

# EDFA-C-B



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

The Optilab EDFA-C-B Erbium-Doped Fiber Amplifier (EDFA) is a high-gain, versatile pre amplifier designed for LiDAR amplifications, optical communication development and other general-purpose optical applications. By using a dual stage amplifier design, EDFA-C-B provides optical gain of up to 45 dB with optical Pre-Amplification, while maintaining low noise figure (NF) below 5 dB. The EDFA-C-B amplifier produces optical output levels from +18 dBm to +26 dBm with an input power level range from -12 dBm to +7 dBm and with pre-amplification at -30 to -10 dBm. Featuring adjustable output level power via ACC through the front panel and software control through USB. Contact Optilab for more information.

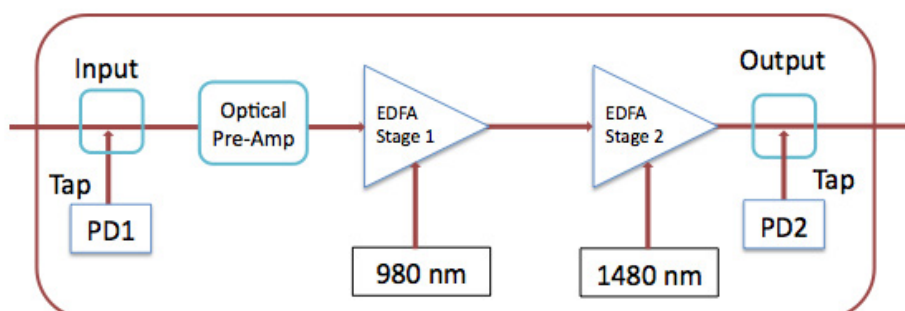
### Features

- Up to +26 dBm output power
- 1528 nm to 1564 nm range
- Dual stage forward/backward pump
- Input power level range: -12 dBm to +7 dBm
- Optical gain up to 45 dB with with optical Pre-Amp
- Pre-Amp option to 45 dB
- Automatic Current Control (ACC) standard
- LCD digital display and LED status indicators
- Software control through USB

### Applications

- Optical communication development
- Test and measurement
- General-purpose optical amplifier
- LiDAR or pulse amplification

### Functional Diagram



# Erbium-Doped Fiber Amplifier, Benchtop | EDFA-C-B

## OPTIONS

### EDFA-C-xx-B-yy

- xx Output power level +18 – +25 dBm
- yy Pre-Amp

## TECHNICAL INFO

For technical info and support:

[sales@optilab.com](mailto:sales@optilab.com)

[www.optilab.com](http://www.optilab.com)

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## Optilab Advantage

- Innovation
- Performance
- Quality
- Customization

Optical Specifications	
Operating Range	1528 nm to 1564 nm
Output Power Levels	+18 dBm to +26 dBm
Input Power Range	-12 dBm to +7 dBm -30 dBm to -10 dBm with Pre-Amp
Optical Gain	Up to 37 dB Up to 45 db with Pre-Amp
Noise Figure (NF)	<5.0 dB Typical @ -10 dBm Input
Number of Outputs	1 output standard
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 Specifications	
Operating Temperature	0° C to +50° C
Storage Temperature	-40° C to +70° C
Power Supply Requirements	80 - 240 V, 43 - 63 Hz AC
Power Consumption	60 W max.
Control	Pump Laser Current Adjustment
Monitoring	Pump Laser Temperature
Computer Interface	LabVIEW via USB
Display	Output Power Level, TEC Temperature
Alarms	Temperature and Input Power
Optical Connectors	FC/APC Standard, SC/APC Other Optional
Housing Dimensions	1RU 16.5"(W) x 12.5"(D) x 5.25"(H)

## Software

