

Headwall Photonics

## **Aberration-Corrected Concave** Original Holographic Diffraction Gratings

**Very Low Stray Light**

**Simplified Optical Designs**

**Excellent Image Quality**

Headwall's Aberration-Corrected Concave gratings combine the functions of optical imaging and diffraction into one optical element. This feature allows the user to couple into a fiber array or image onto a detector array. Aberration-Correction is important for Telecommunication applications, such as DWDM or network channel monitoring, and for spectrographic instrumentation. The Concave grating can greatly simplify the alignment and focus of low-cost spectral systems by reducing the number of optical elements and mounts required to create a given spectrum.

Concave gratings can be manufactured on opaque or ultra low expansion (ULE) glass for improved thermal stability.

[www.HeadwallPhotonics.com](http://www.HeadwallPhotonics.com)

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.

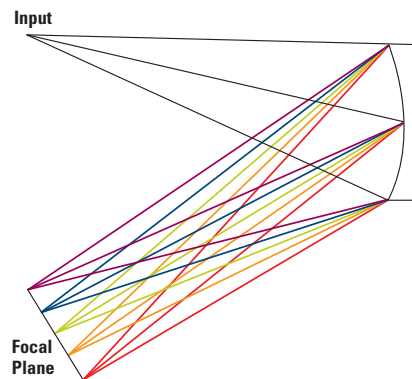
Headwall is the world's largest manufacturer of original holographic diffraction gratings.

### Sample Substrate Sizes

Dimensions	Focal Length	f/#
37 mm x 37 mm	~ 100 mm	2.5
38 mm Round	~ 50 mm	2.0
28 mm Round	~ 30 mm	2.2

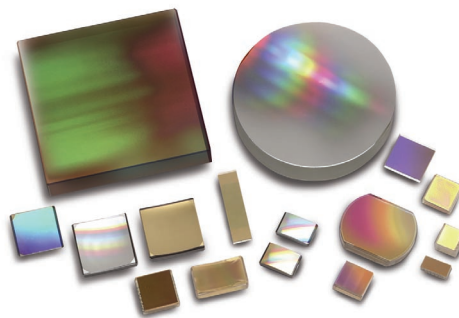
Certain substrate sizes in stock for rapid turnaround. Custom substrate sizes also available. Call for details.

### Example of Optical Layout



### Application Focus

Telecommunications  
Imaging Spectroscopy  
Process Monitoring  
Colorimetry



### Specification Ranges

Groove Frequency:	50 gr/mm - 3000 gr/mm
Wavelength Range:	170 nm - 10,000 nm
Coating:	Gold, Aluminum, Aluminum & Magnesium Fluoride
Spectral Lengths:	Custom
Radius of Curvature:	25 mm to 500+ mm
f/#:	1.5 and Higher
Diameter:	20 mm to 200 + mm

For more information contact Headwall Photonics, Inc.  
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To find out more visit  
[www.HeadwallPhotonics.com](http://www.HeadwallPhotonics.com)