

Pump/Combiner

(1+1)×1 or (2+1)×1 High Power Pump and Signal Combiners

Lightel's (1+1)×1 and (2+1)×1 Multimode Pump and Signal Combiners can be used for high power fiber lasers and fiber amplifiers. These devices can be used with a pump laser(s) to couple that power with a seed signal. Manufactured using our proprietary methods, these combiners provide superior performance and are available with a wide variety of fiber types.

Features

- High Coupling Efficiency
- Stable and Reliable
- Custom Configurations Available

Applications

- High Power Fiber Lasers
- Fiber Amplifiers



Specifications

Parameter	Specification		
Port Configuration	(1+1)×1 or (2+1)×1		
Pump Wavelength	800 nm ~ 1000 nm		
Signal Wavelength	1030 nm ~ 1080 nm or 1450 nm ~ 1600 nm		
Signal Input Fiber (Note 3)	x/125	x/250	20/400
Pump Fiber	105/125 0.15NA/0.22NA	105/125 0.15NA/0.22NA or 200/220 0.22NA	
Output Fiber (Note 3)	y/125 or y/250	y/250	20/400
Pump Efficiency (Note 4)	>90%	>93%	>95%
Signal Insertion Loss	<0.5 dB	<0.45 dB	<0.4 dB
Total Power Handling	300W	1000W	1000W
Return Loss	>45 dB		
Pigtail	Standard 1m or custom		
Operating Temperature	0~75°C		
Storage Temperature	-40~85°C		

Note 1: Values are referenced without connectors.

Note 2: Other package dimensions and optical performances available by request.

Note 3: x, y specifies fiber core size.

Note 4: Fiber size and type dependent.

Ordering Information

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Port Configuration	Wavelength	Pump Fiber	Signal Fiber	Output Fiber	Package Size(mm)	Special Code		
1: (1+1)×1	A: 1060nm	18: MM-S105/125-15A	04: HI1060 NA:0.14	41: LMA-GDF-20/130-M NA:0.08/0.46	1: D4.0xL60 SST			
2: (2+1)×1	B: 1550nm	19: MM-S105/125-22A	29: DCF-UN-10/125DC	49: LMA-GDF-20/400-M NA:0.06/0.46	3: 75x12x8			
		20: MM-S200/220-22A	72: DCF-UN-8/105/125-14	72: DCF-UN-8/105/125-14	8: 105x15x8			

Note: These are our most popular configurations. Contact Lightel Sales for custom port counts or alternative fibers.