

(N+1) x1 正向泵浦&信号合束器



1.0 Description

(N+1) x1泵浦&信号合束器，是一类由多根泵浦光纤与信号光纤结合组成的用于泵浦耦合的光纤器件。使N根同类型光纤紧密围绕中心一信号光纤合束熔融拉锥截断之后，再与一根折射率分布匹配的双包层光纤熔接而成。泵浦合束器的集成度较高，稳定性较好可承受功率和耦合效率也比较高。随着光纤激光器的全光纤化发展，泵浦合束器已作为泵浦耦合的最主要手段应用于各类光纤激光器。

2.0 Optical and Operation Specifications

Item	Specifications	Min.	Typ.	Max.	Unit	Notes
2.01	Signal wavelength	1000	1060	1100	nm	
2.02	Pump wavelength	800	915	1000	nm	
2.03	Polarization	Random				PM Customizable
2.04	Operation regime	CW				
2.05	Fiber length		1.5		m	Default
2.06	Operating temperature range	0		+70	°C	
2.07	Storage temperature	-40		+85	°C	
2.08	Cooling method	Bottom conduction cooling				

3.0 Typical fiber combinations

Item	Confi.	Pump Fiber	Signal Fiber	Output Fiber	Power Handling	Pump Efficiency	Signal IL
3.01	(6+1) × 1	200/220 220/242	X/250 DCF	X/400 DCF	800W/leg	97%	< 2dB, red pilot beam < 0.2dB, seed laser

* X=20, 25, 30 etc.

* Better performance and other configuration can all be customized.

4.0 Mechanical specifications and drawings

Item	Specifications	Unit	Notes
4.01	Module's Dimensions	150*15*12	mm Bottom conduction cooling

5.0 Ordering information

SPC-①-②-③-④-⑤-⑥/⑦-⑧/⑨-⑩		
①: Port combination	②: Signal propagation direction	③: Pump fiber type S-Single clad, D-DCF
61 - (6+1) × 1	Z - Forward F - Backward	SM04 - 200/220 MMF, 0.22NA SM05 - 220/242 MMF, 0.22NA DM04 - 200/220 MMF, 0.22NA DM05 - 220/242 MMF, 0.22NA ect.
④: Signal input fiber type	⑤: Signal output fiber type	⑥: Pump power per port
D06 - 20/250 DCF, 0.06NA D07 - 25/250 DCF, 0.06NA D08 - 30/250 DCF, 0.06NA ect.	D12 - 20/400 DCF, 0.06NA D13 - 25/400 DCF, 0.06NA D14 - 30/400 DCF, 0.06NA ect.	400 - 400W 600 - 600W 1KW - 1000W ect.
⑦: Handling signal power	⑧/⑨: Input/Output fiber length	⑩: Package type
R - Red pilot beam 1KW - 1000W 1.5KW - 1500W ect.	1.5-1.5m Default 2.0-2.0m ect.	A1 = Aluminum package 150*15*12mm

For example: SPC-61-Z-DM05-D06-D12-400/1.5KW-2.0/2.0-A1