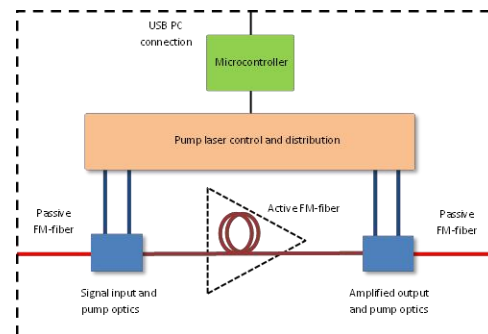


# Few-Mode EDFA

This few mode fiber Erbium doped amplifier has been developed within the EU supported MODE-GAP project. The amplifier covers C-band and is available in 3-mode (LP<sub>01</sub>, LP<sub>11a</sub>, LP<sub>11b</sub>) and 6-mode (LP<sub>01</sub>, LP<sub>11a</sub>, LP<sub>11b</sub>, LP<sub>21a</sub>, LP<sub>21b</sub>, LP<sub>02</sub>) options. Low noise figure and high gain is achievable across the full set of modes. The differential modal gain is low and flat across the wavelength range.

光学参数	典型值
波长范围	1535 – 1560nm (C-band)
输入光功率	-10 to 0 dBm per mode
空间模式数	3 or 6
小信号增益	> 20dB
输出光功率	17dBm
模式间增益差	< 4dB
噪音系数	< 6dB
输入/输出连接头	Bare fiber or FC/PC or FC/APC
<b>常规信息</b>	
封装尺寸	19" Rack Unit
工作电压	110-230 VAC
电流频率	50 to 60 Hz



**Technical references:**

1. Y. Jung et al., "Reconfigurable modal gain control of a few-mode EDFA supporting 6 spatial modes," *IEEE Photon. Tech. Lett.* 26, 1100-1103(2014).
2. Y. Jung et al., "Three mode Er<sup>3+</sup> ring-doped fiber amplifier for mode-division multiplexed transmission," *Opt. Express* 21, 10383-10392 (2013).
3. Y. Jung et al., "First demonstration and detailed characterization of a multimode amplifier for space division multiplexed transmission systems." *Opt. Express Vol. 19, Issue 26*, (2011)