GP700 Platform

Internal Components

Tunable Filters

DiCon's GP700 tunable filter module tunes the center wavelength of a narrow passband filter over a 30-nm range within the 1550-nm window. The module uses a thin-film interference filter mounted between two angled fiber collimators. A high-precision motor with 0.05-nm tuning resolution adjusts the filter angle to select the center wavelength.

Features

- Broad tuning range
- Narrow bandwidth
- Excellent tuning resolution
- Very low insertion loss

Applications

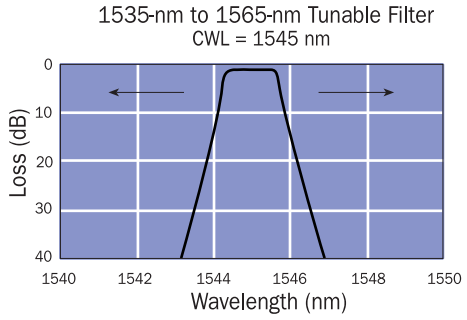
Motorized tunable bandpass filters are used to dynamically select among different wavelength channels at the receiver side of dense WDM transmission systems. Other applications include tuning the center wavelength of incoherent broadband sources (such as white light sources or LEDs) in laboratory test and measurement systems.

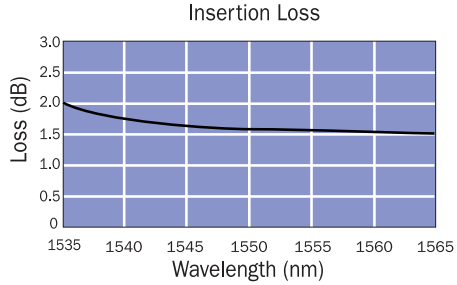
Specifications[1]

Tuning resolution	0.05 nm typ.
0.5-dB bandwidth[2]	0.8 nm typ.
Repeatability	±0.05 nm typ.
Absolute accuracy	±0.3 nm max.
Insertion loss[2]	1.5 dB max.
Back-reflection	-50 dB max.
PDL[2]	0.05 dB typ.
Tuning speed	50 ms min., 1400 ms max.
Fiber type	9/125 Corning SMF-28
Fiber jacket	0.9 mm, tight buffer

1. All specifications referenced without connectors.
2. Measured at maximum center wavelength.

Optical Performance





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