High Gain Erbium Doped Fiber Amplifier

The QAMnet gEDFA series Erbium Doped Fiber Amplifiers (EDFA) are high gain, in-line amplifiers for use in HFC, FTTH and DWDM applications.

gEDFA High Gain Erbium Doped Fiber

Product Description

The QAMnet gEDFA series Erbium Doped Fiber Amplifiers (EDFA) are high gain, in-line amplifiers for use in HFC, FTTH and DWDM applications. By using a dual amplifier design, gEDFAs can provide optical gains of up to 45 dB while maintaining low noise figures (NF). The gEDFAs are versatile amplifiers that can be used for very wide range of input levels.

Depending on the pump laser configuration, gEDFA amplifiers produce optical output levels from +17 dBm up to +24 dBm. The in-line gEDFA is designed with dual amplification – a pre-amp and a power amplifier with a standard housing of a 19" 1RU rack-mount unit.

Features

- High power pump lasers from qualified suppliers
- Laser operating temperature and current regulated by microcontroller
- Forward and backward pumping to minimize noise figure (NF)
- Input power level range: -8 dBm to +12 dBm
- Standard Automatic Current Control (ACC)
- LCD front panel digital display and LED status indicators
- Remote Control through RS-232, or SNMP available as an option

Applications

✓ HFC ✓ FTTH ✓ RFoG ✓ Deep Fiber Applications

PRODUCT SPECIFICATIONS

Optical Specifications

Operating Wavelength Range	1528 nm to 1563 nm
Output Power Level (1550 nm and +3 dBm Input)	16.7 dBm min., 17.0 dBm typ.; 19.7 dBm min., 20.0 dBm typ.; 19.7 dBm min., 23.0 dBm typ.; 23.7 dBm min., 24.0 dBm typ.
Number of Output	1 output standard
Optical Gain	Up to 50 dB, depending on the model
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.
Noise Figure (NF)	5.2 dB max. @ +3 dBm Input
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 Range	0°C to +50°C
Storage Temperature Range	-40°C to +70° C
Power Supply	80 – 240 V, 43 – 63 Hz AC 40 - 58 VDC (Optional)
Power Consumption	60 W max.
Housing Dimensions	1RU: 19"(W) x 14"(D) x 1.75"(H)
Control / Monitoring	Pump Laser Temperature and Current
Display	Output Power Level, TEC Temperature
Alarm	Over Temperature , Over Current
Optical Connectors	SC/APC or Customer Specified

Ordering Information

	gEDFA-xx
xx	Output power level +17 to +24 dBm

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