

# HAPM1000 1.0 $\mu$ m PM Fiber Amplifier ( PM YDFA )

## PRODUCT DESCRIPTION

HAPM1000 is a Polarization Maintaining Fiber Amplifier which worked in 1050~1080nm operating wavelength. Adopt Polarization Maintaining (PM) ytterbium-doped fiber, output optical power range 0.5W~5W, extinction ratio >20dB.

HAPM1000 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 1050~1080nm wavelength range.



## PRODUCT FEATURES

- ▶ 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

## 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

## TECHNICAL INDEX

Performance			Index			Supplement
			Min.	Typ.	Max.	
Optic feature	Operating wavelength range	(nm)	1050		1080	
	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)	27		37	0.5~5W
	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			
	Return loss	(dB)	50			
	Optical connector		FC/APC			
	SNMP network management interface		RJ45			
General feature	Communication interface		RS232			
	Power supply	(V)	90	220	265	AC, stander type, desktop
			30	-48	70	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
			483 × 373 × 89			2U stander
			279 × 356 × 89			2D desktop
			279 × 356 × 133			3D desktop
			125×150×31			Modulator OEM

## PRODUCT SERIES

Model	Wavelength	Type	Output optical power	Optical connector
HAPM1127-FA	1050~1080nm PM-YDFA	Single stage power amplifier	27dBm (0.5W)	FC/APC
HAPM1130-FA			30dBm (1W)	
HAPM1133-FA			33dBm (2W)	
HAPM1136FA			36dBm (4W)	
HAPM1137-FA			37dBm (5W)	

## MODEL EXPLANATION

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Guangtai PM Optical Amplifier	Work Wavelength		Type		Output Power		Connector		Exterior		Power Supply	
	1	1050~1080nm PM-YDFA	1	Single Stage Power Amplifier	27	27dBm(0.5W)	FA	FC/APC	1U	1U Stander	22	220VAC
					30	30dBm(1W)			2U	2U Stander	48	-48VDC
	4	1528~1563nm PM-EDFA	2	Double Stage Power Amplifier	33	33dBm(2W)			2D	2U Desktop	05	5~7VDC
					36	36dBm(4W)			3D	3U Desktop		
	5	1540~1570nm PM-EYDFA			37	37dBm(5W)			MD	Modular OEM		