

rEDFA Series



DEVICE

Rackmount Erbium Doped Fiber Amplifier

OVERVIEW

The Optilab 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 Optilab 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 rackmount unit.

FEATURES

- Designed to distribute forward and aggregate Outdoor at the premise housing return paths
- 8, 16, 32, and 48 Channel Design to distribute optical paths
- Fully customizable for integrating different passive optics
- Optional internal optical protective switch
- Several size and types of the housing available

USE IN

- HFC
- FTTH
- RFoG

- Deep Fiber Applications
- XPON





TECHNICAL SPECIFICATIONS

rEDFA Series

Operating Wavelength Range	1528 nm to 1563 nm
Model Type	Output Power Level (1550 nm and +3 dBm Input)
rEDFA-17	16.7 dBm min., 17.0 dBm typ.
rEDFA-20	19.7 dBm min., 20.0 dBm typ.
rEDFA-23	22.7 dBm min., 23.0 dBm typ.
rEDFA-24	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.D 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 SMF-28

MECHANICAL SPECIFICATIONS

Operation Temperature Range	0°C to +50°C
Storing Temperature Range	-40°C to +70°C
	80 - 240 V, 43-63 Hz AC 40 -58 VDC (Optional)
Power Supply	
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
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