



## Tunable PM Fiber Coupler

I&Optics' tunable polarization maintaining fiber coupler can split any input light into two portions by any wanted splitting ratio or mix two input lights in one or two by any wanted ratio. It features flexible various coupling ratio, low excess loss and high extinction ratio 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	-	-	1x2	2x2
Nominal Center Wavelength	-	nm	1310 , 1480 , 1550 , 1590 or Specify	
Wavelength Range	-	nm	+/-40	
Max. Excess Loss	at Slow or Fast Axis	dB	0.7, Typ. 0.55	0.9, Typ. 0.75
Nominal Tap Ratio	at Tap Port	%	Tunable from 0.1 to 99	
Min. Extinction Ratio	at 23°C, only for PM Fiber Port, at Slow or Fast Axis	dB	21, Typ. 23 for B-Type 22, Typ. 24 for F-Type	
Min. Directivity	Port 3 to Port 2 (1x2) or Port 1/(3) to Port 2/(4)	dB	50	
Min. Return Loss	at Center Wavelength	dB	50	
Max. Power Handling Rate	Continuous Wave, Total Power	mW	300 or Specify	
Electric Tunable Type	-	-	Stepper Motor	
Fiber Type	-	-	SMF-28e or PM Panda Fiber or Specify	
Max. Fiber Tensile Load	-	N	5	
Operating Temperature	-	°C	-5 to 50	
Storage Temperature	-	°C	-40 to 85	

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

TPMFC-①-②-③-④-⑤-⑥-⑦

① - Center Wavelength

31 - 1310nm

48 - 1480nm

55 - 1550nm

SS - Specify

④ - Fiber Type on Tap Port

1 - SMF-28e

2 - PM 1300 Panda Fiber

3 - PM 14xx Panda Fiber

4 - PM 1550 Panda Fiber

⑥ - Fiber Jacket on Port 1/2/3/4

B - Bare Fiber

L - 900um Loose Tube

⑦ - Fiber Length

0.8 - 0.8m

② - Port Configuration

1 - 1x2

2 - 2x2

⑤ - Connector Type on port 1/2/3/4

1 - FC/UPC

2 - FC/APC

3 - SC/UPC

4 - SC/APC

③ - Operating Axis

B - Both Axes Working

F - Fast Axis Blocked