

# Polarization Beam Combiner/Splitter



This device can be used either as a polarization beam combiner to combine light beams from two PM input fibers into a single output fiber, or as a polarization beamsplitter to split light from an input fiber into two output fibers of orthogonal polarization states. An important application of this device is polarization division multiplexing or demultiplexing in optical

systems to increase their transmission capacity. In addition, as a pump combiner in optical amplifiers, the device efficiently combines the output from two pump lasers into a single fiber to increase the optical amplifier's saturation power and to reduce its polarization sensitivity. The wide operation bandwidth and high power handling capability make the device very attractive for next-generation amplifier systems. Finally, with a rugged stainless steel package designed for high optical performance and stability, this compact device offers low excess insertion loss, low back reflection, and high extinction ratio that equal or surpass others on the market.

## Specifications:

Center Wavelength	1310, 1480, 1550 nm	1064 nm
Common Port Fiber Option	SMF-28 or PM Panda	HI 1060 or PM Panda
Operating Bandwidth	±40 nm	±20 nm
Insertion Loss <sup>1</sup>	0.4 dB typical 0.6 dB max.	0.6 dB typical 0.8 dB max.
Extinction Ratio (ER) (PBS Only)	22 dB	22 dB
Return Loss	50 dB	
Optical Power Handling <sup>2</sup>	500 mW	
Operating Temperature	-5 to 70 °C	
Storage Temperature	-40 to 85 °C	
Fiber type (Single Polarization Ports)	PM Panda Fiber	
Dimensions Pigtailed	Ø 5.5 × 35 mm	
Dimensions NoTail	3.5" (L) × 1.5" (W) × 5/8" (H)	

Notes: Values are referenced without connectors.

1. Insertion loss for NoTail version is <0.1 dB higher than corresponding pigtailed device, excluding connectors.

2. Higher power handling available by special request.

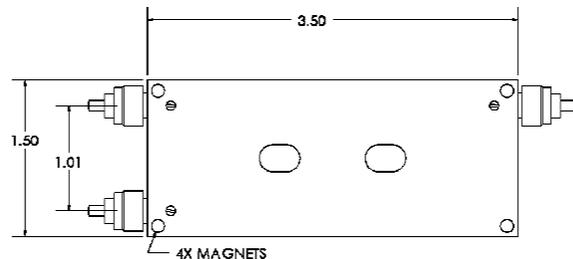
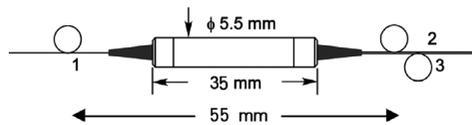
## Features:

- Compact size
- Low insertion loss
- High power handling
- Rugged design

## Applications:

- Polarization division Mux/DeMux
- EDFA and Raman amplifiers
- Fiber Laser Systems
- Fiber Sensor Systems
- Instruments
- R&D Laboratories

## Dimensions:



## Ordering Information:

Visit our website at [www.generalphotonics.com](http://www.generalphotonics.com) for detailed configuration information.