

**[OEFBG-FTU]**

## Fast Tunable Fiber Bragg Grating Filter

### Features:

- Fast tunable up to 1kHz
- Custom filter FBG specifications\*
- Transmission (standard) or reflection mode
- Integrated optical circulator (optional)
- SM or PM fiber
- Receptacle FC/APC connectors (standard)
- Long lifetime and low insertion loss
- High reliability and repeatability
- OEM or Turnkey solution

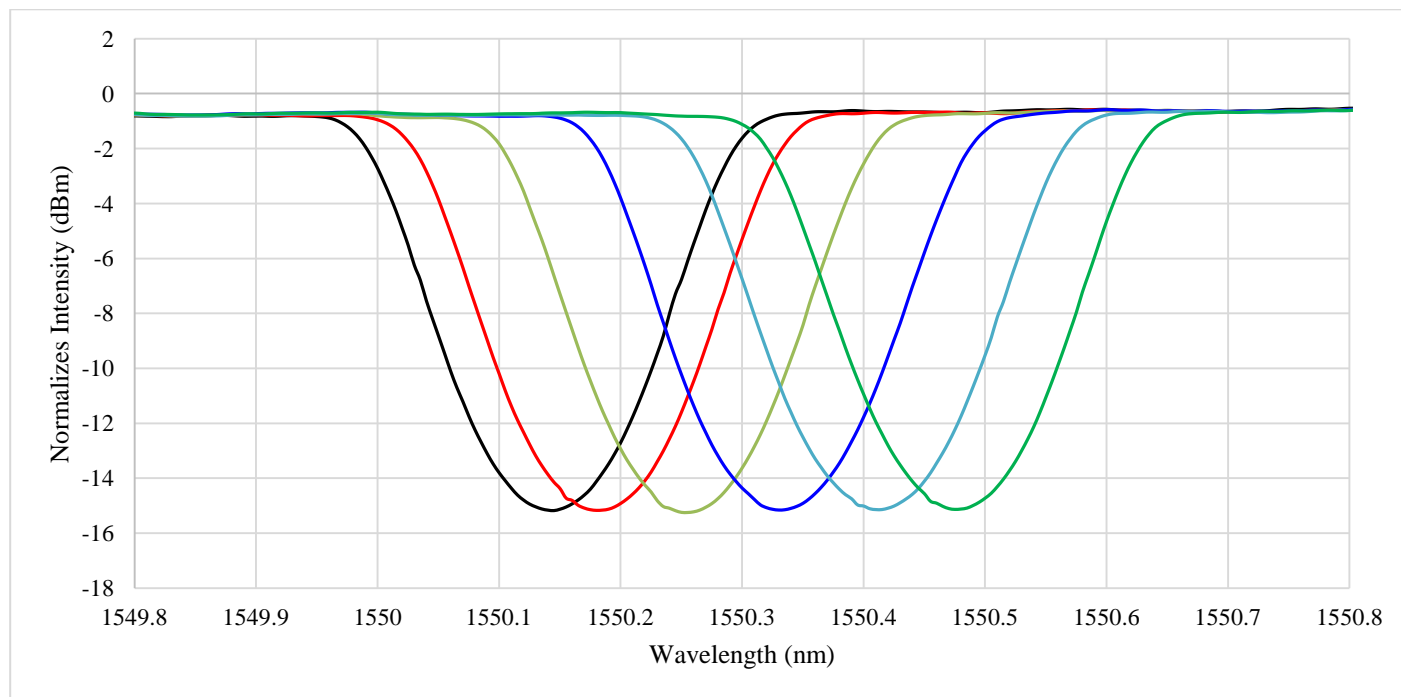
### Product description:

The Fast Tunable Fiber Bragg Grating filter (OEFBG-FTU) offers fast tunable features via piezo stage for tuning FBG center wavelength in a compact package. It can provide fast tunable up to 1kHz (higher speed is also an option) in a stable tunable range, simple structure, high resolution, and long lifetime. The fast tunable filter uses Fiber Bragg Grating technology which can be both used in transmission and reflection mode, or in reflection mode only (by request). As an option, an optical fiber circulator can be integrated to provide a bandpass signal to the output port. Circulators are available at the visible, near infrared and mid-infrared wavelength ranges.

FBG specifications can be customized, although some limitations apply. The Tunable FBG can be used as wavelength modulation, tunable fiber laser, fiber sensor system, and in any other custom applications, where fast tuning of the center wavelength is required.

### Product specifications:

Parameters	Unit	OEFBG-FTU
Center wavelength	nm	650-2100
Tuning range@100Hz	GHz	20
Maximum tuning speed	kHz	1
Insertion loss	dB	<0.5
Out band suppression	dB	10-30
Optical power handling	mW	500
Connectivity	-	Receptacle or fiber pigtail
Fiber type	-	SM, PM
Operating Temp.	°C	15-50
Storage Temp.	°C	5-70
Dimension	mm	300x150x50



**Fig 1:** FBG transmission spectra over the tuning range.

### Ordering number:

<b>OEFBG-FTU-WL-TR-BW-Type:</b>	<b>WL</b>	<b>TR</b>	<b>BW</b>	<b>Type</b>
	Wavelength (nm)	Tuning range (nm)	3-dB BW (nm)	E: electrical M: manual
Example:	OEFBG-FTU-1550-10-0.5			