

(N+1)×1 Backward 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	Conf.	Pump Fiber	Signal Fiber	Output Fiber	Power Handling	Pump Efficiency	Signal Power	Signal IL	Note
3.01	(6+1) ×1	200/220 220/242	20/400DCF	Y/250DCF Y/400DCF	800W/leg	97%	3kW	0.2dB	Y=20, 25, 30, 50

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

HSP-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
D12 - 20/400 DCF, 0.06NA D13 - 25/400 DCF, 0.06NA D14 - 30/400 DCF, 0.06NA ect.	D06 - 20/250 DCF, 0.06NA D07 - 25/250 DCF, 0.06NA D08 - 30/250 DCF, 0.06NA ect.	200 - 200W 400 - 400W 600 - 600W ect.
⑦: Handling signal power	⑧/⑨: Input/Output fiber length	⑩: Package type
2KW - 2000W 3KW - 3000W 5KW - 5000W ect.	1.5-1.5m Default 2.0-2.0m ect.	A1 = Aluminum package 150*15*12mm

For example: **SPC-61-F-SM05-D12-D06-400/2KW-2.0/2.0-A1**