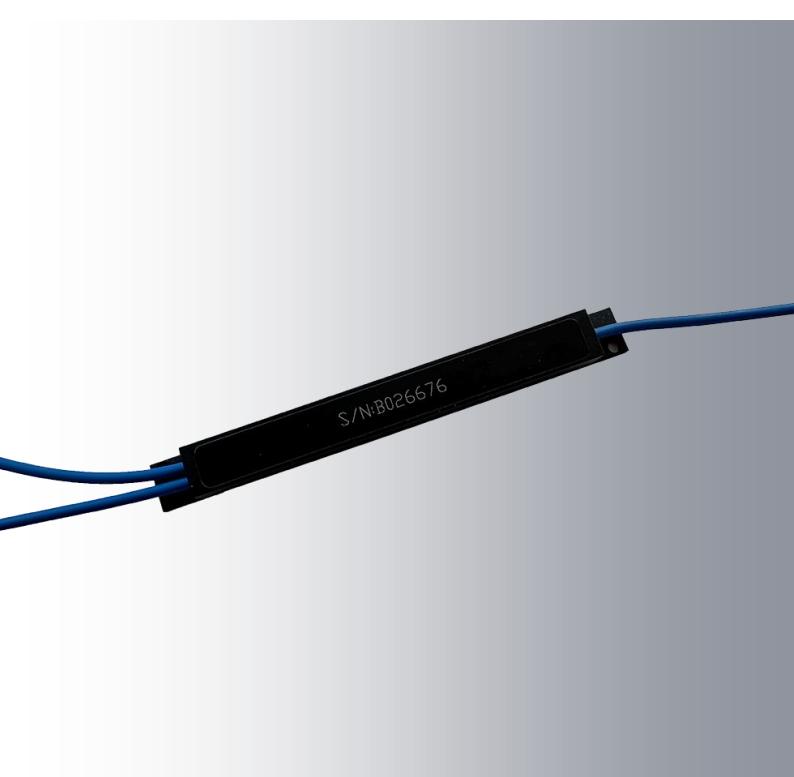


SHAPING LIGHT.

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



**POLARIZATION MAINTAINING COUPLER MODULE 1X2, 2X2
DATA SHEET**



PM PASSIVES

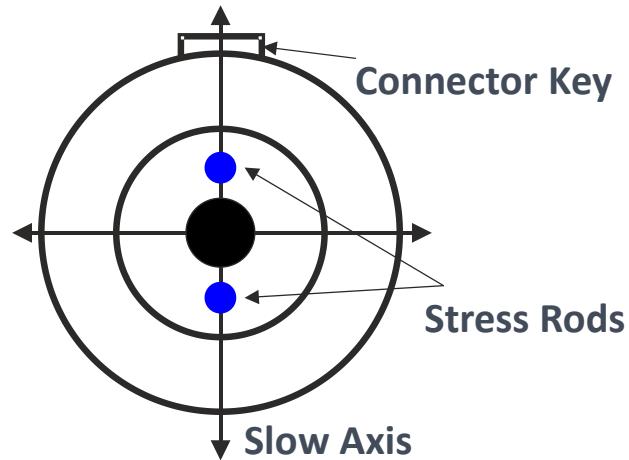
POLARIZATION MAINTAINING COUPLER MODULE 1X2, 2X2

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 | 1x2 | 2x2 | |
| Max. Excess loss | 0.7 | 1.0 | dB |
| Max. Uniformity (only 50/50) | ≤ 0.4 | ≤ 0.6 | dB |
| Max. Optical Power (CW) | 500 | - | mW |
| Return Loss (PC connector type) | ≥ 45 | ≥ 45 | dB |
| Extinction Ratio, F - Type | ≥ 20 | ≥ 20 | dB |
| Extinction Ratio, B - Type | ≥ 18 | ≥ 16 | dB |
| Center Wavelength | 1550 | | nm |
| Operating Wavelength Range | ± 30 | | nm |
| Fiber Type | PM Panda Fiber | | |
| Tap Ratio | 1 ± 0.2%, 2 ± 0.4%, 5 ± 1%, 10% and 50% | | % |

POLARIZATION MAINTAINING COUPLER MODULE



PRODUCT

| PMC2 | NUMBER OF PORTS OUT | COUPLING RATIO | AXIS ALIGNMENT | CONNECTOR | FIBER JACKET | FIBER LENGTH |
|------|---------------------|----------------|----------------------|------------|--------------|--------------|
| | 1: One | 01: 01/99% | F: Fast Axis blocked | FA: FC/APC | 02: 900 um | 10: 1.0 m |
| | 2: Two | 10: 10/90% | B: Both Axis working | FP: FC/UPC | 03: 3 mm | 20: 2.0 m |
| | | 50: 50/50% | | SP: SC/UPC | | |



REQUEST A QUOTATION

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



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