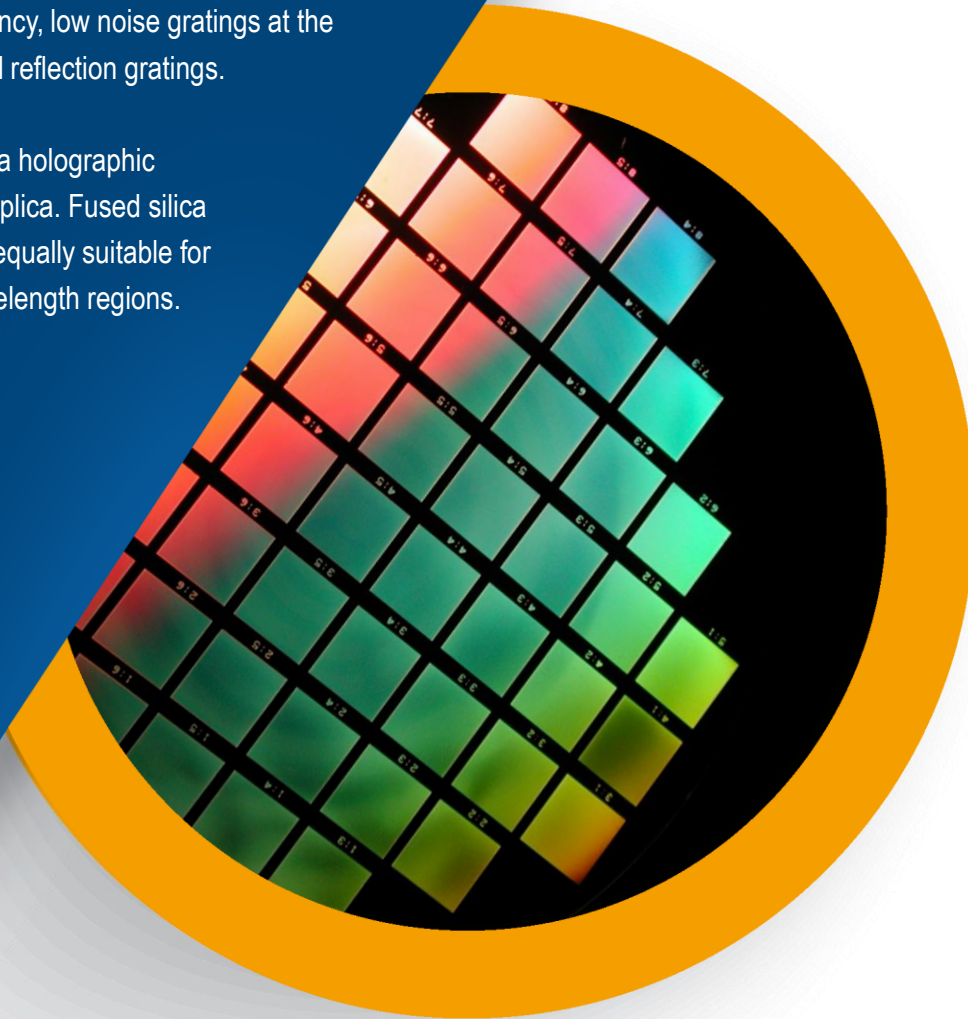


Fused silica transmission grating technology enables high resolution, high efficiency gratings that are ideal for compact spectrometers



Transmission gratings from Ibsen build on leadership in fused silica transmission grating technology. The superior performance of holography, combined with wafer-based Holostepper™ 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.



Spectrometer Grating

757 l/m for 815 – 1065

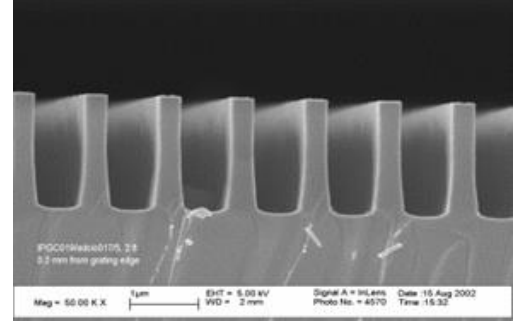
FSTG-NIR757-905

757 l/m for 815 – 1065

FSTG-NIR757-905

Benefits

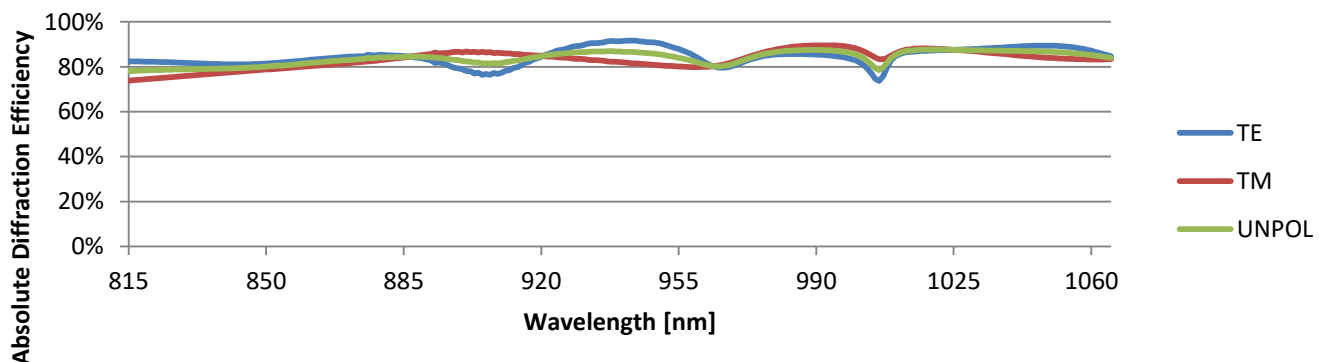
- High diffraction efficiency combined with high dispersion
- Low polarization dependence over broad spectral range
- Unbeatable temperature and environmental tolerance
- Transmission configuration offers flexible and tolerant design
- Low stray light and low wavefront distortion



Parameter	Specification
Materials	Fused silica and high-power, dielectric AR coating materials
Grating area	17.2 mm x 27.8 mm
Chip size	18.2 mm x 29.8 mm
Chip thickness	0.625 mm
Grating resolution	757 l/mm
Dispersion at 940 nm	0.061 deg/nm
Angle of incidence (AOI)	19 deg
Illumination bandwidth	815 – 1065 nm
Diffraction efficiency, unpolarized	>60%, all wavelengths
Coefficient of thermal expansion (CTE)	0.5 ppm/K
Maximum operating temperature	>500 degrees C
Cleaning recommendation	First contact. Available from Photonic Cleaning

Typical grating performance

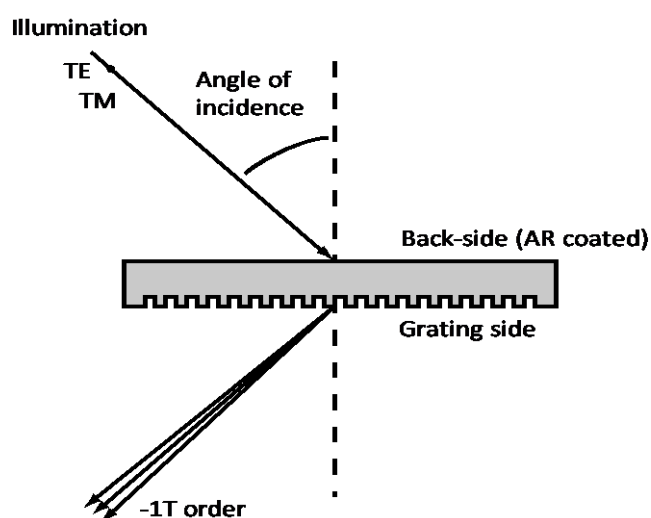
757 l/mm for 815-1065 nm



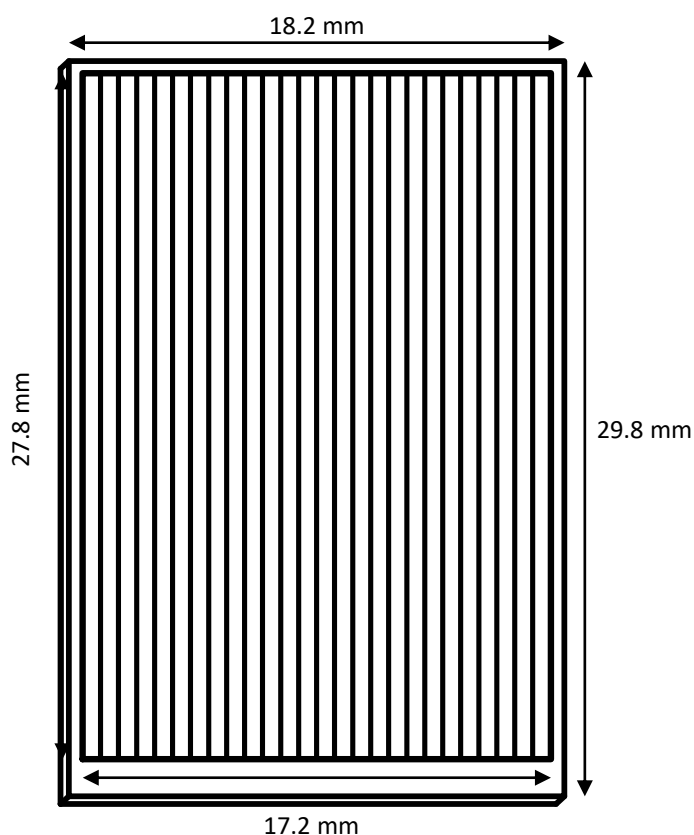
757 l/m for 815 – 1065

FSTG-NIR757-905

Configuration/definitions



Drawing



Specifications are subject to change without notice.

The above grating is an example of Ibsen's capabilities. Ibsen operates as grating partner for our customers, from being an integrated part of the grating and device / instrument design phase, to the manufacturing of prototypes, to volume manufacturing of OEM gratings.