



## PM COUPLERS

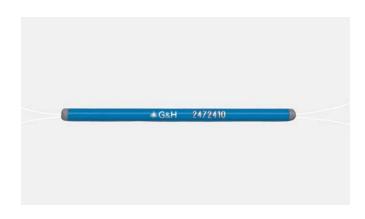
Sub-Zero, Wide Operating Temperature Range, PM Couplers/Splitters

PRODUCT DATASHEET

G&H's fused polarization- maintaining (PM) fiber optic couplers, taps and optical signal splitters offer high polarization extinction ratio (PER) with polarization launch into a single or dual axis (slow axis and fast axis).

We utilize our proven fused biconical taper (FBT) process to manufacture high grade polarization-maintaining couplers including single wavelength and wavelength flattened (broadband/wideband) (WFC). Our PM components offer high extinction ratio with minimum optical loss. G&H selects PM fiber from different suppliers to accommodate your application-specific operating wavelengths.

Due to the significant drop of PER at below freezing temperatures, PM couplers usually operate from 0 to +70°C. G&H's proprietary FBT platform and packaging technology has made it possible to build high performing PM couplers operating reliably from -55°C to +85°C, without significant changes in PER and other optical parameters over such a wide operating temperature range. These types of PM couplers are very suitable for use in many high reliability systems and modules.



## **Key Features**

- Built with panda or bow-tie PM fibers,
  125 μm or 80 μm
- Extreme operating temperature ranges: -55°C to +85°C
- Thermal stability < 0.3 dB
- High polarization extinction ratio (PER)
- Excess loss < 0.5 dB</li>
- Excellent uniformity
- Low wavelength dependent loss
- High directivity
- Available in various split ratios, slow and fast axis
- Built to Mil-Aerospace standards

## **Applications**

- Defense and aerospace
- Fiber gyro and sensors
- Harsh environment DTS and smart structures
- Instrumentation
- Test and measurement

## For further information

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SUB-ZERO, WIDE OPERATING TEMPERATURE RANGE, PM FUSED 125 μm AND 80 μm FIBER COUPLERS/SPLITTERS

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