



FBG Specification

Parameter	Ultra-Low reflectivity	Low reflectivity	Medium reflectivity
Order number	FemtoPlus.5.N. SMAC	FemtoPlus.20.N. SMAC	FemtoPlus.40.N. SMAC
Item description	Single FBG 5% Narrow	Single FBG 20% Narrow	Single FBG 40% Narrow
Wavelength	1460-1640		
Wavelength accuracy	+/- 0,3nm		
Reflectivity	>5%	>20%	>40%
FWHM	0,30nm	0,25nm	0,20nm
SLRS	>12dB		
Length	4mm	4mm	8mm
Tensile strength	> 3%		
Fiber length	2m		
FBG position	center		

Fiber Specification

Parameter	Single Mode Acrylate
Attenuation @1550nm	<0,22dB/km
Cutoff wavelength	<1260nm
Mode field diameter @1550nm	10,4µm
Numerical aperture	0,14
Cladding diameter	125µm
Coating type	Acrylate
Coating diameter	245µm
Max temperature	85°C (high temperature acrylate up to 180°C)

FEMTO Grating arrays and FEMTOPlus Grating arrays

are produced according to customer specifications. FBG spacing from 0,1mm to several 100m.

In co-operation with engionic Group company **engionic Fiber Optics GmbH**, which is specialized in the assembly of fiber optic light guides and sensors, calibrated and assembled sensors and complete sensing solutions, including the sensor and interrogation system, can be provided.



FBG Specification

Parameter	Ultra-Low reflectivity	Low reflectivity	Medium reflectivity
Order number	FemtoPlus.5.N. SMPI	FemtoPlus.20.N. SMPI	FemtoPlus.40.N. SMPI
Item description	Single FBG 5% Narrow	Single FBG 20% Narrow	Single FBG 40% Narrow
Wavelength	1460-1640		
Wavelength accuracy	+/- 0,3nm		
Reflectivity	>5%	>20%	>40%
FWHM	0,30nm	0,25nm	0,20nm
SLRS	>12dB		
Length	4mm	4mm	8mm
Tensile strength	> 3%		
Fiber length	2m		
FBG position	center		

Fiber Specification

Parameter	Single Mode Polyimide
Attenuation @1550nm	<0,4dB/km
Cutoff wavelength	<1300nm
Mode field diameter @1550nm	9,8µm
Numerical aperture	0,12
Cladding diameter	125µm
Coating type	Polyimide
Coating diameter	155µm
Max temperature	300°C (short term 400°C)

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FBG Specification

Parameter	Ultra-Low reflectivity	Low reflectivity	Medium reflectivity
Order number	FemtoPlus.5.N. PCPI	FemtoPlus.20.N. PCPI	FemtoPlus.40.N. PCPI
Item description	Single FBG 5% Narrow	Single FBG 20% Narrow	Single FBG 40% Narrow
Wavelength	1460-1640		
Wavelength accuracy	+/- 0,3nm		
Reflectivity	>5%	>20%	>40%
FWHM	0,30nm	0,25nm	0,20nm
SLRS	>12dB	>15 dB	
Length	4mm	4mm	8mm
Tensile strength	> 3%		
Fiber length	2m		
FBG position	center		

Fiber Specification

Parameter	Pure Core Polyimide
Attenuation @1550nm	<0,8dB/km
Cutoff wavelength	<1290nm
Mode field diameter @1550nm	9,0µm
Numerical aperture	0,13
Cladding diameter	125µm
Coating type	Polyimide
Coating diameter	155µm
Max temperature	300°C (short term 400°C)

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