

NIR Spectrometer Grating

1500 l/mm for 815-1065 nm

Fused Silica Transmission Grating Technology

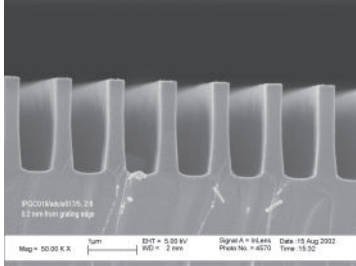
Fused silica transmission grating technology enables high resolution, high efficiency gratings that are ideal for compact spectrometers

Transmission gratings from Ibsen build on leadership in fused silica transmission grating technology. The superior performance of holography, combined with wafer-based Holostep™ processing, makes possible high resolution,

high efficiency, low noise gratings at the cost level of traditional reflection gratings. Each Ibsen grating is a holographic masterpiece - not a replica. Fused silica grating technology is equally suitable for UV, VIS and NIR wavelength regions.

NIR Spectrometer Grating - 1500 l/mm for 815-1065 nm

FSTG-NIR1500-903

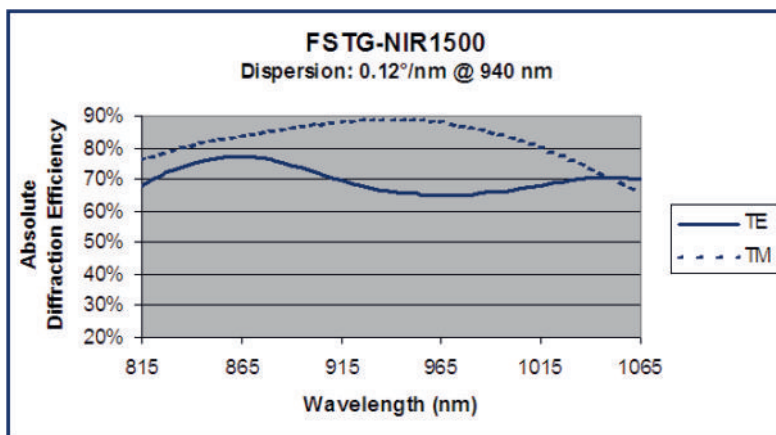


Features
High performance of holography combined with the cost level of replicated gratings
Unbeatable temperature stability, environmental tolerance and power damage threshold
High diffraction efficiency combined with with high dispersion
Low polarization dependence (PDL) over broad spectral range
Transmission configuration offers flexible optical design and tolerant assembly requirements
Low straylight and low wavefront distortion

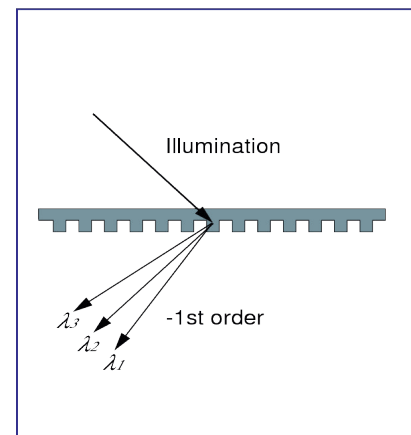
Specifications

Parameter	Specification	Comments
Materials	Fused silica	Surface relief, etched grating structure
Chip size	19 mm x 15 mm	
Chip thickness	1.0 mm	
Grating area	16 mm x 12 mm	
Grating resolution	1500.0 l/mm	+/- 0.5 l/mm
Dispersion @ 940 nm	0.12 deg/nm	
Angle of incidence (AOI)	44 deg	
Illumination bandwidth	815 nm - 1065 nm	
Diffraction efficiency, unpolarized	> 55%	All wavelengths
Coefficient of thermal expansion (CTE)	0.5 ppm/K	
Maximum operating temperature	>500 degrees C	
Packaging and shipment	Gelpack containers	Manufactured and sealed in class 10 cleanroom
Cleaning recommendation	First Contact TM	Available from Photonic Cleaning

Typical grating performance



Configuration sketch



Specifications are subject to change without notice.