Low Dispersion High Power 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
- Saturated output power up to 37 dBm
- Wavelength range 1540 ~ 1565 nm
- Input power range -5 ~ +5 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 high power 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 37 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-30 | AMP-LD-33 | AMP-LD-37 |
|------------------------------------|----------------------|-----------|-----------|
| Output Power (dBm)* | 30 | 33 | 37 |
| Input Power Range (dBm) | -5 ~ +5 | | |
| Input Signal Repetition Rate (GHz) | > 1.0 | | |
| Input Signal Pulse Width (ps) | > 1.0 | | |
| Wavelength (nm) | 1540 ~ 1565 | | |
| Noise Figure (dB) | < 6.0 | < 6.5 | < 7.0 |
| Pulse Broadening (%) | < 5 | < 5 | < 5 |
| Spectrum Broadening (%) | < 4 | < 10 | < 15 |
| Chromatic Dispersion (ps/nm) | 0.03 | | |
| Operating Voltage (VAC) | 85 ~ 264 | | |
| Dimensions (cm) | 48(w) x 42(d) x 9(h) | | |

^{*} Other output power are available.

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



