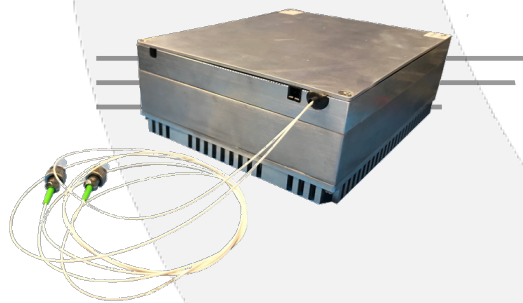




EYDFA-33-M



DEVICE

Er/Yb Doped Fiber Amplifier, 33 dBm, Module

OVERVIEW

The Optilab EYDFA-33-M Erbium Ytterbium Doped Fiber Amplifier (EYDFA) Module 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-M is designed to produce high output power up to 33 dBm. By using a dual stage design, EYDFA-M provides optical gain of up to 50 dB (with optional Pre-Amp), while maintaining low noise figure (NF) below 5 dB. The EYDFA-M 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.

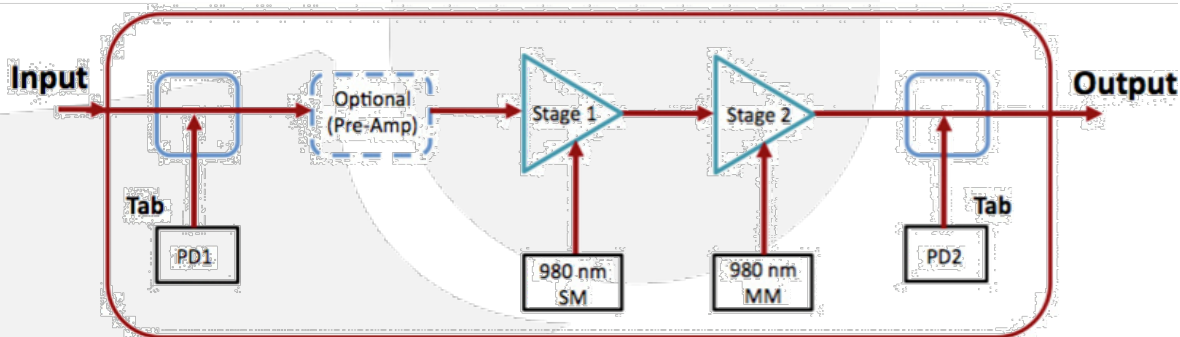
FEATURES

- 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-M

SPECIFICATIONS

| | |
|--------------------------------|--|
| 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 |

OPTICAL

PULSE MODE W/ NPL-1550

| | |
|----------------------------|--------------------------------|
| Peak Power (100 ns p.w.) | 200 W @ 100 KHz rep. rate |
| Pulse Energy (100 ns p.w.) | 20 μ J @ 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-M-yy

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

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

