PHOTONWARES

Motor Driven Grating-Based Fiber Optic Tunable Filter

(patent pending)

Product Description

Agiltron's Motor Driven Grating-Based Fiber Optic Tunable Filter provides a simple way to adjust the center wavelength of narrow band over wide band. Wavelength tuning is actuated by driving a built-in precise stepper motor through interface of USB or RS232.

Based on a proprietary optics, Agiltron offers extremely low insertion loss, high stability, polarization independent operation, and high off-band suppression. It is tunable continuously over a wide spectral range. The device presents a most cost-effective solution for OEM applications from fiber optic networks to fiber sensing interrogation.

Features

- Extremely Low Loss
- Wide Tune Range
- High Off-Band Suppression
- Uniform bandwidth
- High Tuning Resolution
- Cost-Effective

Applications

- DWDM networks
- Fiber Sensing
- ASE Control
- Tunable Fiber Lasers

Performance Specifications

Parameter	Min	Typical	Max	Unit
Wavelength Tuning Range	1060±15	1500±20	2000±20	nm
Tuning Resolution	-	0.02	-	nm
Tuning Speed				nm/s
Insertion Loss[1]	1.1	-	1.6	dB
Bandwidth @-3dB	-	0.25	-	nm
Bandwidth @-20dB	-	0.75	-	nm
Polarization Dependent Loss	-	0.25	-	dB
Extinction Ratio (PM fiber only)	-	20	-	dB
Off-Band Suppression	-	45	-	dB
Polarization Mode Dispersion	-	-	0.5	ps
Return Loss[1]	40	-	-	dB
Optical Power Handling (CW)	-	-	500[2]	mW
Operating Temperature	0	20	60	°C
Storage Temperature	-10		70	°C
Dimensions	320x110x90			mm

[1]: Excluding connectors
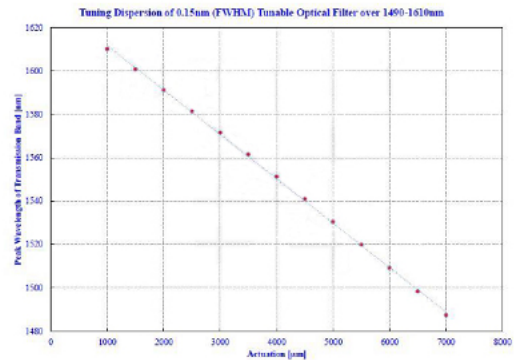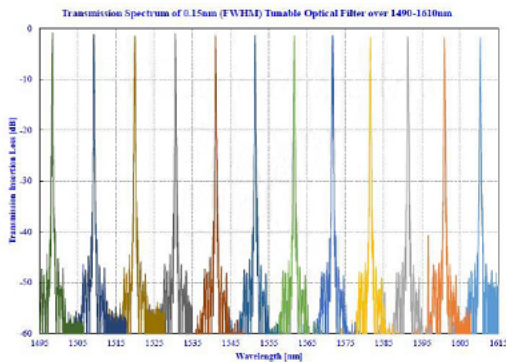[2]: high power version available upon request

Manual Grating –based Fiber Optic Tunable Filter

Mechanical Dimensions (mm)
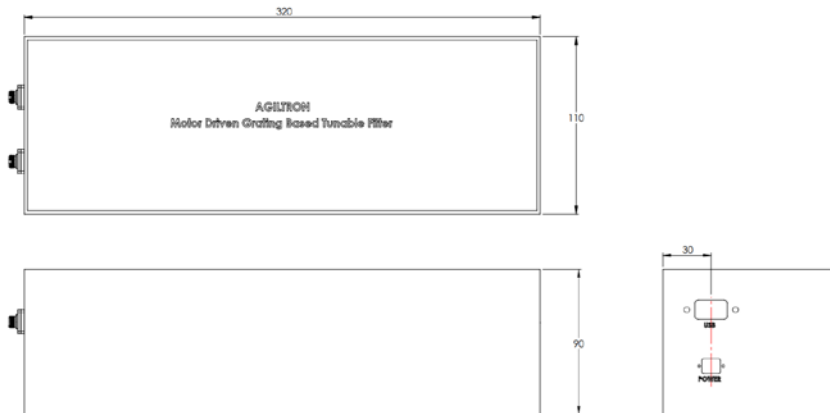
*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

Spectrum

Ordering Information

FOTF-	0 4	☐	1	2	☐	☐	☐	☐
	Type	Wavelength	Config.	Package	Fiber Type		Fiber Length	Connector
		1060nm=1 1310nm=3 1550nm = 5 1600nm = 6 2000nm =2			SMF-28 =1 Hi1060=2 Panda PM1550 =5 PM980=E Special = 0	900um loose tube=3 Special=0	0.25m= 1 0.5m = 2 1.0 m= 3 Special =0	None = 1 FC/PC = 2 FC/APC = 3 SC/PC = 4 SC/APC = 5 ST/PC = 6 LC = 7 Special = 0