Gain Flattened Inline EDFA with Mid-stage Access

The Optilab EDFA-GM series is a line of gain-flattened EDFAs designed for optical amplification in DWDM networks.

EDFA-GM Gain Flattened Inline EDFA with Mid-stage Access

Product Description

The Optilab EDFA-GM series is a line of gain-flattening EDFA designed for optical amplification in DWDM networks. The FGM In-line EDFA is typically used as an intermediate point in the network to increase the DWDM channel power levels. The FGM In-line EDFA is able to amplify input signals as low as -18 dBm per channel.

Featuring a dual-stage design with mid-stage access, the EDFA-GM can be fitted with Dispersion Compensation Modules (DCM) to reduce distortion due to effects of chromatic dispersion that occurs in single-mode fiber (SMF). The mid-stage access can also be ideal for installing Optical Add/Drop Module (OADM). The EDFA-GM provides flattened optical gain and low noise figures for optimum DWDM signal amplification. Various output power levels are available (ranging from +18 to 24 dBm) to provide maximum flexibility for network design and implementation.

Features

- Compatible with 10G/40G DWDN Networks
- Flat gain spectrum across C-band
- Mid-stage access for DCM or OADM
- High reliability Telcordia qualified components
- Three year limited warranty

PRODUCT SPECIFICATIONS

Optical Specifications

Operating Range	1529 nm to 1561 nm
Output Power Levels	+18 dBm to +24 dBm
Input Signal Level	-18 to 0 dBm per channel
Number of Channels	42 at 100 GHz
Optical Gain per Channel	23 to 28 dB, depending on configuration
Gain Flatness	±1.0 dB
Noise Figure	5.0 dB typ.
Loss Budget for Mid-stage Device	9 dB
Polarization Dependent Gain (PDG)	0.2 dB max.
Polarization Mode Dispersion (PMD)	0.5 ps max.
Power Stability	± 0.1 dB over 8 hours
Input/Output Isolation	30 dB min.

Ordering Information

EDFA-GM-xx-R

xx: Output power level 18 – 24 dBm

OEQuest.com

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

Optilab 5110 N 44th St, Ste 200L, Phoenix AZ 85018

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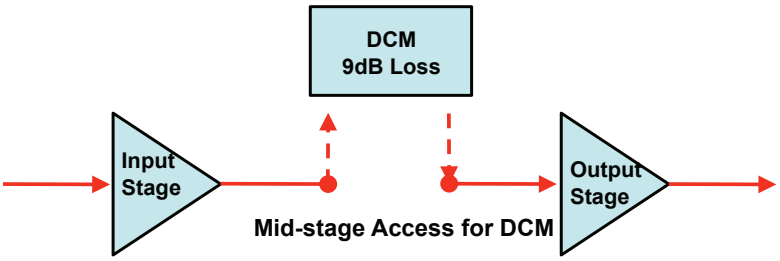
Block Diagram



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Additional Information

The Optilab EDFA and Raman amplifiers can provide an optimal solution for DWDM network optical amplification based on channel and transmission distance requirements. The FGM series In-line EDFA can be used in conjunction with Optilab DWBA series Booster EDFAs, DWPA series Pre-amplifiers and DWRA series Raman amplifiers to significantly increase the transmission distance and quality of DWDM signals.

All Optilab DWDM EDFA products are constructed with 100% Telcordia qualified components to ensure 15 years of continuous operating life. Our technical team provides in-house technical support for networks installation.

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	75 W max.
Control	Pump Laser Current Adjustment
Monitoring	Pump Laser Temperature
Computer Interface	RS-232 (Optional)
Display	Output Power Level, TEC Temperature
Alarms	Temperature and Current Threshold
Optical Connectors	FC/APC, SC/APC
Housing Dimensions	1U Rack: 19” x 14” x 1.75”
Housing	Precision Machined Aluminum, Anodized

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