

Gain Flattened Erbium-doped Fiber Amplifier for C-band

ERBIUM-DOPED FIBER AMPLIFIERS (EDFA)



The gain-flattened erbium-doped fiber amplifier (EDFA) is specifically designed for fiber laser or fiber communication systems. It can simultaneously amplify multiple wavelength signals within the C-band while maintaining a consistent gain across all wavelengths, with a gain flatness of ≤ 1.5 dB. It boasts the capabilities of simultaneously amplifying multiple wavelengths across a broad spectrum, along with the advantages of flat gain, adjustable gain, high gain, and low noise.

- Gain Flatness
- Fiber Communication
- High Gain
- Fiber Sensing
- Wide operating wavelength
- Fiber Laser

Specifications

Parameter	EDFA-C-PA-GF (Pre-Amp)	EDFA-C-BA-GF (Booster)	EDFA-C-LA-GF (Line-Amp)
Operating Wavelength (nm)	1530~1565 nm	1530~1565 nm	1530~1565 nm
Input signal power (dBm)	-45 ~-25	-12 ~ +3	-25 ~+3
Max output power (dBm)	14	17/20/23/25/26	17/20/23/25/26
Small signal gain (dB)	25	25	25
Noise Figure (dB)	5	5	5.5
Control Mode	ACC	ACC/ APC/AGC	ACC/ APC/AGC
Parameter small signal gain	ACC: 0~100%; APC: 10%~100%; AGC: 0~25dB	ACC: 0~100%; APC: 10%~100%; AGC: 0~25dB	ACC: 0~100%; APC: 10%~100%; AGC: 0~25dB
Gain Flatness (dB)	≤ 1.5	≤ 1.5	≤ 1.5
Isolation at input/ output (dB)	>35	>35	>35
Optical power monitoring	Input / Output Power	Input / Output Power	Input / Output Power
Optical fiber and connectors	SMF-28	PM1550	PM1550
Polarization dependent gain (dB)	≤ 0.3	-	-
Polarization mode dispersion (ps)	0.5	-	-
Extinction Ratio PER (dB)	-	≥ 23	≥ 23

* Input signal power: Customizable

* Gain Flatness: APC/AGC, 10~25dB

* Optical fiber and connectors: FC/APC Connector

Source: WaveQuanta product database. For ordering, customization (wavelength, power, package) and quotation, contact sales@wavequanta.com.