EYDFA-33-B

DEVICE

Er/Yb Doped Fiber Amplifier, 33 dBm, Benchtop

OVERVIEW

The Optilab EYDFA-33-B Erbium Ytterbium Doped Fiber Amplifier (EYDFA) Benchtop 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- 33-B is designed to produce high output power up to 33 dBm. By using a dual stage design, EYDFA-33-B provides optical gain of up to 50 dB (with optional Pre-Amp), while maintaining low noise figure (NF) below 5 dB. The EYDFA-33-B amplifier produces optical output level of +33 dBm with an input power level range from -20 dBm. Featuring adjustable output level power via ACC through the front panel and software control through USB, this compact module housing ideal for OEM integration applications. Contact Optilab for more information.

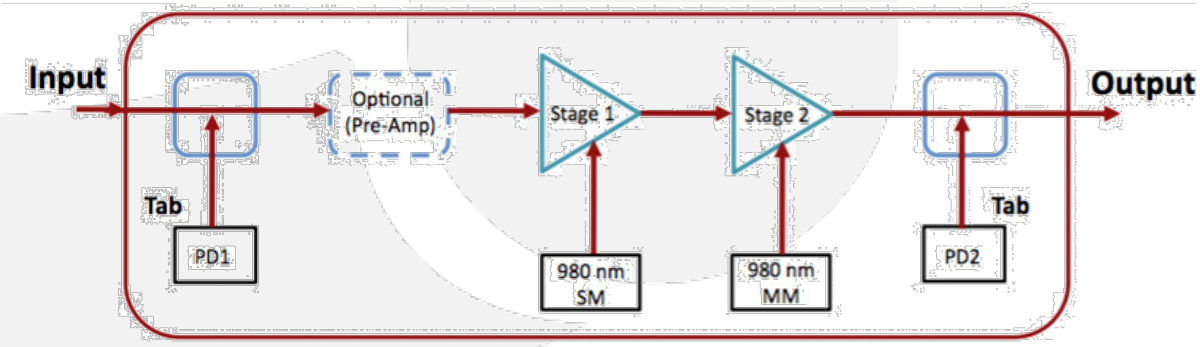
FEATURES

- Up to +33 dBm output power
- Input power level -20 dBm (w/ PA)
- Optical gain up to 50 dB with pre-amp
- 200 W Peak Power (Pulse) mode
- Automatic Current Control (ACC) standard
- LCD digital display and LED status indicators
- Software control through USB

USE IN

- General-purpose optical amplifier
- Pulsed Laser amplifier
- CATV-PON Networks
- Optical Communication
- Test and measurement

FUNCTIONAL DIAGRAM



EYDFA-33-B

SPECIFICATIONS

OPTICAL

Operating Range	1540 nm to 1570 nm
Output Power Level	+33 dBm
Input Power Range	-3 dBm to +7 dBm, -20 dBm to 0 dB with optional PA
Optical Gain	40 dB max., 50 dB with optional PA
Noise Figure (NF)	< 5.0 dB typ. @ -10 dBm input
Number of Outputs	1 output standard, up to 8 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

PULSE MODE W/ NPL-1550

Peak Power (100 ns p.w.)	200 W @ 100 KHz rep. rate
Pulse Energy (100 ns p.w.)	20 uJ @ 100 KHz rep. rate

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
LCD Display	Input/Output Power Level, TEC Temperature
Alarms	Temperature and Input Power
Optical Connectors	FC/APC, other type optional

ORDERING OPTIONS

EYDFA-xx-yy-B

xx Pre-Amp (PA), Pulse Mode (PM)

yy Output Power Level: 33, 34, 35, 36 dBm