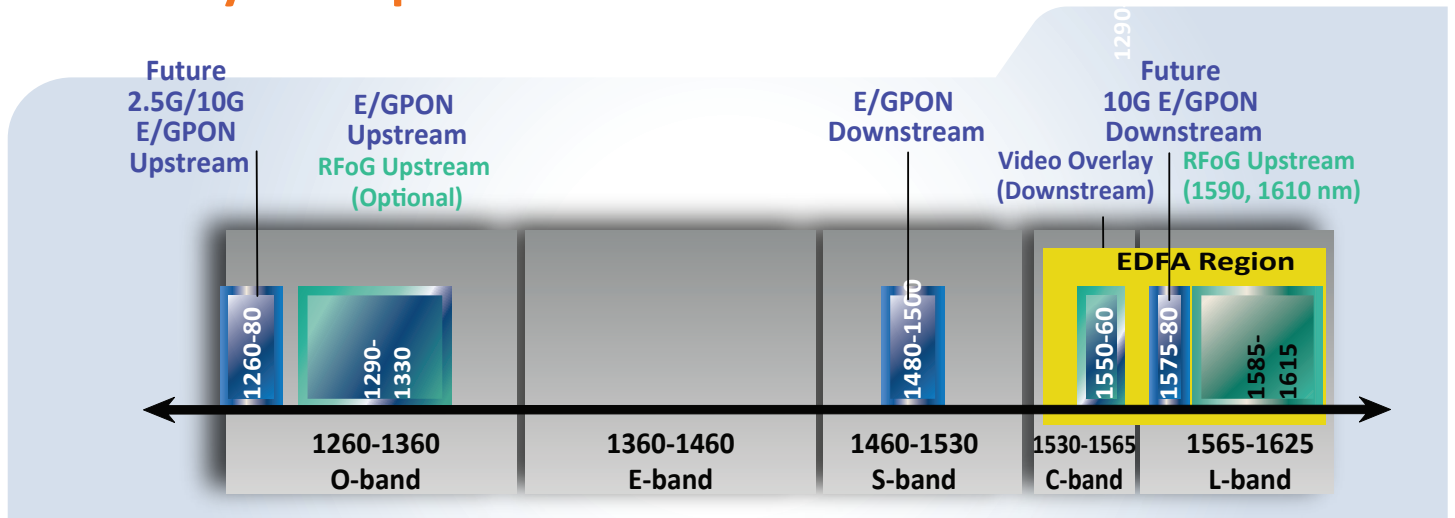


EAR Series

Two-way Multiport EDFAs for FTTx Networks



Applications

- ▶ Radio Frequency over Glass (RFoG)
- ▶ EPON
- ▶ GPON
- ▶ FTTx



Features

- ▶ EDFA Cascade Increases CMTS Port Utilization
- ▶ Upstream Wavelength from 1585 or 1620 nm
- ▶ Available for Extended Temperature Deployment (-40 to +65°C)
- ▶ Up to +23 dBm per Port Output Power for Downstream C-band
- ▶ Eliminates RF Receiving, Combining & Upstream Transmission Equipment
- ▶ Extends Life of PON Networks

IPG Photonics' EAR Series two-way EDFA is a novel approach enabling two-way RF service delivery as well as leveraging the capability and capacity of the fiber optic media by supporting many other potential wavelengths in the future. EPON and GPON standards accommodate RF video delivery using a 1550 nm wavelength overlay. In addition, the Society of Cable Telecommunications Engineers (SCTE) has developed RFoG standards to specify the requirements to support two-way RF delivery over FTTH networks. The RFoG standards have been developed so that two-way RF services can co-exist on the same EPON and GPON networks.

IPG's EDFAs can be cascaded within a single equipment rack to support long-term growth as new homes are connected over time. IPG's proprietary multimode side-pump technology increases power scalability while reducing component count. IPG combines pumps in a high-power, redundant design with intrinsic "soft-fail" characteristics, providing the multi-layer reliability required in a network building block. IPG's experienced team of engineers and scientists will work with you to customize configurations, electrical connections and optional characteristics.

EAR Series

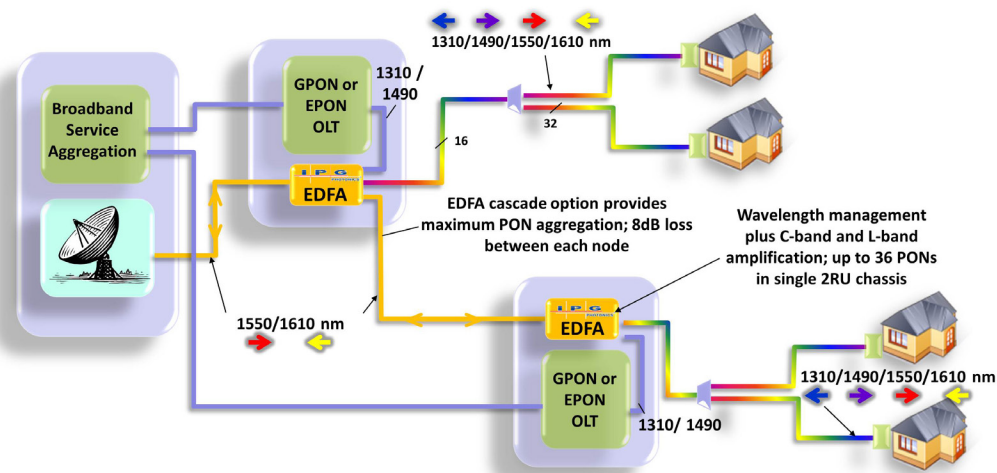
Two-way Multiport EDFAs for FTTx Networks

Optical Characteristics

| | Value |
|---|---|
| Max. Output Power per Port, dBm | 0-3 |
| Number of Ports | 1RU Booster: 4; 2RU Pre-amp: 4 2RU: 8,16 |
| Max. Port to Port Variation, dB | 1.0 |
| Max. Monitor Port Output Power, dBm | 0 to 3 |
| Max. Operating Wavelength Range, nm | C-band: 1550-1560; L-band: 1580-1620 |
| Standard Noise Figure (Pin= +6 dBm), dB | 4.5 |
| Max. Carrier-to-Noise Ratio (CNR) Degradation, dB | 0.5 |
| Max. Power Consumption, W | 90 |
| Max. Daisy Chain Output Power, dBm | 2 or 4 Ports |

General Characteristics

| | |
|---|--|
| Chassis Dimensions, mm | 1RU: 483 x 311 x 44; 2RU: 483 x 311 x 88 |
| Ambient Operational Temperature Range, °C | Standard: -10 to +55; Extended: -40 to +65 |
| Storage Temperature Range, °C | -40 to +80 |
| Humidity (Non-condensing), % | 10 to 95 |



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