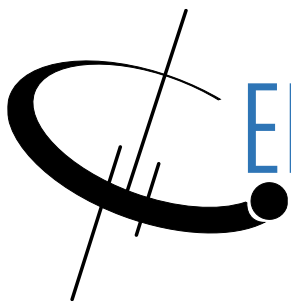
- Up to +21 dBm output power
- Optical gain up to 30 dB
- Software control through USB
- Single Pump Amplification
- PM Output
- Input power level range: -10 dBm to +7 dBm
- Automatic Current Control (ACC) standard
- LCD digital display and LED status indicators

## USE IN

- Optical Communication
- Test and measurement
- General-purpose optical amplifier

## FUNCTIONAL DIAGRAM





# EDFA-L-XX-PM-B

## SPECIFICATIONS

### OPTICAL

|                                |                               |
|--------------------------------|-------------------------------|
| Operating Range                | 1568 nm - 1605 nm             |
| Output Power Levels            | +17 dBm to +21 dBm            |
| Input Power Range              | -10 dBm to +7 dBm             |
| Optical Gain                   | Up to 30 dB @ -10 dBm input   |
| Noise Figure (NF)              | < 5.0 dB typ. @ -10 dBm input |
| 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        | PANDA PM                      |

### MECHANICAL

|                           |   |
|---------------------------|---|
| 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., Other Option Available           |
| Housing Dimensions        | 250mm (W) x 300mm (L) x 100mm (H)         |

## ORDERING OPTIONS

### EDFA-L-XX-PM-B

**XX** Output Power Level: +17 dBm to +21 dBm





# EDFA-L-XX-PM-B

## RELATED RACKMOUNT

- **EDFA-L-XX-R**



The Optilab EDFA-L-XX-PM-R is a Polarization Maintaining (PM) high-gain EDFA in a 1U rackmount housing.