EYDFA-PA-XX-PM-R

DEVICE

Up to +37 dBm Integrated Pre-Amp EYDFA Amplifier Rackmount w/PM output

OVERVIEW

The Optilab EYDFA-PA-XX-PM-R is a high-power, versatile amplifier designed for optical communication and other general-purpose Polarization Maintaining (PM) optical amplification applications. Based on multi-mode pumping Er/Yb double clad fiber technology, EYDFA-PA-XX-PM-R is designed to produce high output power up to 37 dBm. By using a dual stage design, EYDFA-PA-XX-PM-R provides optical gain of up to 50 dB (with optional Pre- Amp), while maintaining low noise figure (NF) of 5 dB. The EYDFA amplifier produces optical output level of +36 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.

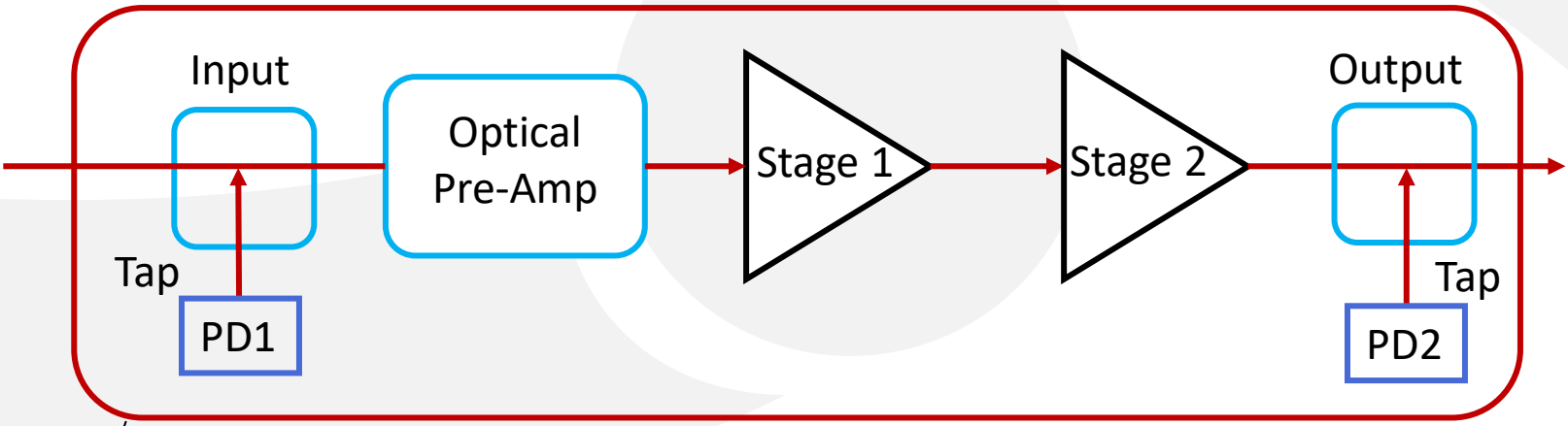
FEATURES

- Up to +37 dBm output power
- Input power level range: -20 (w/ PA)
- Optical gain up to 50 dB (with PA)
- 200 W Peak Power (Pulse) mode
- PM Output
- Automatic Current Control (ACC) standard
- LCD digital display and LED status indicators
- Software control through USB

USE IN

- Pulsed Laser amplifier
- MOPA
- Optical Communication
- Test and Measurement
- General-Purpose Optical Amplifier

FUNCTIONAL DIAGRAM



EYDFA-PA-XX-PM-R

SPECIFICATIONS

GENERAL

Operating Range	1540 nm to 1570 nm
Output Power Levels	+33 dBm to +37 dBm
Input Power Range	-12 dBm to +7 dBm, -20 dBm to +0 dB w/PA
Optical Gain	40 dB max., 50 dB w/PA
Noise Figure (NF)	5.0 dB typical @ -10 dBm Input
Number of Outputs	1 output standard, up to 32 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	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	80 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, SC/APC, Other type optional

ORDERING OPTIONS

EYDFA-PA-XX-PM-R

XX Output power level: 33 ~ 37 dBm

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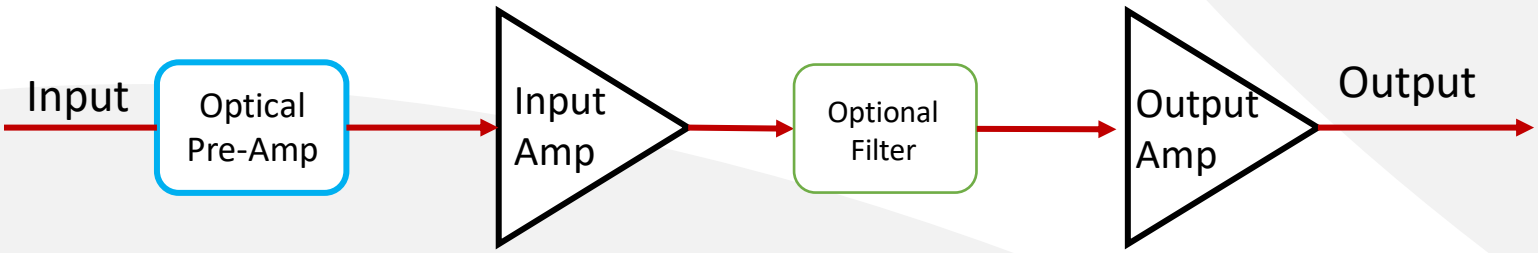
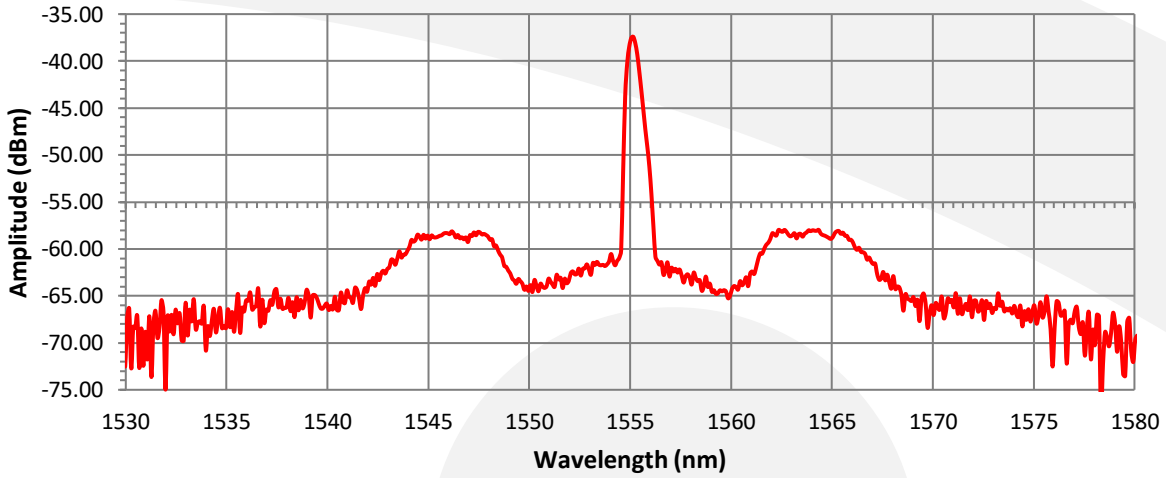
PULSE VERSION SPECIFICATION

The Pulse EYDFA is designed to amplify optical signals up to 37 dBm average power for high power applications. Pulse version can be used in the range of 1540nm to 1564nm and it will amplify pulse up to kW level. There will be Mid-stage access with optional filter depending on the requirements. Please see following functional diagram for more details.



Attenuated Optical Output Spectrum



*Taken at Settings: Pulse Width: 100 ns / Repetition Rate: 100 kHz

RELATED MODULE

- **EYDFA-PA-XX-PM-BM**

The Optilab EYDFA-XX-PM-PA-BM is a High Output Optical Amplifier in an easy to use module form factor with touch screen control