

Gold Coated FBG

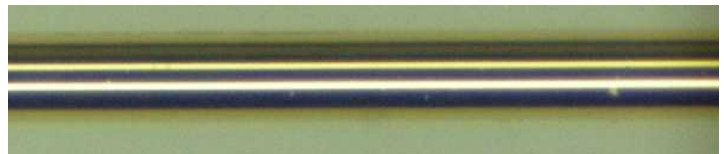
Gold Coated FBG not only offer the mechanical protection and hermetic seal needed in harsh environments, the enhanced sensitivity through plasmonic effects is also particularly useful for bio-chemical measurements. Gold coated fibers rated from -269°C to 750°C, though for most applications the gold coated fibers will continue to protect the fiber to 1,000°C. The high-temperature performance of gold-coated FBG, combined with excellent corrosion resistance and the ability to be soldered or brazed, makes these sensors ideal for many demanding sensing applications.

Key Features

- High wavelength stability
- Reflectivity continuous stability
- High mechanical strength

Applications

- Power plants
- Turbines
- Combustion process
- Aerospace
- Deep-well oil/gas exploration
- Hot pipelines



Specifications

Parameter	Unit	Value
Center Wavelength	nm	1460 ~ 1610
FBG Length	mm	10
Reflectivity	%	≥90%
Bandwidth (FWHM)	nm	≤0.3
SLSR	dB	≥15
FBG Recoating	--	None, Acrylate, Polyimide or custom
Gold Coated Length	mm	≤40
Gold Coated Thickness	µm	3 ~ 4
Tensile Strength	kpsi	≥100
Fiber Type	--	Single-Mode
Fiber Coating	--	Acrylate, Polyimide, or custom
Pigtail Length	m	Standard 1m both ends, or custom
Optical Connector	--	Bare Fiber, FC/APC, SC/APC, or custom