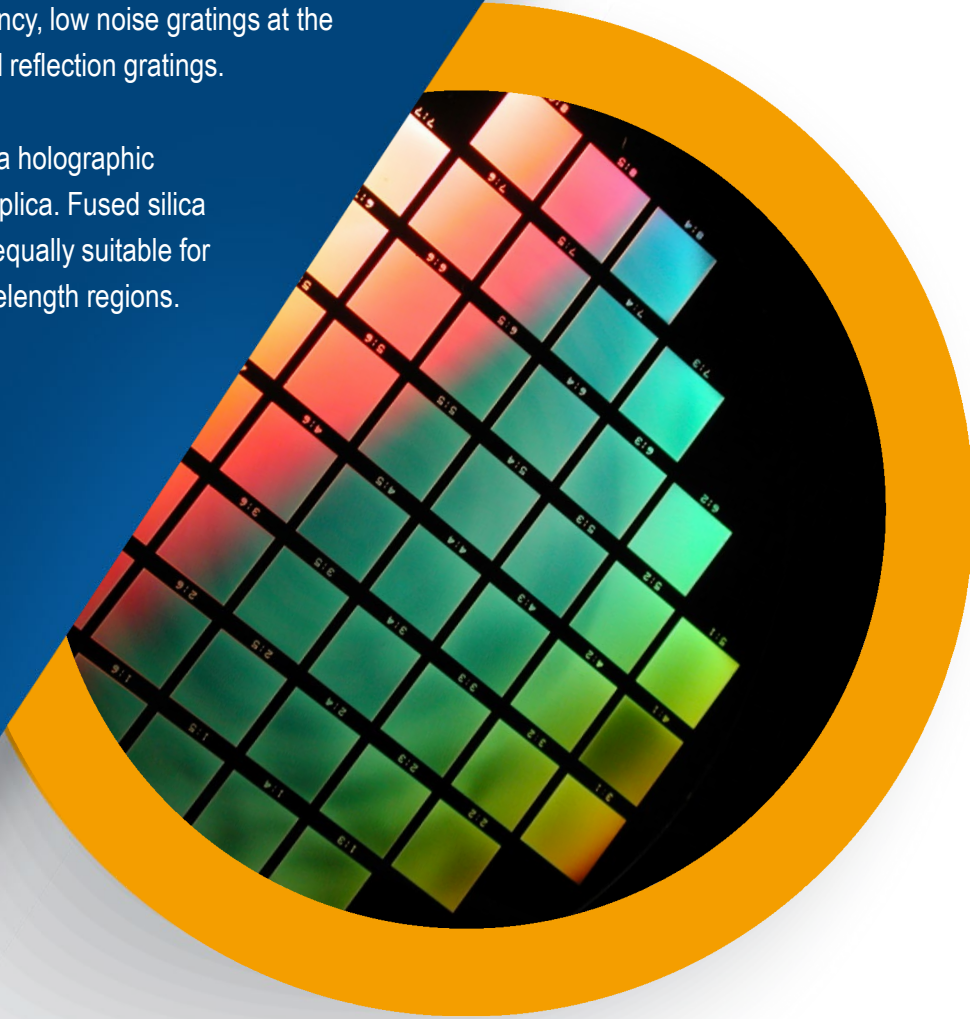


***Fused silica transmission grating technology enables high resolution, high efficiency gratings that are ideal for compact spectrometers***



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**

**1274 l/mm for 360 – 830**

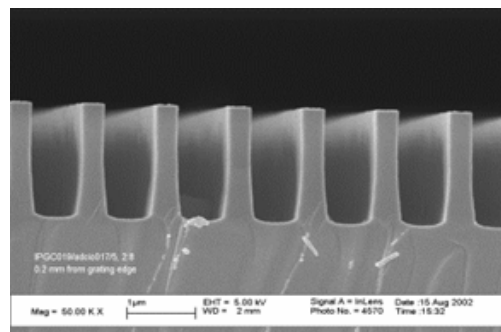
**FSTG-XVIS1274-942ds**

# 1274 l/mm for 360 – 830

## FSTG-XVIS1274-942ds

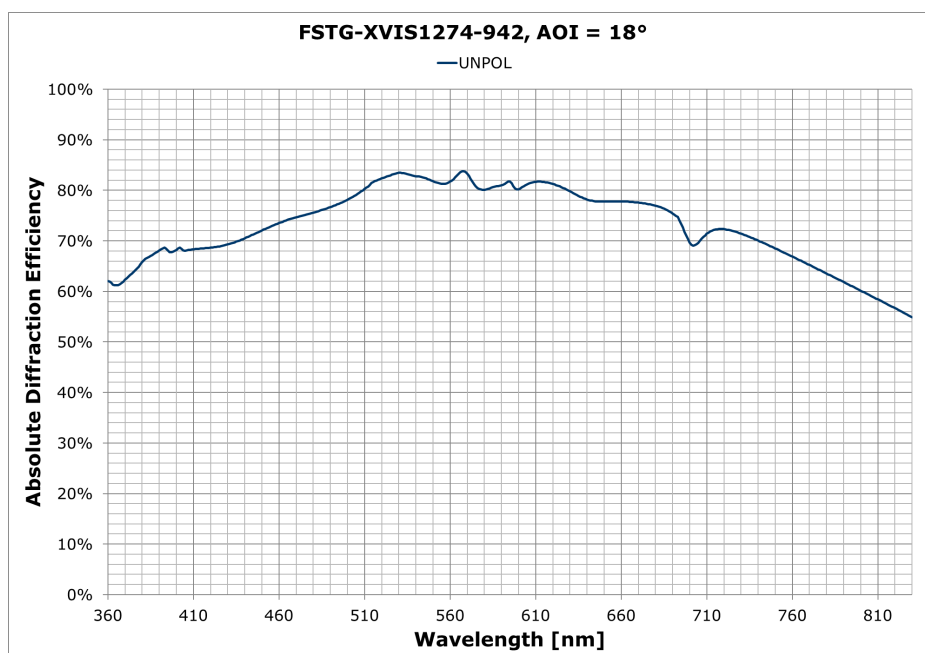
### Benefits

- 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	27.1 mm x 26 mm
Chip size	27.5 mm x 30 mm
Chip thickness	1.0 mm
Grating resolution	1274 l/mm
Dispersion at 532 nm	0.0785 deg/nm
Angle of incidence (AOI)	18 deg
Illumination bandwidth	360 – 830 nm
Diffraction efficiency, unpolarized	>40%, all wavelengths, unpolarized
Coefficient of thermal expansion (CTE)	0.5 ppm/K
Maximum operating temperature	>500 degrees C
Cleaning recommendation	First contact. Available from Photonic Cleaning

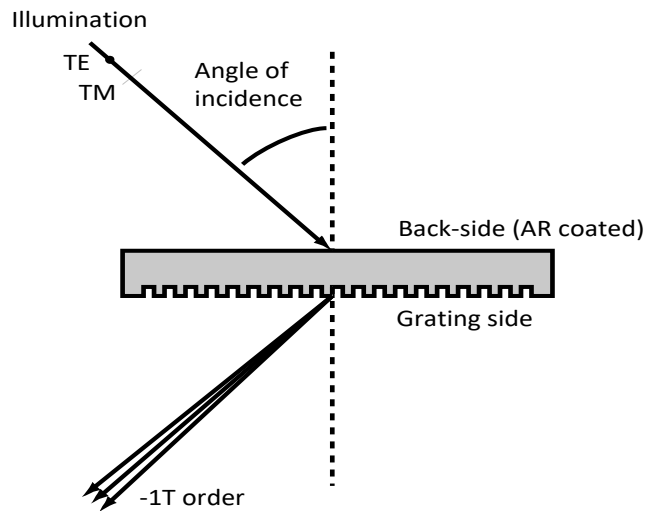
### Typical grating performance



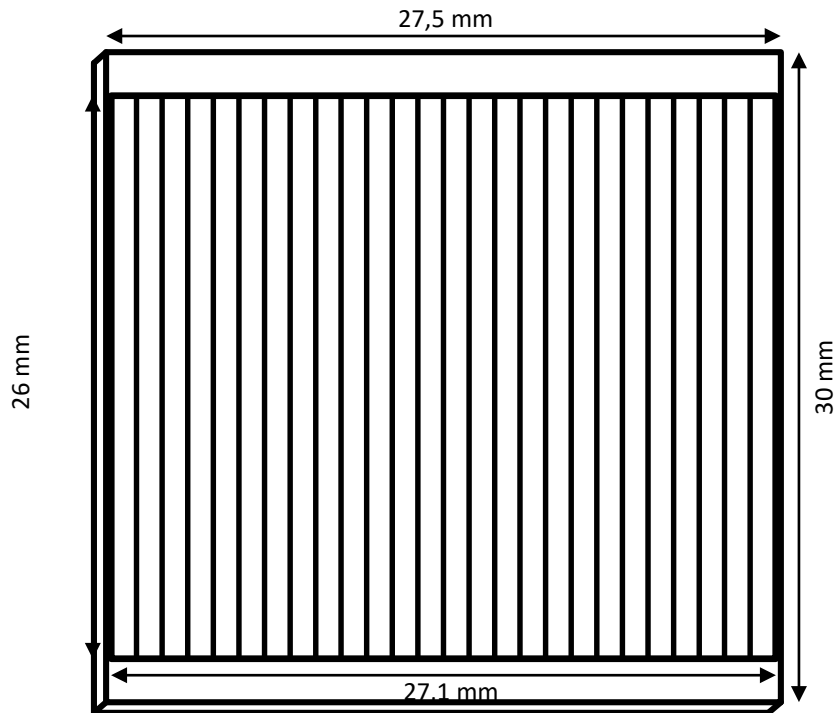
# 1274 l/mm for 360 – 830

FSTG-XVIS1274-942ds

## 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.