

C-band Single Channel Erbium-doped Fiber Pre-Amplifier

1. Description:

The Pre-amplifier is specially used for the amplification of small optical signal in the range of - 45dBm to - 25dBm. The typical gain of small signal is as high as 35 or 45dB, and low noise coefficient. It is usually used to improve the sensitivity before the optical receiver.

2. Features:

- Wide wavelength range
- High gain factor
- Low noise

3. Applications:

- Optical fiber communication
- Optical fiber sensor
- Fiber laser



4. Electro-Optical Characteristics:

Parameters	Unit	Values		Notes
		EDFA-PA-35	EDFA-PA-45	
Part number	-	EDFA-PA-35	EDFA-PA-45	
Operating wavelength	nm	1530~1565		C-band
Input power	dBm	-35~-25	-45~-25	
Small signal gain coefficient	dB	35	-	@-35dBm Input
Small signal gain coefficient	dB	-	45	@-45dBm Input
Noise figure	dB	4.5		@-35dBm Input
Gain flatness	dB	3		
Polarization dependent gain	dB	<0.3		
Polarization mode dispersion	ps	0.5		
Input/Output isolation	dB	>35		
Fiber type	-	SMF-28e		
Connector	-	FC/APC		
Operating mode	-	Automatic current control (ACC)		
Dimensions	mm	260(W)×280(D)×120(H)		Benchtop
		125(W)×150(D)×20(H)		Module
Power supply	V	AC 110~240V, <30W@25°C		Benchtop
		5V DC, <15W		Module
Control mode	-	RS232 Serial communication		Module
Communication Interface	-	DB9 Female		Module

Operating temperature	°C	-5~ +55	
Operating humidity range	%	0~70	

5. Ordering information:

EDFA	Wavelength	EDFA Type	Small signal gain	Dimension
Erbium-doped Fiber Amplifier	C: C-band	PA: Pre-Amp	35: 35dB@-35dBm 45: 45dB@-45dBm	M: Module B: Benchtop