



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

### OVERVIEW

The Optilab EDFA-L-XX-R Erbium-Doped Fiber Amplifier (EDFA) is a versatile amplifier designed for optical communication and other general-purpose optical applications. EDFA-L-XX-R provides optical gain of up to 30 dB, while maintaining low noise figure (NF) of 5 dB. The EDFA-L-XX-R amplifier produces optical output levels from +17 dBm to +21 dBm with an input power level range from -10 dBm to +7 dBm. Featuring adjustable output level power via ACC through the front panel and software control through USB in a standard 1U rackmount. Contact Optilab for more information.

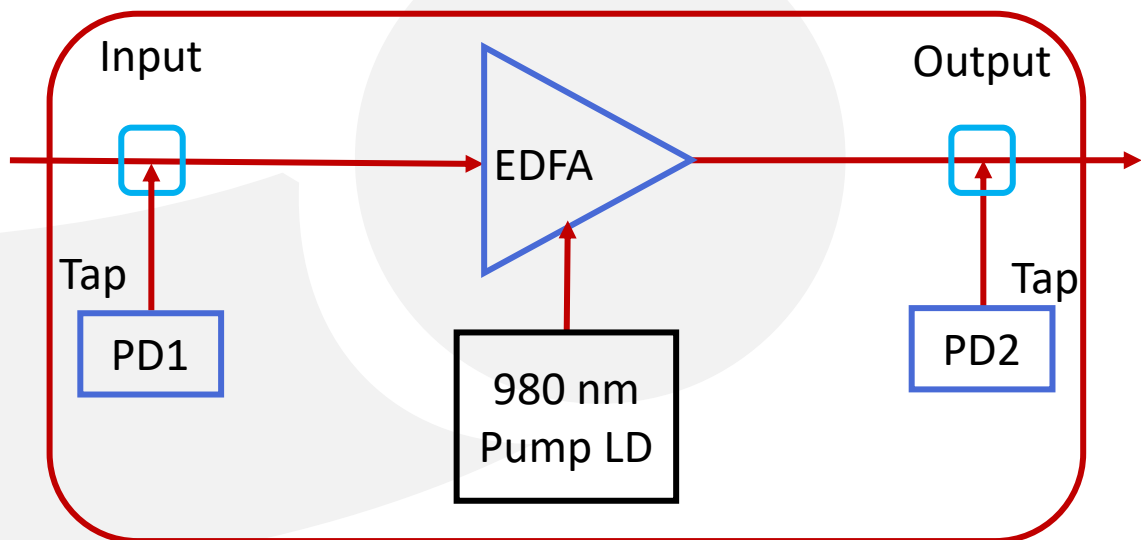
### FEATURES

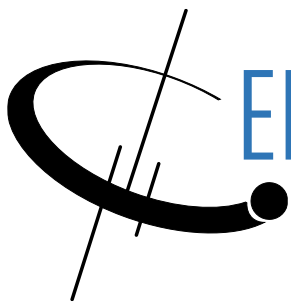
- Up to +21 dBm output power
- Optical gain up to 30 dB
- Software control through USB
- Single Pump Amplification
- Input power level range: -10 dBm to +7 dBm
- Automatic Current Control (ACC) standard
- LCD digital display and LED status indicators

### USE IN

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

### FUNCTIONAL DIAGRAM





# EDFA-L-XX-R

## SPECIFICATIONS

### OPTICAL

Operating Range	1565 nm – 1625 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	Corning SMF-28

### 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	IRU 482.60 (L) x 470.57 (W) x 44.00 (H) (mm)

### ORDERING OPTIONS

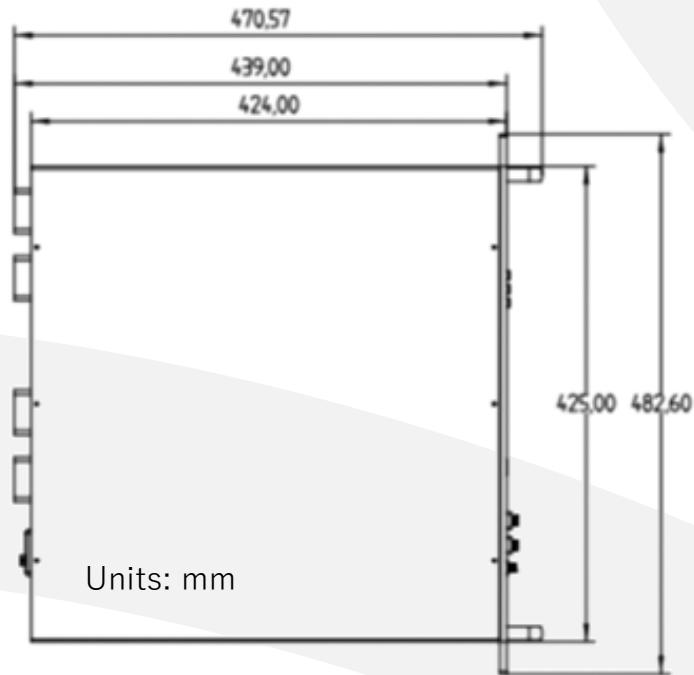
#### **EDFA-L-XX-R**

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



# EDFA-L-XX-R

## MECHANICAL DRAWING



## RELATED BENCHTOP

- **EDFA-L-XX-B**



The Optilab EDFA-L-XX-B is a high-gain EDFA in a benchtop, featuring front panel touch screen control. PM version is also available upon request.