1064nm High Power Pulse Fiber Amplifier(YDFA)

Description

IdealPhotonics's 1.0um high power pulse fiber amplifiers are specially designed for short pulse (<50ns) amplification. These amplifiers employ optimized double cladding fiber amplification technology. Therefore, it guarantees the maximum optical-optical conversion efficiency and minimum nonlinear effects and avoids the spectral broadening of the pulse signal during the process of amplifying. The output peak power is up to 10kW.

The unique thermal treatment technology guarantees that the amplifiers can operate stably for a long time. The high-speed response protection circuit monitors the power of input and output signal automatically so that ensures the safety of the whole system.
This high-power pulse fiber amplifiers include single-mode and polarization output. Different kinds of package type are adopted such as desk type, rack type and module type. This series of amplifiers can be widely used in the areas of optical fiber sensing, coherent combination and laser processing.

Feature

- High peak output：up to 10kW
- Short pulse amplifying: 10ns/1MHz
- High stability, high reliability
- Output power tunable
- customization product is available

Application

- Fiber Sensing
- LiDAR&LaDAR
- Biological and Medical
- Laser Processing
- Research & development

Specification

Parameter	Unit	Specification		
		Min	Typ.	Max
Part NO.		IDP-Yb-10xx-P-SM IDP-Yb-10xx-P-PM		
Wavelength Range[1]	nm	1035	1064	1083
Average output power	W	-	-	5
Peak output power	KW	-	-	10
Pulse width	ns	1	10	50
Repetition rate	MHz	-	-	1
Operating mode		Pulse		
Output power tunable range	%	10	-	100
Output polarization		Random or linear polarization		
Polarization Extinction Ratio(PER)	dB	15	20	-
Output power stability[2](8hours)	%	-	±1	±2
Beam quality	M^2	<1.2		
Input light isolation	dB	30	-	-
Output light isolation	dB	30	-	-
Length of the output fiber	m	>1		
Optical connectors		FC/APC (other options available)		
Power supply	VAC	170	220	260
Power consumption	W	-	-	150
Operation temperature	℃	0	-	35
Storage temperature	℃	-40	-	+85
Dimension	mm	420(L)×485(W)×150(H)		
Cooling mode		Air-Cooled		

1.Typical operating wavelength: 1053nm、1064nm、1083nm;

2.The output power stability is measured under 25℃, 30 minutes after warm-up.

Ordering Information：

IDP-Yb-10xx-P-M

Series NO.	10xx	P:Package	M:Working Mode	
IDP-YB	Xx:64-1064nm	B:Benchtop	SM:Single Mode	
	XX:53-1053nm	M-Module	PM:Polarization Maintaining Mode	
	XX:83-1083nm			