



Key Features

- ▶ Small Pluggable Erbium-Doped Fiber Amplifier in standard XFP module
- ▶ Optical output power up to +17 dBm
- ▶ Flat gain for 8-wavelength DWDM links
- ▶ Automatic power control
- ▶ LC Angled-Physical Contact (APC) optical interfaces for low reflections
- ▶ Built-In digital diagnostic functions
- ▶ Low power consumption: 2.5 Watts
- ▶ Plugs into Finisar's XFP-RF Transmitter Host System XC00AAQTZAJ

Applications

- ▶ Multi-wavelength segmentation of CATV nodes
- ▶ RF-over-Glass networks
- ▶ Long-distance Hybrid Fiber Coaxial (HFC) optical links

XFP-OA Optical Amplifier

Overview

Finisar's XFP-OA Optical Amplifier is an Erbium-Doped Fiber Amplifier (EDFA) in a small form factor hot-pluggable optical module. It amplifies optical signals to enable long Hybrid Fiber Coaxial links and/or high optical splitting for RF-over-Glass architectures. The optical output power, which is settable by the user, is kept constant through an active feedback loop.

The XFP-OA can be paired with Finisar's wavelength-tunable XFP-RF Transmitters for single wavelength applications or Dense Wavelength Division Multiplexing (DWDM) up to 8 wavelengths. It installs into the same Finisar XFP-RF host system so it can be monitored and controlled through embedded Web Browser Graphical User Interface or through a network management system.



Product Selection

Part Number	Description
XA17AAZ5ZZJD	XFP Pluggable Optical Amplifier, +17 dBm, LC/APC
XA13AAZ5ZZJD	XFP Pluggable Optical Amplifier, +13 dBm, LC/APC

XFP-OA Optical Amplifier

Specifications

Parameter	Value
Optical Wavelength Range	1529 nm to 1563 nm
Optical Input Power	-5 dBm to +10 dBm
Optical Output Power	+17 dBm (XA17AAZ5ZZJD) +13 dBm (XA13AAZ5ZZJD)
Optical Output Power Adjustment Range	-3 dB to 0 dB
Multi-Wavelength Gain Flatness	1.0 dB peak-to-peak from 1554.5 nm to 1561.0 nm
Noise Figure	5 dB Typical
Optical Interface	LC/APC receptacle (angled physical contact)
Case Operating Temperature	0°C to 70°C
Storage Temperature Range	-40°C to 85°C
Power Consumption	2.5 Watts maximum
Data/Control	Digital diagnostic functions via two-wire serial interface
Mounting	XFP cage assembly on host module

Reference architecture for multi-wavelength node segmentation:

