

# Atlas

## Dual EDFAs with dynamic gain equalization in a single module

Boost your optical network with PhotonPath's Dual EDFA module, combining two high-performance Erbium-Doped Fiber Amplifiers in one compact unit. Delivering up to 20 or 23 dBm per amplifier, it ensures low noise, minimal gain ripple, and stable C-band signal amplification.

Built on PhotonPath's proprietary Integrated Photonics Platform, this solution miniaturizes, integrates, and automates optical components, cutting costs while boosting scalability.

The integrated dynamic equalizer secures low Noise Figure across a wide operational mask making it ideal for DWDM amplification in Telecom, Datacom, and CATV networks.



**Reach out to our sales team** to have more information on our Dual Dynamic Equalized Amplifiers!

### Key Benefits

- Reconfigurable, low power consumption Dual EDFA C-band module
- Dynamic equalization
- Hitless gain tuning from 10 to 30 dB
- Inherent Tilt Control Feature
- Highly integrated passive component for compactness and efficiency.

### Specifications

Operational Bandwidth	1528 -1567 nm
Gain Range	10 dB - 30 dB
Output Power	0 dBm - 20 dBm
Noise Figure	$\leq 8.5$ dB
Gain Ripple	0.5 dB
Power Consumption	$\leq 15$ W

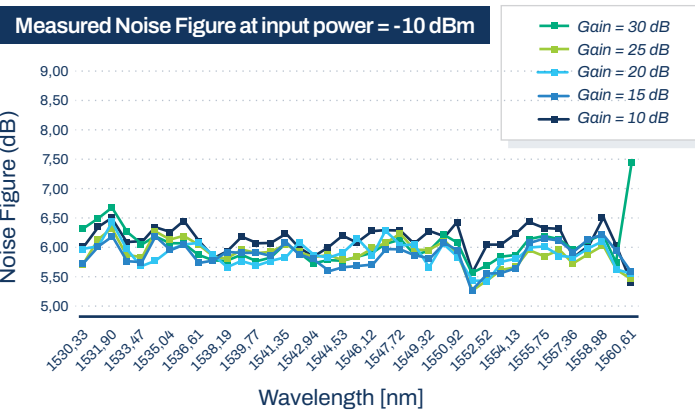
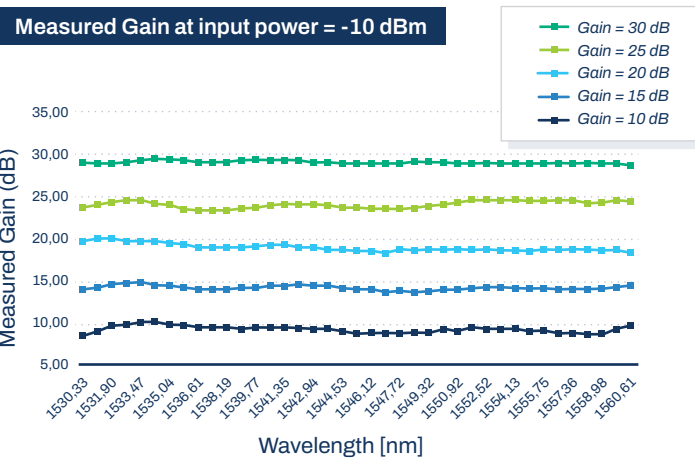


# Dynamic Amplifiers

Integrating Dynamic Gain Equalization (DGE) into smart Erbium-Doped Fiber Amplifiers (EDFAs) offers significant cost-saving opportunities for optical transmission networks. By dynamically adjusting the gain across the C-band, these advanced amplifiers can effectively replace traditional configurations that require separate booster, in-line, and pre-amplifiers.

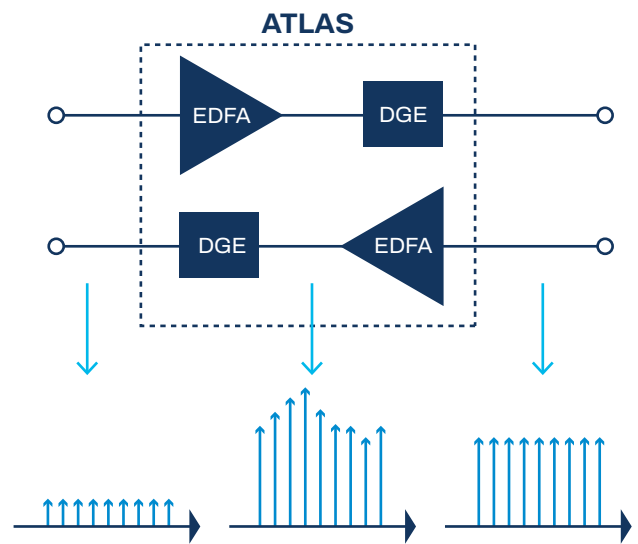
## Principle of Operation

PhotonPath Dual EDFA is based on reconfigurable Dynamic Equalizers realized in our proprietary integrated photonic platform with ultra-low losses. The key differentiation is the ability to compensate for several spectral profiles, thus covering a wide operational mask while keeping a low Noise Figure (NF).



## Atlas impact on network

Metro area network simulations show a reduction of optical amplifiers cost up to 20%, by choosing Atlas over a commercial EDFA. Further savings can be achieved by considering OEO regeneration and maintenance costs. We are currently investigating how these costs impact Atlas's overall benefits.



## Contact Information

Contact us today to learn more about PhotonPath's Atlas.

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