SELECT
Wavelength **0.6 µm to 2.1 µm**

FBG Mirrors

For fiber laser cavity and high power applications

Fiber Bragg Grating mirror is a critical component used to design laser cavity and ideal for high power fiber laser. iXblue's mirrors have been customized to address the specific requirements of high efficiency and laser applications.

iXblue offers these wavelength selective mirrors on a complete range of specialty fibers for high power handling and standard applications. Optimized manufacturing process and testing ensure their long-term reliability in fiber laser.

iXblue dissipative package available to manage heating and preserve mirrors stability in high power rate.

Key Features
- Low thermal effect
- Single mode or double clad fiber (in house fiber)
- Custom specifications available
- Specific recoating for pump guidance
- Full passive assembly available
- Packaging options : bare FBG and heat dissipative package
- PM available
- Custom design on request

Advantages of dissipative package
- Thermal and mechanical shock protection for FBG mirrors and splices
- Highly reduced wavelength drift

Related Products
- Passive fiber
- Dissipative package

Main specification for Standard Mirrors

Product Name	iXC-MIR
Fiber Type[1]	Simple and Double clad
Wavelength Range	600 to 2100 nm
Wavelength HR/LR Matching	+/- 0.2 nm (typical)
Reflectivity HR	> 99 % or > 99.9 %
FWHM Bandwidth HR	0.5 to 1.5 nm (typical)
Reflectivity LR	3 to 20 %
FWHM Bandwidth LR	0.1 to 1 nm (typical)
FBG Recoating	Acrylate low and high index
Max Operating T°	80°C

Main specification for High Power Mirrors

Product Name	IXC-MIR-HP	
Fiber Type[1]	LMA	
Wavelength Range	1 µm, 1.5 µm & 2 µm	
Mirror Type	HR	LR
Peak Reflectivity	> 99 %	4 - 20 %
Reflection Bandwidth (FWHM)	1 – 3.5 nm	0.2 - 3 nm
Side Mode Suppression Ratio	> 15 dB	
Wavelength matching (HR/LR)	0.2 nm	
FBG Recoating	Low refractive index polymer, dissipative package	
Max Operating T°	80°C	
Maximum pump power handling[2 3 4]	100 up to 250 W	

[1] Cladding diameter (µm): 125, 250, 400 or other types of fiber available upon request (PM, other optical parameters)
[2] Determined from suspended fiber in still air.
[3] Maximum power (through the grating in air) derived from thermal slope
[4] Depending on wavelength, fiber type and packaging