

Headwall Photonics

Littman Metcalf Original Holographic Diffraction Gratings

High Combined Efficiency
Low Stray Light/Noise
Environmentally Stable
Flat Wavefront

Headwall's Littman Metcalf gratings can be optimized for S, C, or L bands with efficiency split between the negative 1st and 0th orders in the TM polarization. Typical combined efficiency of the negative 1st and 0th order exceeds 90% at angles of incidence ranging from 75°- 85°. Optimizations can be made for other angles of incidence. These gratings are manufactured on planar ultra low expansion (ULE) glass, and use an environmentally stable material set which provides highly reliable performance. ULE is the preferred substrate material for this product.

Littman Metcalf gratings can be manufactured with various groove frequencies, wavelength ranges, and on substrates up to 110 mm x 110 mm. Headwall offers both standard and custom gratings to meet your specifications.

Headwall Photonics manufactures original holographic diffraction gratings and precision spectral modules for wavelength management and spectroscopic measurement. Headwall offers accurate modeling, rapid prototyping, and collaborative product design capabilities.

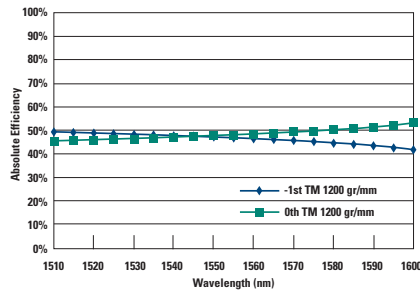
Headwall is the world's largest manufacturer of original holographic diffraction gratings.

Available Substrate Sizes

Length (mm)	Width (mm)	Thickness (mm)
4	x 5	x 1
up to		
110	x 110	x 25

Certain substrate sizes in stock for rapid turnaround. Custom substrate sizes also available. Call for details.

Representative Littman Metcalf (45/45) Grating Performance: 1200 gr/mm; 85° Angle of Incidence

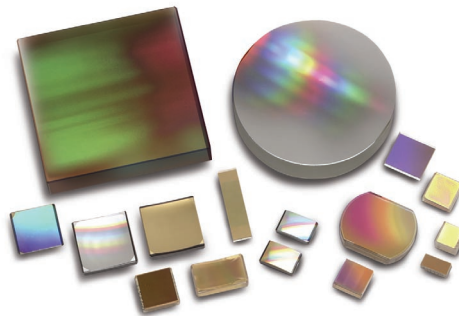


Specification Ranges

Groove Frequency:	900 gr/mm - 1200 gr/mm
Wavelength Range:	S, C or L Band
Coating:	Gold
Angle of Incidence:	75° - 85° or Custom
Diffraction Order:	-1st & 0th
Flatness:	$\lambda/10$ or better at 1550 nm
-1st/0th Eff. Options:	80/10, 70/20, 60/30, 45/45, 10/80, 20/70, 30/60

Application Focus

Telecommunications



For more information contact Headwall Photonics, Inc.
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To find out more visit www.HeadwallPhotonics.com