

In-line Erbium Doped Fiber Amplifier, Benchtop

The Optilab EDFA-I series Doped Fiber Amplifier is a high gain, in-line amplifier for use of research and development of optical networks.

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Product Description

The Optilab EDFA-I series Erbium Doped Fiber Amplifier (EDFA) is a high gain, in-line amplifier for use of research and development of optical networks. By using a dual amplifier design, EDFA-I provides optical gain of up to 40dB while maintaining low noise figure (NF). EDFA-I is a versatile amplifier that can be used for very wide range of input levels.

Depending on the pump laser configuration, EDFA-I amplifier produces optical output levels from +17dBm to +24dBm. The EDFA-I has dual-stage amplifier design consistin of a pre-amp and a booster amplifier.

Features

- Highly reliable 980 nm and 1480 nm pump lasers
- Dual amplifier design: pre-amp and power amplifier
- Pump laser operating temperature and bias current continuously regulated by microcontroller
- Forward and backward pumping to minimize noise figure (NF)
- Wide input power level range from -15 dBm to +5 dBm
- Optical gain up to 40 dB
- ACC; Automatic Current Control (stand.) or APC; Automatic Power Control (opt.)
- LCD front panel digital display and LED status indicators
- Software control through RS-232, RS-485 available as option

PRODUCT SPECIFICATIONS

Optical Specifications

Operating Range	1528 nm to 1563 nm
Output Power Levels	+18 dBm to +25 dBm
Optical Gain	Up to 40 dB
Noise Figure (NF)	5.2 dB max. @ -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	0.15 dB max.
Input Power Range	-15 dBm to +5 dBm
Output Power Stability	0.15 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	SNMP (Optional)
Display	Output Power Level, TEC Temperature
Alarms	Temperature and Current Threshold
Optical Connectors	FC/APC, SC/APC
Housing Dimensions	Benchtop, 16.5" x 12.5" x 5.25"
Housing	Precision Machined Aluminum, Anodized

Ordering Information

EDFA-I-xx-B

xx: Output power level 18 – 25 dBm



To order this product online, visit our site at oequest.com



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Product specifications and description are subject to change without notice.
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