

Richardson Gratings™ 1800 Grooves, 12.7 x 12.7mm, 250-900nm, Plane Holographic Reflection Grating

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Richardson Gratings™ High Precision Reflective Holographic Diffraction Gratin



Stock #15-751 **15 In Stock**

1

MRP ₹15,033

Price inclusive of all taxes

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Volume Pricing	
Qty 1-9	₹15,033 each
Qty 10-24	₹13,530 each
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Product Downloads	
STEP:step	Curve:pdf
PDF Drawing:pdf	IGES:igs
eDrawing:eprt	Whitepapers
EO Spec Sheet	Download All

General

Type: Reflective Diffraction Grating

Master Reference: 320H

Physical & Mechanical Properties

Dimensions (mm): 12.7 x 12.7 ±0.1

Clear Aperture (%): >90

Construction: Holographic Grating

Length (mm): 12.70

Thickness (mm): 6.00 ±0.5

Width (mm): 12.70

Centering of Ruled Area on Substrate (mm): ±1

Alignment of Grooves to Edge (°): ±0.15

Groove Spacing Tolerance (%): <0.05

Optical Properties

Groove Density (grooves/mm): 1800

Wavelength Range (nm): 250 - 900

Blaze Wavelength (nm): 450

Coating: Aluminium

Substrate: Float Glass

Reflected Wavefront, RMS: λ/4

Polarization: S, P and Average

Spectral Order (m): 1

Regulatory Compliance

Certificate of Conformance: [View](#)

Country of Origin: United States

Imported By: Edmund Optics
India Private Limited
267, Greystone Building,
Second Floor,
6th Cross Rd,
Binnamangala,
Stage 1,
Indiranagar,
Bengaluru,
Karnataka,
India 560038
Phone: +91-80-6845 0000

Need different specs or modifications?

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

Product Details

- High Diffraction Efficiency
- Reduced Stray Light and More Accurate Periodicity than Ruled Gratings
- Wavelength Options from UV to NIR Regions Available
- Custom Sizes Available

Richardson Gratings™ High Precision Reflective Holographic Diffraction Gratings display reduced light scattering compared with ruled gratings, making them ideal for stray light sensitive applications such as Raman spectroscopy. The gratings are recorded in a photoresist by exposure to an intense laser interference pattern and then chemically developed to reveal a fringe pattern with a sinusoidal cross section. Gratings for use from the UV to NIR spectral regions are available.

Note: The surface of these gratings is very sensitive and should never be touched when handling the optic. If cleaning is required to remove dust particles, non-contact cleaning using clean compressed air is recommended.

Special Handling

These optics require special handling to avoid damage and ensure long-term performance. Proper handling, cleaning, and storage are essential to maintain optical quality. Explore our [Optics Cleaning Resources](#) for step-by-step guides and best practices. For personalized assistance, [Email us](#) or [Chat](#) with our technical support team.

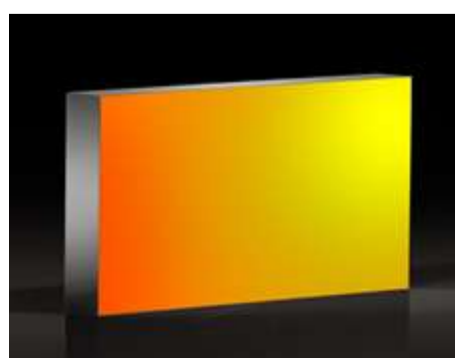


Component Handling Tools

Related Products



Richardson Gratings™ High Precision Plane Reflective Gold



Richardson Gratings™ Echelle Reflective Diffraction Gratings



Richardson Gratings™ High Precision Plane Ruled Reflective



Adjustable Grating Mounts

Frequently Purchased Together



#48-464 - 1200 Grooves, 12.7mm Square, 400nm Ruled Diffraction Grating
₹9,585

Qty



#58-970 - 25.4mm Length, M6 Thread, Post Holder
₹1,362

Qty



#43-465 - 25mm Dia. x 25mm FL Protected Aluminum, Concave Mirror
₹5,499

Qty



#43-775 - 1800 Grooves/mm, 12.7mm Square, VIS Holographic Grating
₹12,612

Qty

Resources

Media Type

- Application Note
- Video
- FAQ
- Glossary

WEBINARS

Helpful Tips for Selecting the Correct Diffraction...

APPLICATION NOTE

All About Diffraction Gratings

VIDEO

Richardson Gratings™ Unboxing

? FAQ

What is the difference between holographic...

? FAQ

How do the efficiency curves relate to the actual...

? FAQ

What is the difference between Rowland circl...

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