

PING - Polarization Independent Gratings

Telecom Transmission Gratings, 966 lines/mm

100% dielectric gratings offer unbeatable environmental and thermal stability combined with high-efficiency, low PDL performance.

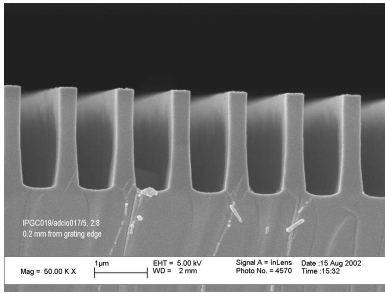
Polarization independent (PING) telecom gratings from Ibsen are produced by holographic stepper technology in 100% dielectric materials. This leads to unbeatable

thermal and environmental stability, with no polymers, epoxies, gelatins or metals in the optical path nor in the grating whatsoever. Advanced etching technology ensures highest diffraction efficiency and lowest PDL over a very broad bandwidth. Low angular sensitivity is an added bonus for module design and assembly.



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Benefits
High diffraction efficiency and low PDL
Environmentally and thermally stable
Convenient optical design by transmission principle
Combined dispersion and beam folding elements
Low straylight

Sample Applications
ROADMs
Wavelength Blockers
Wavelength Selective Switches
Dynamic Gain Equalizers
Mux / Demux / OSA

Features

Parameter	Specification	Comments
Production technology	Holographic stepper and RIE etching	Class 10 cleanroom environment
Resolution	966.2 lines/mm	+/- 0.1 line/mm
Bandwidth	1525 nm - 1575 nm	
Incidence angle	50 degrees	High angular tolerance (see plot below)
Diffraction efficiency (TE & TM)	> 90%	
PDL	< 0.25 dB	
Materials	100% dielectric materials	No polymers, epoxies, gelatins or metals
Grating area	8 mm x 4 mm or custom	
Chip size	9 mm x 8 mm or custom	For mounting and on-chip identification
Thickness	0.625 mm	+/- 0.05 mm
Maximum operating temperature	500 degrees C	
Packaging and shipment	Gelpak containers, up to 40 gratings per Gelpak	Sealed in cleanroom

Typical Grating Performance

