

# SHAPING LIGHT.

HELPING ENGINEERS AND SCIENTISTS IN  
ADVANCING HOW THE WORLD COMMUNICATES,  
SENSES AND CONNECTS



**POLARIZATION MAINTAINING COUPLER MODULE**  
**1X4, 1X8, 1X16**  
**DATA SHEET**

**PM PASSIVES**

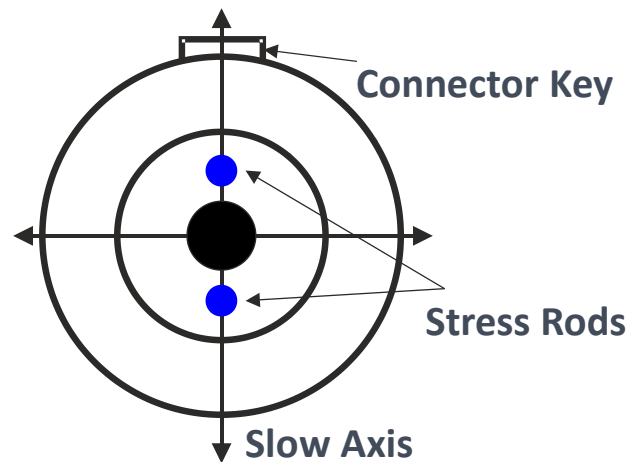
## POLARIZATION MAINTAINING COUPLER MODULE 1X 4,8,16

Our Polarization-Maintaining Couplers complement our CoBrite laser sources, enabling channel multiplexing on any arbitrary grid (e.g FlexGrid) with preserved input polarization. Stable output polarization of all laser lines allows for arbitrary modulation of a channel comb using Mach-Zehnder structures.

Opting for couplers over complex tunable filters or WSS structures for FlexGrid scenarios offers cost savings and simplified configuration, while ensuring polarization preservation. For high port count needs, amplification might be required to compensate for the loss incurred. Even then, the couplers + EDFA combo still offers great cost advantage over a WSS structure.

**APPLICATIONS**

- Device interconnect
- Polarization management
- Connection of Laser Ports
- Coherent Communication Systems
- Fiber Optic Gyroscopes
- Quantum Cryptography
- Interferometric Sensors



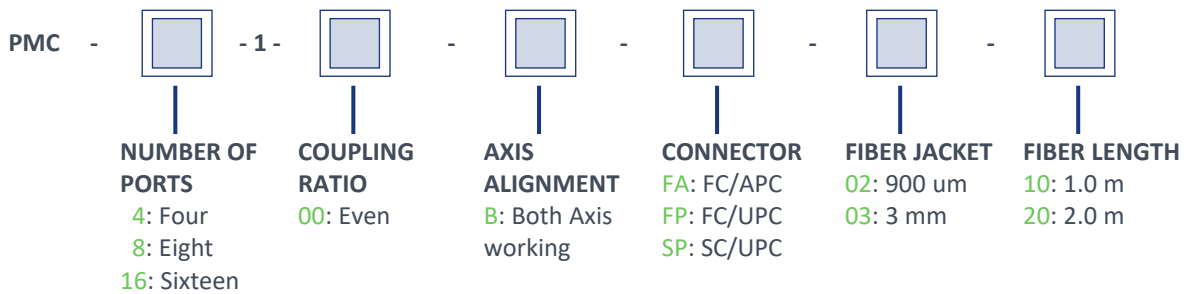
## SPECIFICATION

PARAMETER	SPECIFICATION			UNIT
Port configuration	<b>1x4</b>	<b>1x8</b>	<b>1x16</b>	
Insertion loss	≤ 7.8; Typ. 7.3	≤ 11.3; Typ. 10.8	≤ 14.8; Typ. 14.3	dB
Wavelength dependent loss	≤ 0.5, Typ. 0.3		≤ 0.7	dB
Insertion Loss uniformity of Ports	≤ 0.8	≤ 1.0		mW
Return Loss (PC connector type)	≥ 45			dB
Directivity	≥ 50	≥ 45		dB
Extinction Ratio	≥ 21		≥ 20	dB
Center Wavelength	1550			nm
Operating Wavelength Range	± 30			nm
Fiber Type	PM Panda Fiber			
Package dimensions	160 x 140 x10	160 x 160 x 10	160 x 160 x 10	mm

# POLARIZATION MAINTAINING COUPLER MODULE



## PRODUCT



### REQUEST A QUOTATION

Get in touch with us via [info@id-photonics.com](mailto:info@id-photonics.com) or send a request via our [web form](#).



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