

## High-power Fiber-optical Amplifier Series



### Product Introduction

High-power fiber amplifier (HFA) products are designed for optical fiber CATV system. As the low noise figure, high output power (27~40dBm) and compact structure, HFA can compensate the transmission and distribution loss, improve the system performance and offer low-cost and flexible solution for system design. Furthermore, with gain flatness control technology and polarization maintaining technology, multi-wavelength HFA and polarization maintaining HFA (PMHFA) enrich the applications.

### Features

- High Output Power
- Low Noise Figure
- Compact structure, multi-port output
- Excellent gain flatness(multi-wavelength HFA)
- High polarization extinction(PMHFA)
- Support remote management

### Applications

- Single-/multi-wavelength CATV system
- Doppler laser radar system (PMHFA)

### Standards

- Telcordia GR-1312-CORE
- RoHS

### Specifications

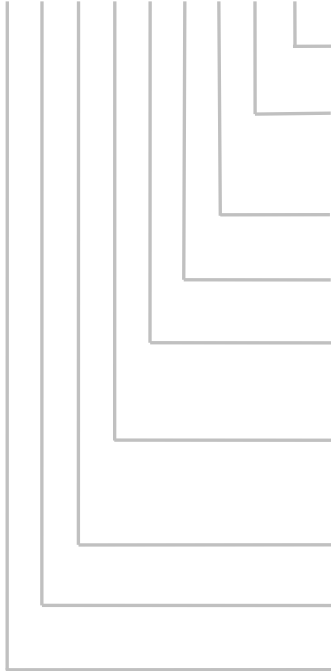
Parameter	Unit	Min.	Typ.	Max.	Note
Operation Wavelength	nm	1545		1565	
Input power ( $P_{in}$ )	dBm	-5		10	
Total output power( $P_{tot}$ )	dBm	27		40	Include access loss of output splitter
Output port power	dBm	17, 20, 23, ...			Customer configuration
Output port number(N)	/	4, 8, 16, 32, ...			Customer configuration
Insertion loss of OLT signal <sup>1</sup>	dB			1	
Noise figure (NF)	dB			5.5	$P_{in} = 0\text{dBm}$

Return loss	dB	50			
Polarization dependent gain (PDG)	dB			0.5	
Polarization mode dispersion (PMD)	ps			0.5	
Polarization extinction ratio (PER) <sup>2</sup>	dB	20			
Gain flatness (GF) <sup>3</sup>	dB				
Dimensions	dB	see order information			
Power consumption of module / rack product	W			30/45	$P_{tot} \leq 30\text{dBm}$
				40/55	$30 < P_{tot} \leq 33\text{dBm}$
				70/85	$33 < P_{tot} \leq 36\text{dBm}$

Ordering Information

Module product

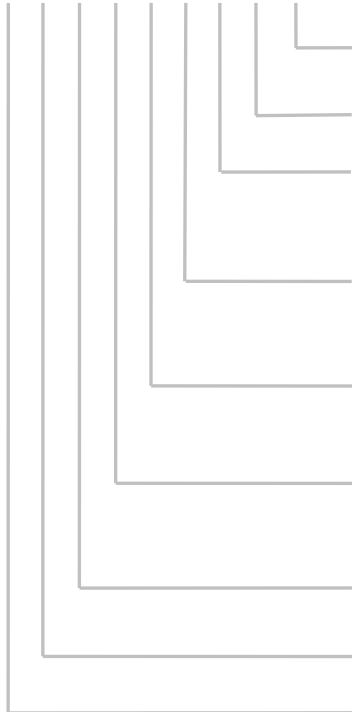
HFAM-□-□-□-□-□-□-□-□-□



- Fiber Length: 1:1m、customer specify
- Pigtail Fiber: 025:  $\phi$  0.25mm、09:  $\phi$  0.9mm  
PM025:PM  $\phi$  0.25mm、PM09:PM  $\phi$  0.9mm
- Dimension(mm): 03:220×160×35、04:170×150×25
- Power Supply: A: -48V DC、D: +24V DC
- Output Connector : SA:SC/APC 、 LA:LC/APC 、 EA:E2000/APC、customer specify
- Input Connector : SA:SC/APC 、 LA:LC/APC 、 EA:E2000/APC、customer specify
- Output Port Number: 1:1、2:2、8:8、customer specify
- Total Output Power: 30:30dBm、customer specify
- Channel: S: single wavelength、M: multi-wavelength

Rack product

HFA-□-□-□-□-□-□-□-□-□



- PON Port Connector: SA:SC/APC、customer specify
- PON Port Number: 1:1、2:2、8:8、customer specify
- Package: 11:19 inch 1U、12:19 inch 2U、41:19/21 inch 1U、42:19/21 inch 2U
- Power Supply : A: -48V DC 、 B:220/110V AC 、 AA: Dual -48V DC、BB: Dual 220/110V AS
- Output Connector : SA:SC/APC 、 LA:LC/APC 、 EA:E2000/APC、customer specify
- Input Connector : SA:SC/APC 、 LA:LC/APC 、 EA:E2000/APC、customer specify
- Output Port Number: 1:1、2:2、8:8、customer specify
- Total Output Power: 30:30dBm、customer specify
- Channel: S: single wavelength、M: multi-wavelength