

Erbium Doped Fiber Amplifier, Polarization Maintaining OEM module

Model no.: EDFA-C-SPM-1



Description

This Single Polarization-Maintaining Erbium doped fiber amplifier is a high small-signal gain polarization maintaining single polarization (PMSP) amplifier for the C-band. Performance is optimized for 1550 nm. Input polarization should be aligned with the slow axis. The unit has internal input and output isolators and polarizers that block the power in the fast axes. It includes drive and control electronics. Upon request, it allows for external Enable/Disable and external control of the pump laser diode current.

Optical parameters (at 25°C)

Parameter	Specification	Unit
Operating wavelength band	1525 – 1560	nm
Saturated output power (0 dBm input at 1550nm)	>+17	dBm
Small signal gain (-10 dBm input at 1550nm)	> 26	dB
Noise Figure (0 dBm input at 1550)	< 7	dB
Output polarization extinction ratio (with connectors)	> 25	dB

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	< 15	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)	120 x 90 x 25	mm