

1U 1550nm CATV Fiber Amplifier EDFA PON EDFA



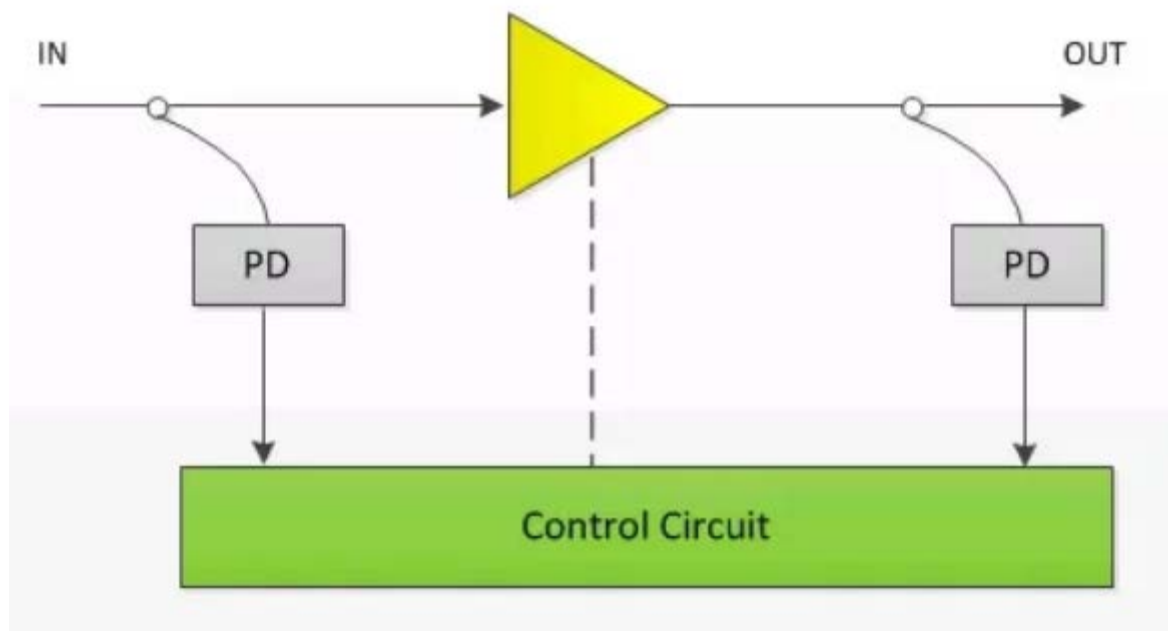
Product Introduction

This optical amplifier is high stability output EDFA. The key component of the product is the high reliability PUMP laser. A unique APC (Automatic Power Control), AGC (Auto Gain Control) and ATC (Automatic Temperature Control) circuit ensure the high stability and reliability output power or gain, and the unique optical circuit design ensures the excellent optical performance. The high stability and high precision MPU system ensure that the control, adjustment and monitor are intelligent and user-friendly.

The optical circuit design characteristics, especially for Analog CATV system, are shown as below:

- (1) Excellent CNR performance with low noise for Analog system which highly concerns noise.
- (2) Good Spectral flatness in the operating signal which ensures better CSO.
- (3) Good Spectral flatness in whole C-bands allows the future upgrade in NGB.

System Function Diagram



This CATV EDFA supports the following features:

- Low noise figure: less than 5.5 dB at 0 dBm input
- Extremely low CSO: <-70 dBc
- High stability and reliability
- Perfect status monitoring interface: RS-485 and RS-232
- High precision APC circuit: power control accuracy typ ± 0.05 dB
- Intelligent temperature control system: power consumption and hot radiation reduce 30% less than the figures of common products.
- Compact structure and circuit
- Compatible with Bellcore GR-1312-CORE
- OEM is available

Environmental Characteristics

parameters	Min.	Max.	Unit
Working temperature	-5	60	°C
Working humidity	10	85	%
Storage temperature	-40	85	°C
Storage relative humidity	5	95	%
Voltage	90	240	VAC
Power consumption		20	

Optical Characters

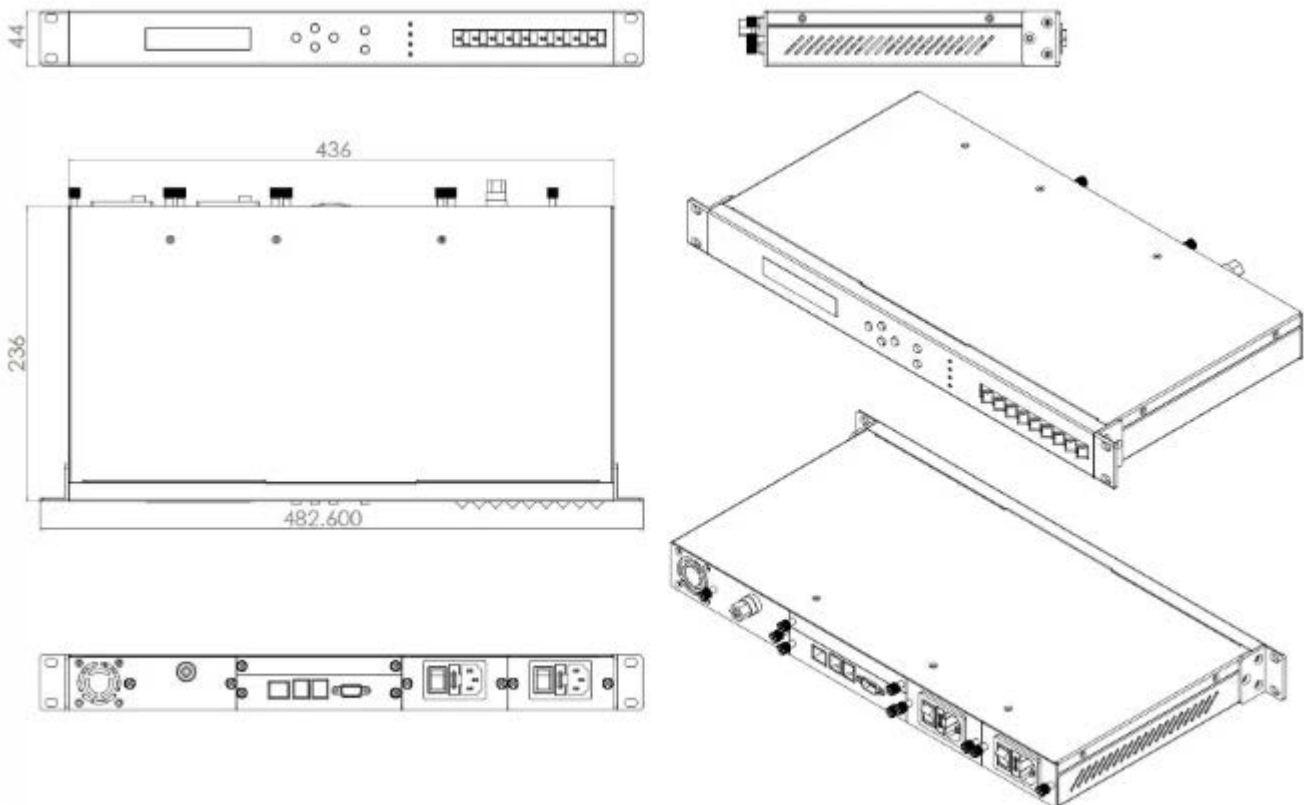
Parameter	Min	Type	Max	Units	Remark
Wavelength range	1545	1550	1565	nm	
Output power ⁽¹⁾	-----	-----	37	dBm	
Input power	-10		10	dBm	
NF (In=0dBm, $\lambda=1550$ nm)	-----	5.5	6	dB	
Output Power Stability	-0.5		0.5	dB	
PMD (Polarization Mode Dispersion)	-----	-----	0.5	ps	
PDG(Polarization dependent gain)	-----	-----	0.5	dB	
RL (Optical Return Loss)	50	-----	-----	dB	
Wavelength range	1545	1550	1565	nm	

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Output Power Stability	-0.5		0.5	dB	
PMD (Polarization Mode Dispersion)	-----	-----	0.5	ps	
PDG(Polarization dependent gain)	-----	-----	0.5	dB	
RL (Optical Return Loss)	50	-----	-----	dB	

(1) Output power and dual output is optional.

Mechanical Dimensions

Size: 483*236*44 mm



Order Information

Structure	Application	Output power	Voltage1	Voltage2	Interface
GA1A: 1U compact dual power supply	CATV	10: 10dBm	1:110/220VAC(100-240V)	1:110/220VAC(100-240V)	2:SC/PC
		...	2:-48VDC(-36- -72VDC)	2:-48VDC(-36- -72VDC)	4:FC/PC
		23:23dBm	9:other	9:other	6:LC/PC
			0:W/O	0:W/O	9:other