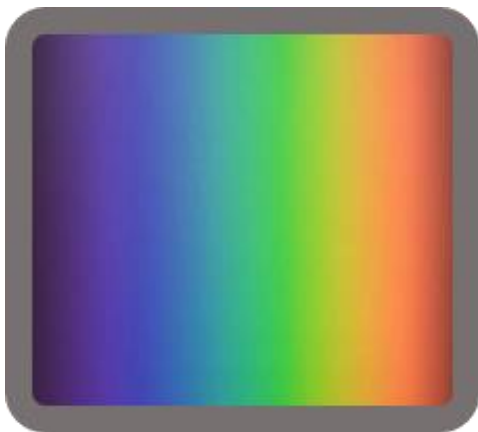


Gratings

Diffraction gratings separate polychromatic “white” light into individual wavelengths. Dispersed light is then reimaged by the monochromator/spectrograph so that individual wavelengths can be directed into a detection system or sample.

Key Features

Efficient Wavelength Isolation

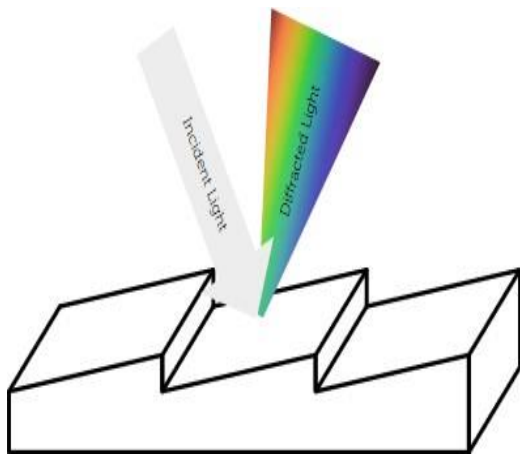


Gratings are used to split incident light into several beams spread over multiple directions.

They are used alongside spectrometers to measure wavelength intensity over a specific portion of the electromagnetic spectrum.

This provides information about the sample by producing a spectral fingerprint.

Variable Resolution Options

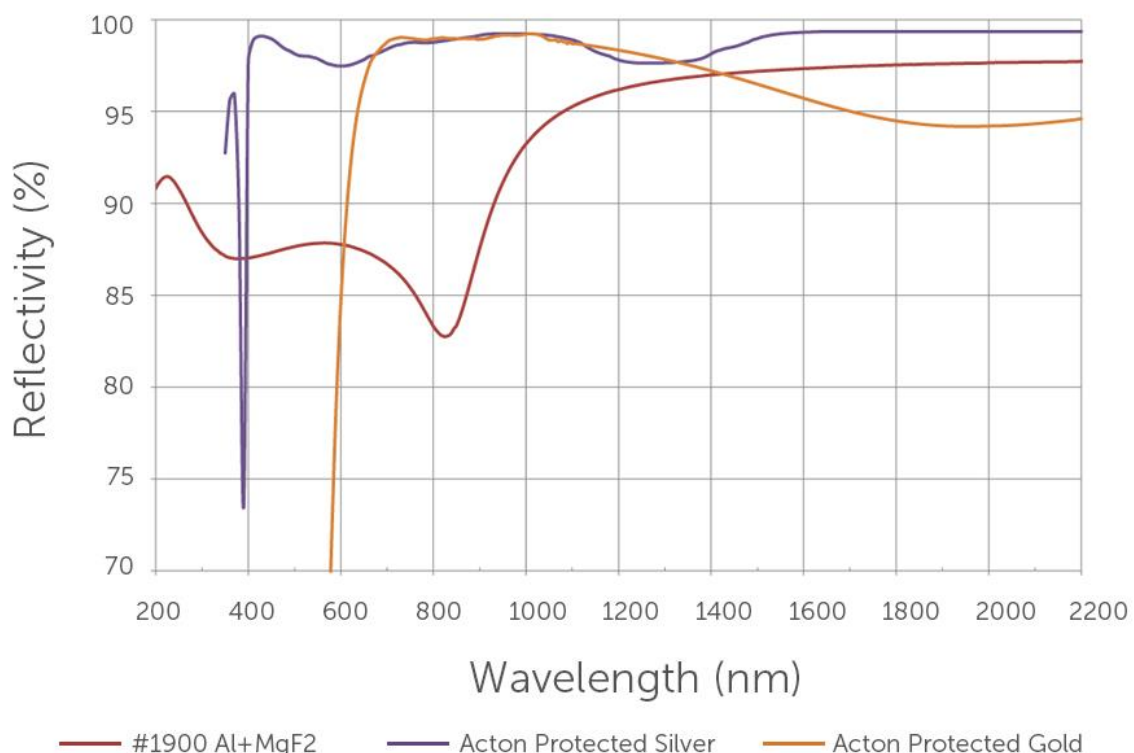


When using a grating, the direction in which the incident light is separated is dependent on the beam wavelength and the spacing of the grating.

If there are more ridges on the grating, the spectra produced will have a sharper pattern. However, this will be over a smaller region of the electromagnetic spectrum. Therefore, finer gratings are used for high resolution and coarser gratings are used for broad spectral range.

Enhanced Reflectivity Coatings

Each grating is supplied with a bare aluminum coating, offering approximately 85-90% reflectivity from the UV – NIR. This increases to 98% in the SWIR and MIR.



Family Models

Groove Density	Blaze Wavelength	Available for	Efficiency Curve
50 gr/mm	600 nm	IsoPlane, SpectraPro, TriVista	View Curve
150 gr/mm	300 nm	IsoPlane, SpectraPro, TriVista	View Curve
150 gr/mm	500 nm	IsoPlane, SpectraPro, TriVista	View Curve
150 gr/mm	800 nm	IsoPlane, SpectraPro, TriVista	View Curve
150 gr/mm	1.25 μ m	IsoPlane, SpectraPro, TriVista	View Curve
300 gr/mm	300 nm	IsoPlane, SpectraPro, TriVista	View Curve
300 gr/mm	500 nm	IsoPlane, SpectraPro, TriVista	View Curve
300 gr/mm	750 nm	IsoPlane, SpectraPro, TriVista	View Curve
300 gr/mm	1.2 μ m	IsoPlane, SpectraPro, TriVista	View Curve
300 gr/mm	2 μ m	IsoPlane, SpectraPro, TriVista	View Curve
600 gr/mm	300 nm	IsoPlane, SpectraPro, TriVista	View Curve
600 gr/mm	500 nm	IsoPlane, SpectraPro, TriVista	View Curve
600 gr/mm	750 nm	IsoPlane, SpectraPro, TriVista	View Curve
600 gr/mm	1 μ m	IsoPlane, SpectraPro, TriVista	View Curve
600 gr/mm	1.6 μ m	IsoPlane, SpectraPro, TriVista	View Curve
1200 gr/mm	300 nm	IsoPlane, SpectraPro, TriVista	View Curve
1200 gr/mm	500 nm	IsoPlane, SpectraPro, TriVista	View Curve
1200 gr/mm	750 nm	IsoPlane, SpectraPro, TriVista	View Curve
1200 gr/mm	blazed holographic – UV optimized	IsoPlane, SpectraPro, TriVista	View Curve
1200 gr/mm	holographic – VIS optimized	IsoPlane, SpectraPro, TriVista	View Curve
1800 gr/mm	500 nm	IsoPlane, SpectraPro, TriVista	View Curve
1800 gr/mm	blazed holographic – UV optimized	IsoPlane, SpectraPro, TriVista	View Curve
1800 gr/mm	holographic – VIS	IsoPlane,	View Curve

	optimized	SpectraPro, TriVista	
2400 gr/mm	240 nm	IsoPlane, SpectraPro, TriVista	View Curve
2400 gr/mm	blazed holographic – UV optimized	IsoPlane, SpectraPro, TriVista	View Curve
2400 gr/mm	holographic – VIS optimized	IsoPlane, SpectraPro, TriVista	View Curve
3600 gr/mm	240 nm	IsoPlane, SpectraPro, TriVista	View Curve
3600 gr/mm	holographic – UV optimized	IsoPlane, SpectraPro, TriVista	View Curve

- Larger 68 x 84 mm size gratings are available for 1200 g/mm and higher density gratings. Other blaze wavelength and groove density options are also available.