

## IDPM4000

### 1.5 $\mu$ m PM Fiber Amplifier ( PM EDFA )



#### Description

Idealphotonics'IDPM4000 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.

IDPM4000 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.

#### Feature

Single mode, TEM00 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

## 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

## Specification

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)	5		17		
	Output optical power	(dBm)	13		26		
	Output power adjustable range	(%)	10		100		
	Output power stability	(dB)			0.2	8 hous	
	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				
	Communication interface		RS232				
General feature	Power supply	(V)	90	220	265	AC, stander type, desktop type	
			30	-48	72	DC, stander type	
			5		4	DC, modulator type	
	Power consume	(W)			60		
	Operating temp.	(°C)	-5		65		
	Store temp.	(°C)	-40		80		
	Operating relatice humidity	(%)	5		95		
	Size (W)×(D)×(H)			19×14.3×1.75 ( " )		1RU stander	
				483×363×44 ( mm )			
				19×14.7×1.75 ( " )		2RU stander	
			483×373×44 ( mm )				
			11×14×3.5 ( " )		2RU desktop		
			279×356×89 ( mm )				
			11×14×5.25 ( " )		3D desktop		
			279×356×133 ( mm )				

			4.9×5.9×1.2 ( " ) 125×150×31 ( mm )	Modulator OEM
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## Product series

Model	Wavelength	Type	Output optical power	Optical connector
IDPM4113-FA	1528~1563nm PM-EDFA	Single stage power amplifier	13dBm	FC/APC
IDPM4117-FA			17dBm	
IDPM4120-FA			20dBm	
IDPM4122-FA			22dBm	
IDPM4123-FA			23dBm	
IDPM4126-FA			26dBm	

## Ordering information

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IDP 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	
				17	17dBm			2U	2U Stander	48	-48VDC	
	1050~1080nm PM-YDFA	2	Double Stage Power Amplifier	20	20dBm			2D	2U Desktop	05	5~7VDC	
				22	22dBm			3D	3U Desktop			
	1540~1570nm PM-EYDFA	5			23	23dBm			MD	Modular OEM		
					26	26dBm						