

(N+1)×1 Forward High Power Signal and Pump Combiner



1.0 Description

The High Power Signal and Pump Combiner is designed for combining pump laser and signal laser into the main double cladding fiber. The SPC can be applied in forward, backward or double-end pumping schemes.

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					
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.	200 - 200W 400 - 400W 600 - 600W ect.			
⑦: Handling signal power	⑧/⑧: Input/Output fiber length	⑨: 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