

IDPM5000

1.5 μ m PM Fiber Amplifier (PM EDFA)



Description

Idealphotonics IDPM5000 is a C-Band Polarization Maintaining Optical Amplifier which worked in 1540~1570nm operating wavelength. Adopt Polarization Maintaining (PM) Multiclad Ev-Yb fiber, output optical power range 27~37dBm(0.5W~5W) , extinction ratio >20dB.

IDPM5000 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)	1540		1570
	Work mode		CW		
	Polarization output		Linear polarization		
	Optical quality		Single mode, TEM ₀₀		

	Input optical power	(dBm)	5		17	
	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			
General feature	SNMP network management interface		RJ45			
	Communication interface		RS232			
	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 relative humidity	(%)	5		95	
	Size (W)×(D)×(H)		19×14.3×1.75 (") 483×363×44 (mm)			1RU stander

		19×14.7×1.75 (") 483×373×44 (mm)	2RU stander
		11×14×3.5 (") 279×356×89 (mm)	2RU desktop
		11×14×5.25 (") 279×356×133 (mm)	3D desktop
		4.9×5.9×1.2 (") 125×150×31 (mm)	Modulator OEM

Product series

Model	Wavelength	Type	Output optical power	Optical connector
IDPM5127-FA	1540~1570nm PM-EYDFA	Single stage power amplifier	27dBm (0.5W)	FC/APC
IDPM5130-FA			30dBm (1W)	
IDPM5133-FA			33dBm (2W)	
IDPM5136-FA			36dBm (4W)	
IDPM5137-FA			37dBm (5 W)	

Ordering information

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PM Optical Amplifier	Work Wavelength		Type		Output Power		Connector		Exterior		Power Supply		
5	1540~1570nm PM-EYDFA	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		
				1	1050~1080nm PM-YDFA	2	Double Stage Power Amplifier	33	33dBm(2W)	2D	2U Desktop	05	5~7VDC
								36	36dBm(4W)	3D	3U Desktop		
4	1528~1563nm PM-EDFA			37	37dBm(5W)			MD	Modular OEM				