

FIBER BRAGG GRATINGS TRAINING KIT



Features

- ✓ Comprehensive teaching & training manual
- ✓ Rack mounted components
- ✓ Eye safe connectors
- ✓ Competitive pricing

The Fiber Bragg Gratings (FBGs) training it enables theoretical and experimental investigation of some FBGs. Different applications of FBGs and notably gain flattening and wavelength stabilization of a laser diode can be studied. But the most famous application is the optical fiber sensor to measure strain and temperature changes.

COMPONENTS INCLUDE

- | | |
|-----------------------------------|---|
| 1 ASE source | 1 Fiber Bragg Grating for laser diode stabilization (FBG _{«LDS»}) |
| 1 Gain Flattening Filter (GFF) | 1 Detector : InGaAs photodiode |
| 2 Fiber optic couplers 1x2, 50/50 | 1 FBG + heater (FBG _{«T°»}) |
| 1 Optical Isolator | 1 FBG + deformation's system (FBG _{«ε»}) |
| 1 Fabry Perot laser diode (FP) | 5 Patchcords E2000/APC Diamond connectors |

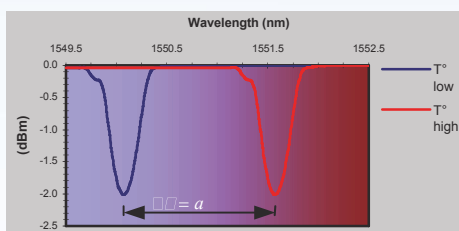
PRACTICAL EXPERIMENT

Gain flattening of an ASE source

Strain's sensor

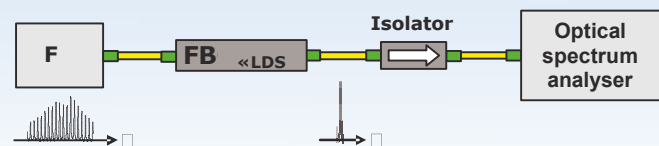
Temperature's sensor

Wavelength stabilization of a multimode laser diode to become monomode

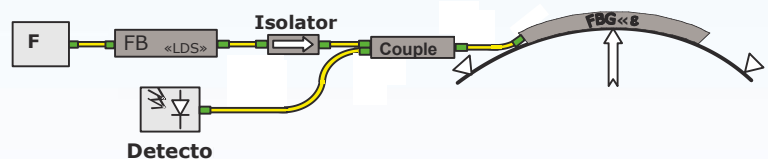


Effect of a temperature change on FBG_{«T°»} transmission spectrum

Examples of experiment :



Wavelength st. bilization of a laser diod



Strain's senso