

Power Fiber Combiner



1.0 Description

Power Fiber Combiner(PFC) is one of the key components to break through the power scaling limitation of a single fiber laser by combing several high power fibers into a single fiber to realize the higher output power.

2.0 Optical and Operation Specifications

Item	Specifications	Min.	Typ.	Max.	Unit	Notes
2.01	Signal wavelength	1000	1060	1100	nm	
2.02	Polarization		Random			PM Customizable
2.03	Operation regime			CW		
2.04	Fiber length		2.0		m	Default
2.05	M2	≤5				Customizable
			5.5			For 50μm Core Diameter
			10			For 100μm Core Diameter
2.06	Operating temperature range	0		+70	°C	
2.07	Storage temperature	-40		+85	°C	

3.0 Output fiber and termination options

Item	Configuration	Input Fiber Type	Output Fiber Type	Power Handling	Efficiency
3.01	3×1	X/250 DCF, NA:0.06/0.46	100/120/360, NA:0.22/0.46	5kW/leg	>96%
3.02	7×1	X/250 DCF, NA:0.06/0.46	100/120/360, NA:0.22/0.46	3kW/leg	>96%

* X=25 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-B	150*15*12	mm Bottom conduction cooling

5.0 Ordering information

PFC-①-②-③-④-⑤/⑥-⑥		
①: Port combination	②: Input fiber type	③: Output fiber type
3 – 3×1 7 – 7×1	D06 – 20/250 DCF, 0.06NA 25/250 DCF, 0.06NA ect.	D07 – T01 – 100/120/360, NA:0.22/0.46 ect.
④: Handling power per port	⑤/⑥: Input/Output fiber length	⑥: Package type
3KW – 3.0Kw 5KW – 5.0Kw ect.	1.5 – 1.5m Default 2.0 – 2.0m 3.0 – 3.0m ect.	A1 = Aluminum package 150*15*12mm

For example: **PFC-3-D07-T01-3KW-1.5/1.5-A1**