

Low Dispersion Optical Fiber Amplifier for Ultrashort Pulse Amplification



Applications

- Ultrashort pulse amplification
- C-band channel amplification booster, Pre-amp
- Narrow band amplification in access network or CATV network
- DWDM metro network
- Core network

Features

- Negligible pulse and spectrum broadening
- Wavelength range 1530 ~ 1565 nm
- Input power range -25 ~ +10 dBm
- Low noise figure
- Dispersion compensation 0.03 ps/nm
- Long term stability

In addition to our standard EDFA systems, Calmar Laser's low dispersion EDFA amplifier is specially designed for ultrashort pulse amplification.

The dispersion compensating EDFA (AMP-LD), also described as High Speed, Short Pulse EDFA due to its special usefulness for amplifying high-speed short pulse optical signal, minimizes signal distortion due to chromatic dispersion and self phase modulation nonlinearity of a small fiber core, while boosting the power of an optical signal power up to 23 dBm.

AMP-LD is a robust instrument that is easy to configure and operate.

AMP-LD provides an ideal way to amplify short optical pulses, eliminating penalty due to dispersion or self phase modulation. With its wide range of specifications, Calmar can customize solutions that closely fit your amplification requirements.

Technical Specifications

| Model Number | AMP-LD-20 | AMP-LD-23 |
|------------------------------|-----------------------|-----------|
| Output Power (dBm)* | 20 | 23 |
| Input Power Range (dBm) | -25 ~ +10 | |
| Wavelength (nm) | 1530 ~ 1565 | |
| Noise Figure (dB) | < 5.5 | < 6.0 |
| Pulse Broadening** (%) | < 5 | < 5 |
| Spectrum Broadening** (%) | < 2 | < 4 |
| Chromatic Dispersion (ps/nm) | 0.03 | |
| Operating Voltage (VAC) | 85 ~ 264 | |
| Dimensions (cm) | 37(w) x 16(d) x 25(h) | |

* Other output power are available.

** Input signal: repetition rate > 10 GHz, pulsewidth > 1 ps.

Due to our continuous improvement program, specifications are subject to change without notice

