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## Feature :

- All-fiber tunable filter
- Pure axial compression tuning for large wavelength tuning range
- Low insertion loss
- High power handling
- Capability for tuning of various types of fiber grating

## \*Patents:

US 7801403  
 China ZL 2008 1 0211470.7

## Applications :

- All fiber tunable filters
- Tunable lasers
- Fiber optic sensors
- Optic wave mixing

## Specifications:

- Typical Tuning Range:**  
 >25 nm up to 50 nm
- Dimension: 124X55X40mm
  - Weight: 0.9 kg

## Contact us:

To install your custom  
 Fiber Gratings  
[info@fltphotonics.com](mailto:info@fltphotonics.com)

# Fiber Light Tuning Technology

## Fiber Grating Tuner:

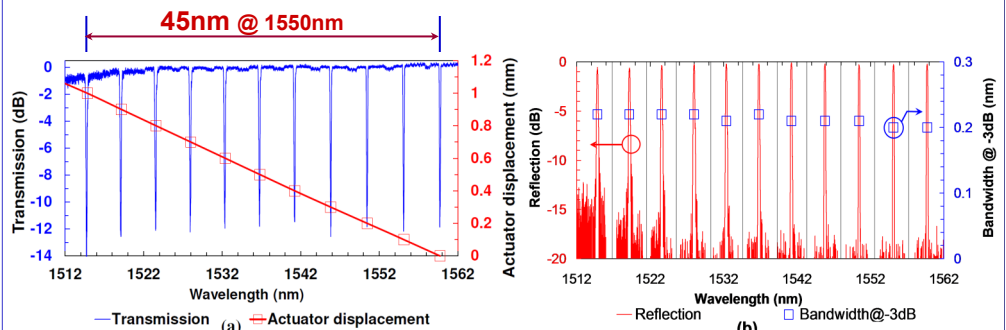
**Innovative Patented\* Technology for  
 Fiber Grating Tuning**

Fiber Bragg gratings (FBGs) are key photonic elements for broad applications. Tunable FBG devices provide tunable platform offering "all-fiber" advantages with extended application in optical fiber communication systems, tunable lasers and fiber optic sensors.

*The fiber grating tuner is based on our innovative patented tuning technology that utilizes pure compressive strain tuning to achieve large wavelength tuning range.*

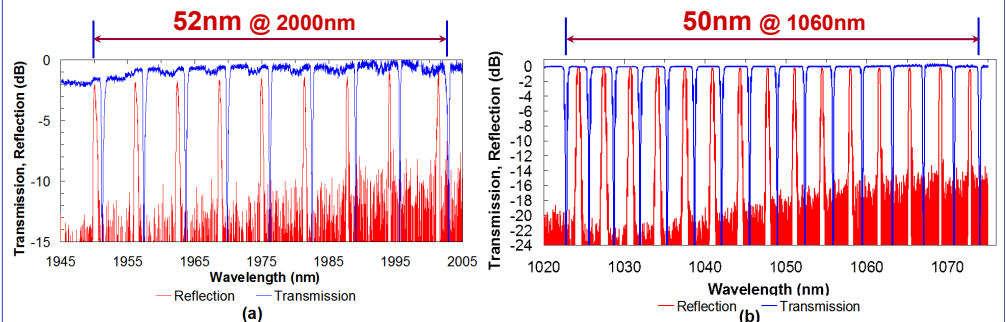
*The fiber grating tuner is designed to tune wavelength of various types of fiber gratings that include: fiber Bragg grating, phase-shifted fiber grating, or long period fiber grating, etc.*

**Tuning range: > 25nm up to 50nm**



### Typical spectra of center wavelength shift during tuning of 1560-nm FBG.

(a) Transmission spectra of the FBG and wavelength shift versus actuator displacement;  
 (b) Reflection spectra of the FBG and -3dB spectral bandwidth variations during tuning.



### Spectra of wavelength shifts during tuning of a 2001-nm and a 1073-nm FBG

(a) transmission and reflection spectra of the 2001-nm FBG during tuning;  
 (b) transmission and reflection spectra of the 1073-nm FBG during tuning.