

Erbium Doped Fiber Amplifier, Polarization Maintaining OEM module

Model no.: EDFA-C-PM-20 [23]



Description

This Polarization-Maintaining Erbium-doped fiber amplifier is designed as a booster to provide amplification solutions for a broad range of applications, including high speed optical transmission (polarization multiplexing), PM transmitter, sensing and test and measurement setups. The unit has internal input and output isolators. As an option, it can also include an internal tap power monitor. It includes drive and temperature control electronics. Upon request, the user can have the ability to control some setting parameters externally. Main features are external enable/disable and booster pump current control.

Optical parameters (at 25°C)

Parameter	Specification	Unit
Operating wavelength band	1530 – 1570	nm
Saturated output power (+5 dBm input)	>+20 *	dBm
Gain (+5 dBm input)	> 15	dB
Small-signal gain (-10 dBm input)	> 25	dB
Noise Figure (0 dBm input)	< 7.5	dB
Output polarization extinction ratio	> 20	dB
Polarization dependent gain	< 0.5	dB

* +23dBm version available on request

Optical connections

Fiber type – input and output signal	Panda, Fujikura SM 15-P (or equivalent)
Connector type – input and output signal	FC/APC, key width 2.02 mm, key aligned with slow axis
Polarization – input and output signal	Aligned with slow axis

Electrical parameters (at 25°C)

Parameter	Specification	Unit
DC Power supply	5	V
Power consumption	< 25	W

Mechanical and environmental specifications

Parameter	Specification	Unit
Operating case temperature	5 - 55	C
Storage temperature	-5 - 75	C
Humidity	0 - 95, Non-condensing	%
Dimensions (WxDxH)	160 x 110 x 25	mm

Typical Amplifier Gain and Noise Figure

