

Erbium Doped Fiber Amplifier

The QAMnet rEDFA series of Erbium Doped Fiber Amplifiers (EDFA) are reliable and cost-effective optical amplifiers for use in HFC, FTTH, PON and deep fiber applications.

rEDFA Erbium Doped Fiber Amplifier



Product Description

The QAMnet rEDFA series of Erbium Doped Fiber Amplifiers (EDFA) are reliable and cost-effective optical amplifiers for use in HFC, FTTH, PON and deep fiber applications. By combining 980 nm/1480 nm pump laser modules and high efficiency Erbium doped fiber, rEDFA amplifiers deliver output up to +24 dBm, while maintaining low noise figure (NF).

Depending on pump lasers configuration, rEDFA amplifier produces optical output level from +17 dBm to +24 dBm. In conjunction with other QAMnet transmitter products, The rEDFA can be used for transmitting forward 1550 nm analog channels and/or 100% QAM256 modulated signal channels. The rEDFA is housed in a standard 19" 1RU rack mount unit.

Features

- Highly reliable 980 nm and 1480 nm pump laser from qualified suppliers
- Pump laser's temperature and bias current continuously regulated by micro-controller
- Forward and backward pumping to minimize noise figure (NF)
- Input power level range: -5 dBm to +7 dBm
- Automatic Current Control (ACC) standard
- LED front panel digital display and LED status indicator

Applications

✓ HFC ✓ FTTH ✓ RFoG ✓ PON ✓ 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.; 22.7 dBm min., 23.0 dBm typ.; 23.7 dBm min., 24.0 dBm typ.
Number of Output	1 output standard, 2 and 4 outputs available
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)	5.0 dB max. @ +3 dBm Input
Input Power Range	-5 dBm to +7 dBm
Output Power Stability	0.15 dB over 8 hours
Input Output Fiber Type	Corning SMF28
Output Power Stability	0.25 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

rEDFA-xx-y

xx	Output power level +17, +20, +23, +24 dBm
y	Number of outputs 1, 2, 4, 8