

Hybrid Raman/EDFA optical amplifier



Product Introduction

Hybrid Raman/EDFA optical amplifier series are mainly used in ultra-long span, large capacity and high rate system to improve the OSNR of the system. Compared with the conventional EDFA systems, the OSNR can be improved 6~7dB; and they can effectively reduce the design cost of system compared with separate Raman systems.

Features

Respective AGC control for Raman and EDFA

Rapid transient control

Apply to different types of fiber: SSMF/G.652,Leaf/G.655,Truewave/G.655

Large dynamic adjustable range of gain and gain Tilt, dynamical adjustment of gain and gain Tilt for both Raman and EDFA

Applications

Long-distance optical transmission system extend relay distance

upgrade existing systems to 100Gb/s or higher rate

Standards

Telcordia GR-1312-CORE

RoHS

Specifications

Parameter	Unit	Min.	Typ.	Max.	Remark
Operation Wavelength	nm	1528		1568	
Input Optical Power	dBm	-35		0	@ pump off
Saturated Output Optical Power	dBm			24	
Gain	dB	13		42	
Noise Figure	dB	0		3.2	The minimum gain of 13dB, the largest noise figure With the gain becomes larger, noise figure reduces gradually, , noise figure is 0dB in the case of the maximum gain

Transient	Overshoot&undershoot	dB	-1	1	For 20dB Add/drop,
	setting time	us		800	100us signal Fall/Raise time
	gain error	dB		±0.5	
Gain Fluctuation		dB		±0.5	
Size	mm	220×130×20			Without radiator fan
	mm	220×130×30			With radiator fan
Operation Temperature			-10	55	
Power Consumption		W		50	

Ordering Information

HYFA - R-□- E-□-□-□-□-□-□

Connector	FC SC,LC,MU/UPC,APC
Fiber length	1:1m customer specify
Fiber Dia.	09: .9mm customer specify
Output Power:	17:17dBm customer specify
EDFA Gain:	25:25dB 15/25: 15~25 adjustable gain range customer specify
Operating Wavelength:	40:1528~1562nm 48: 1528~1568nm customer specify
Raman Gain:	10:10dB customer specify