

HAPM4000 Series  
1.5 $\mu$ m PM Fiber Amplifier  
(PM EDFA)

TECHNICAL INDEX

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## **1.0 PRODUCT SUMMARY**

Huatai HAPM4000 is a Polarization Maintaining Optical Amplifier which working in 1528~1563nm operating wavelength. Adopt Polarization Maintaining Erbium-doped fiber (PM-EDF), output optical power range 13~26dBm, extinction ratio >20dB.

HAPM4000 input and output both adopt single-polarized optical isolator and PM optical component. This equipment is used to ensure the high extinction ratio and the stability of amplified output polarization. Mainly maintained by narrow linewidth, single channel seed laser source's power amplification and PM in 1540~1570nm wavelength range.

## **2.0 PRODUCT FEATURE**

- Single mode, TEM<sub>00</sub> Gaussian spectrum, linear polarization output.
- Keep single channel seed light source linewidth, frequency stability and RIN
- High extinction ratio
- Low noise figure
- Stable output polarization
- High power stability
- Single-polarized input/output optical isolation
- Input output and echo reflection monitoring function, offer automatic system protection
- ACC、APC working mode
- RS232 control interface
- SNMP network management function, support remote control
- Rack-mounted type, desktop type, modular type (OEM) optional.
- Excellent P/P ratio

## **3.0 MAIN APPLICATION**

- Narrow linewidth, single channel seed laser source regeneration amplification
- Laser radar
- Optical fiber sensing
- Spectral analysis
- Coherent detection
- Frequency generation
- Coherent combination high precision

## 4.0 TECHNICAL INDEX

Performance		Index			Supplement
		Min.	Typ.	Max.	
Optic feature	Operating wavelength range	(nm)	1528	1563	
	Work mode		CW		
	Polarization output		Linear polarization		
	Optical quality		Single mode, TEM <sub>00</sub>		
	Input optical power	(dBm)	-10		+10
	Output optical power	(dBm)	13		26
	Output power adjustable range	(%)	10		100
	Output power stability	(dB)		0.2	8 hours
	Extinction ratio	(dB)	15	20	
	Noise figure	(dB)		5.0	
	Input/output optical isolation	(dB)	30		
	Optical return loss	(dB)	50		
	Optical connector		FC/APC		
General feature	SNMP network management interface		RJ45		
	Communication interface		RS232		
	Power supply	(V)	90	220	265
			30	-48	72
	AC, stander type, desktop type				
	DC, stander type				
	Power consume	(W)		60	
	Operating temp.	(°C)	-5		65
	Store temp.	(°C)	-40		80
	Relative humidity	(%)	5		95
Size(W) × (D) × (H)	(mm)	483 × 363 × 44			1U stander type
		483 × 373 × 89			2U stander type
		279 × 356 × 89			2U desktop type
		279 × 356 × 133			3D desktop type
		125×150×31		modulator type OEM	

## 5.0 PRODUCT SERIES

Model	Operating wavelength	Type	Output optical power	Optical connector
HAPM4113- FA	1528~1563nm PM-EDFA	Single stage power amplifier	13dBm	FC/APC
HAPM4117-FA			17dBm	
HAPM4120-FA			20dBm	
HAPM4122-FA			22dBm	
HAPM4123-FA			23dBm	
HAPM4126-FA			26dBm	

## 6.0 ORDER INFORMATION

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Huatai PM Optical Amplifier	Work Wavelength		Type		Output Power		Connector		Exterior		Power Supply	
	4	1528~1563nm PM-EDFA	1	Single Stage Power Amplifier	13	13dBm	FA	FC/APC	1U	1U Stander	22	220VAC
1	1050~1080nm PM-YDFA	2	Double Stage Power Amplifier	20	20dBm			2U	2U Stander	48	-48VDC	
				22	22dBm			2D	2U Desktop	05	5~7VDC	
				23	23dBm			3D	3U Desktop			
				26	26dBm			MD	Modular OEM			
	5	1540~1570nm PM-EYDFA										