

# ERBIUM-DOPED FIBER AMPLIFIER (EDFA) FOR WDM1800

## Features

- High flatness: Typical 1.5dB
- Cover whole C-band
- Adjustable gain
- High saturation output power
- High Precise AGC Circuit
- Compact mechanical and circuit structure
- Available with OEM
- Compatible with Bellcore GR-1312-Core standard
- Application: Pre-amplifier, booster, and DWDM transmission system



## Description

The Erbium-Doped Fiber Amplifier (EDFA) for WDM1800 is an optical amplifier with the wavelength range from 1529 to 1564 nm, and it is covered with whole C-band. The EDFA module is designed to meet the need from the dynamic networks nowadays.

Applied with WDM1800, the EDFA module is capable to support local control and diagnostics by using a VT-100 terminal connected to the console port, and Ethernet and SFP ports for Web, Telnet, SSH, and SNMP v1/v3 management as well. The complete EDFA is designed to provide the solution for various amplification requirements, such as single-channel, and DWDM transmission in public transportation or long-haul network.

## Ordering Information

To specify options, choose from the list below.

Model	Description	Notes
<b>Single Slot Plug-in Module</b>		
WDM1800-1BOEDFA-CBA20	DWDM EDFA amplifier as booster, support C-Band, with up to 20dB Gain	
WDM1800-1PREDFA-CBA20*	DWDM EDFA amplifier as pre-amplifier, support C-Band, with up to 20dB Gain	

\*Future Option

## Product Specifications

Parameter	Symbol	Min	Typ	Max	Unit	
<b>Wavelength</b>	$\lambda_c$	1529	1550	1564	nm	
<b>Saturated output power <sup>(1)</sup></b>	$P_o$	-	-	20	dBm	
<b>Input power</b>	<b>Booster</b>	$P_i$	-10	-	+6	dBm
	<b>Inline</b>		-25	-	-10	
	<b>Pre</b>		-35	-	-25	
<b>Gain</b>	$G$	10	20	23	dB	
<b>Multi-wavelength gain flatness</b>	$GF$	-	-	1.5	dB	
<b>Noise Figure <sup>(2)</sup></b>	$NF$	-	4.5	-	dB	
<b>Output power stability</b>	$\Delta P_o$	-	$\pm 0.05$	$\pm 0.1$	dB	
<b>Return loss</b>	$RL$	-	-	-45	dB	
<b>Polarization dependent gain</b>	$PDG$	-	-	0.3	dB	
<b>Polarization mode dispersion</b>	$PMD$	-	-	0.5	ps	

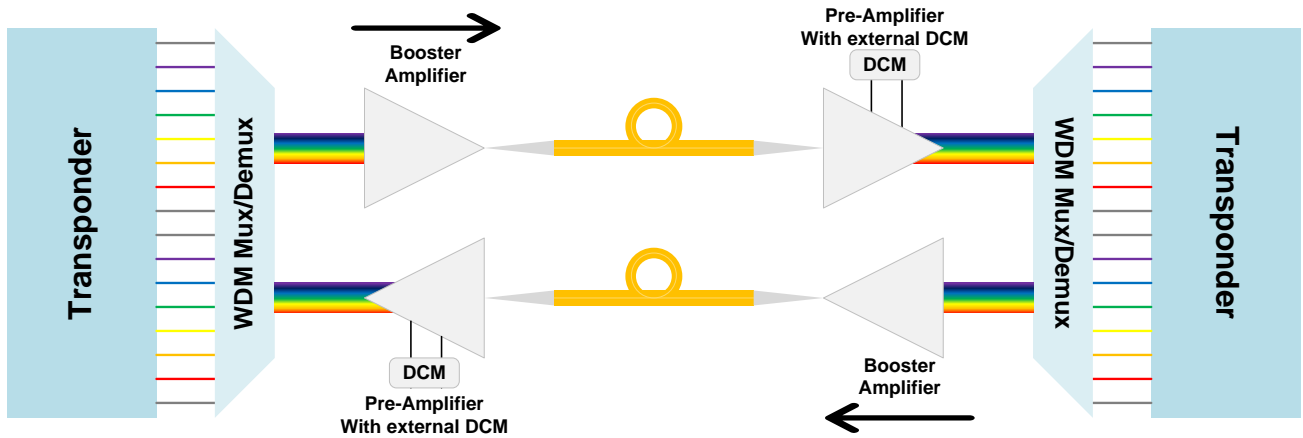
(1): 2 output ports is available

(2): Test at 0dBm input

## Product Application

### Booster Amplifier and Pre-Amplifier\* EDFA

Booster Amplifier and Pre-Amplifier EDFA: Depending on the link budget (i.e. optical transceiver type, fiber type, reach distance and etc), none, one or both of these amplifiers may be required. External Dispersion Compensation Module (DCM) may or may not be required as well.



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