



## Polarization Maintaining Fiber Coupler Module

I&Optics' polarization maintaining fiber coupler module can split any input light into N/M portions by any specified splitting ratio or mix N/M input lights in one or two by given ratio. It features low excess loss, high extinction ratio and broad band property due to our unique technology. It can be used in lasers, LiDARs, Telecom, sensors, Instruments, testing systems and R&D.

### Specification

Parameter	Test Condition	Unit	Value	
Port Configuration	-	-	1xN	2xM ( M Be Even Number)
Nominal Center Wavelength	-	nm	1310, 1480, 1550, 1590 or Specify	
Wavelength Range	-	nm	+/-30	
Max. Excess Loss	at Slow or Fast Axis	dB	$\log(N, 2)*0.6$	$\log(M, 2)*0.6 + 0.2$
Nominal Coupling Ratio	-	%	1/N	1/M
Min. Extinction Ratio	at 23°C, only for PM Fiber Port, at Slow or Fast Axis	dB	B-Type: 19, Typ. 21 (N, M<5 ), 17, Typ. 19 (N, M=5~16) 22, Typ. 24 for F-Type	
Max. Uniformity	only for Balance Coupling Ratio	dB	0.5 for N, M<5, 0.7 for N, M=5~16	
Min. Directivity	between Any Pair of Output Ports	dB	50	
Min. Return Loss	at Center Wavelength	dB	50	
Max. Power Handling Rate	CW, only for Splitting, Proper SOP	mW	500 or Specify	
Fiber Type	-	-	PM Panda Fiber or Specify	
Max. Fiber Tensile Load	-	N	5	
Operating Temperature	-	°C	-5 to 70	
Operating Relative Humidity	Non-Condense	%	0 to 95	
Storage Temperature	-	°C	-40 to 85	
Storage Relative Humidity	Non-Condense	%	0 to 95	

Above values are for device without connectors. For device with connectors, IL will be 0.3dB higher, ER will be 2dB lower, and return loss will 5dB lower.

The default alignment of working polarization and connector key is to slow axis of fiber. Special requirement please call.

### Package Dimensions

Detailed Informations and Dimensions Please Contact Us. Customized Design Is Available Upon Request.

### Ordering Informations

PMFCM-①-②-③-④-⑤-⑥-⑦-⑧

① - Center Wavelength

31 - 1310nm

48 - 1480nm

55 - 1550nm

SS - Specify

② - Port Configuration

ON - 1xN

EM - 2xM

③ - Coupling Ratio

B - Balance

S - Specify

④ - Operating Axis

B - Both Axes Working

F - Fast Axis Blocked

⑤ - Fiber Type

1 - PM 1300 Panda Fiber

2 - PM 14xx Panda Fiber

3 - PM 1550 Panda Fiber

⑥ - Connector Type

1 - FC/UPC

2 - FC/APC

3 - SC/UPC

4 - SC/APC

⑦ - Fiber Jacket

B - Bare Fiber

L - 900um Loose Tube

⑧ - Fiber Length

0.8 - 0.8m