

EAR Series 2RU Rack Mount EDFAs

Fiber Amplifiers for FTTx Networks



Applications

- ▶ CATV
- ▶ FTTB
- ▶ FTTC
- ▶ FTTH
- ▶ FTTx
- ▶ Broadband Access
- ▶ Free Space Communications
- ▶ RF Video Overlay



Features

- ▶ Up to 64 Output Ports in a 2RU Package
- ▶ Up to +23 dBm per Port Output Power
- ▶ Low Power Auxiliary Output Ports for Future Expansion
- ▶ Integrated CWDM Splitter Option
- ▶ <4.5 dB RF Noise Figure
- ▶ Cooler-free Pumps for Higher Reliability & Lower Power Consumption

IPG Photonics' EAR Series are high-performance Erbium-doped Fiber Amplifiers (EDFAs) that supply maximum output power and port count while freeing up valuable rack space. IPG's cooler-free pumps assure superior reliability and lower power consumption. The integrated CWDM splitter option eliminates the need for a separate shelf. This allows the 1310 nm and 1490 nm data streams to be routed from the OLT to the ONU through the EDFA, reducing component count, lowering the FIT rate and improving system performance.

IPG's EDFAs have a broad input power specification (from -5 to +10 dBm). They can be cascaded within a single equipment rack to support long-term growth as new homes are connected over time. For networks requiring fewer optical ports, a lower power 1RU version is available. Both 1RU and 2RU EDFAs are designed and manufactured using IPG's high-reliability pumping technology.

EAR Series 2RU Rack Mount EDFAs

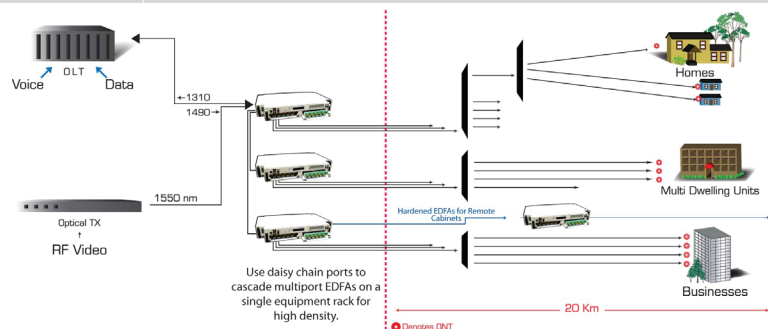
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Optical Characteristics

| | Value |
|--|-----------|
| Max. Output Power per Port, dBm | Up to +23 |
| Number of Ports | 4-64 |
| Max. Port to Port Variation, dB | 0.25-1.5 |
| Monitor Port Output Power, dBm | 0-3 |
| Operating Wavelength Range, nm | 1540-1560 |
| Typ. Noise Figure (Pin= +6 dBm), dB | 4.5 |
| Carrier-to-Noise Ratio (CNR) Degradation, dB | 1.0 |
| Typ. Power Consumption, W | <70 |
| Max. Residual Pump Power, dBm/ nm | -30 |
| Typ. 1550 nm Input Power, dBm | -5 to +10 |
| Daisy Chain Output Power, dBm | +9 to +12 |

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 |



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