

N×1 多模泵浦合束器 (CNMPC)



1.0 Description

Nx1 多模泵浦合束器(Pump Combiner)是一类由多根泵浦光纤进行泵浦耦合的光纤器件。光纤合束器既可以用作泵浦合束，也可以用作功率合束。如果 Nx1 光纤合束器的 N 路输入光纤与多个泵浦源相连，用来提高多模泵浦光输入功率，则是泵浦合束器；如果 N 路输入光纤与激光器连接，用来提高激光合成功率，则是功率合束器。由于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	Pump wavelength	800		1000	nm	
2.02	Polarization	Random				PM Customizable
2.03	Operation regime	CW				
2.04	Fiber length		1.0		m	Default
2.05	Operating temperature range	0		+70	°C	
2.06	Storage temperature	-40		+85	°C	
2.07	Cooling method	Bottom conduction cooling				

3.0 Typical fiber combinations

Item	Confi.	Pump Fiber Type	Output Fiber Type	Pump Efficiency	Power Handling	Package
3.01	7×1	106.5/125, 0.22NA 135/155, 0.22NA	220/242, 0.22NA	95%	200W/leg	150*15*12
3.02		200/220, 0.22NA	X/400, 0.46NA	97%	800W/leg	150*15*12
3.03		220/242, 0.22NA		95%	500W/leg	150*15*12

* X=20 etc.

* The fiber core shape can be round, square or other customized.

* Better performance and other configuration can all be customized.

4.0 Mechanical specifications and drawings

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

5.0 Ordering information

CNMPC-①-②-③-④-⑤/⑥		
①: Port combination	②: Pump fiber type S-SCF,D-DCF	③: Output fiber type
7 – 7×1	M02 – 106.5/125, 0.22NA M03 – 135/155, 0.22NA M04 – 200/220 MMF, 0.22NA M05 – 220/242 MMF, 0.22NA ect.	D12 - 20/400 DCF, 0.06NA M05 – 220/242 MMF, 0.22NA ect.
④: Pump power per port	⑤/⑤: Pump/Output fiber length	⑥: Package type
100 – 100W 200 – 200W 250 – 250W ect.	1.0 – 1.0m Default 1.5 – 1.5m 2.0 – 2.0m ect.	A1 = Aluminum package 150*15*12mm S – Specify
For example: CNMPC-7-SM04-M05-200-1.0/1.0-A1		