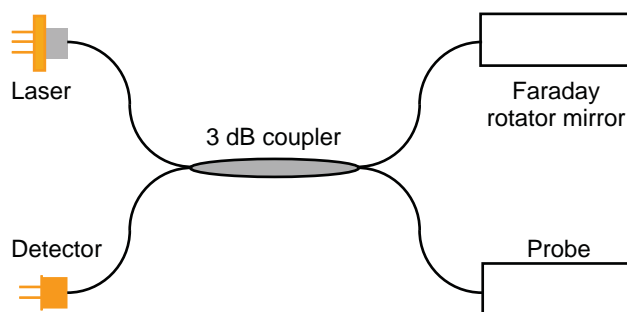




# Fiber Optic Faraday Rotator Mirror



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## Description

Singlemode fibers by nature are randomly birefringent due to stress caused by bending and uneven pressure. As a result, optical beams traveling in a singlemode fiber experience a random birefringence which would make a fiberoptic Michelson interferometer impossible.

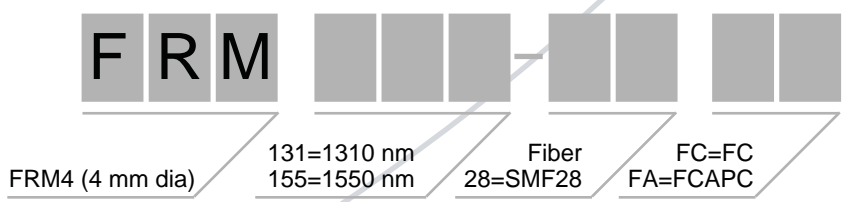
Fortunately, there is a simple remedy, the Faraday rotator mirror. This unique device takes the output beam from a singlemode fiber and rotates the polarization by 90 degrees before sending it back through the same fiber. By doing so, the Faraday mirror functions as a phase conjugate mirror and cancels out any birefringent effects the beam experienced along the forward path.

## Specifications

Wavelength	1310 or 1550 nm
Insertion loss	<1.0 dB (0.5 dB typical)
Polarization rotation accuracy	+/- 2 degrees
Return loss due to secondary reflections	>55 dB*
Operating temperature	0 to 65 C
Storage temperature	-40 to 85 C
Package Material	Stainless steel
Fiber type	Singlemode (typically Corning SMF28)
Fiber jacket type	900 um tight or loose buffer
Connector type	FC, SC, ST, LC, FC/APC, SC/APC, or LC/APC
Dimensions	6 mm dia x 9 mm length or 4 mm dia x 20 mm length

\* Return loss due to reflection off non-mirror surfaces.

## Part Number



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