

1800 Grooves/mm, 30mm Square, VIS Holographic Grating



Reflective Holographic Gratings

Stock #55-265 **3 In Stock**

1 MRP ₹26,736

Price inclusive of all taxes

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Volume Pricing	
Qty 1-9	₹26,736 each
Qty 10-24	₹24,063 each
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Product Downloads	
STEP:step	Curve:pdf
PDF Drawing:pdf	IGES:igs
Spec Sheets:pdf	
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EO Spec Sheet	Download All

General

Type: Reflective Diffraction Grating

Physical & Mechanical Properties

Dimensions (mm): 30.0 x 30.0 ±0.5	Construction: Holographic Grating
Length (mm): 30.00	Thickness (mm): 9.50 ±0.5
Width (mm): 30.00	Alignment of Grooves to Edge (°): ±0.5

Optical Properties

Groove Density (grooves/mm): 1800	Wavelength Range (nm): 400 - 700
Coating: Bare Aluminum	Substrate: Float Glass
Wavelength: VIS	Absolute Peak Efficiency, Typical (%): 81
Peak Efficiency Avg, Typical (%): >65	

Regulatory Compliance

RoHS 2015: Compliant	Certificate of Conformance: View
Reach 247: Compliant	
Country of Origin: United States	Imported By: Edmund Optics India Private Limited 267, Greystone Building, Second Floor,

Product Details

- Groove Density up to 3600 Grooves per mm
- Bare Aluminum Coating
- Sinusoidal Grating Profile
- Available Wavelength Range of 250 - 1500nm

Holographic gratings are formed by an interference fringe field of two laser beams whose standing wave pattern is exposed to a polished substrate coated with photoresist. Processing of the exposed medium results in a pattern of straight lines with a sinusoidal cross section.

Holographic gratings produce less stray light than ruled gratings. They can also be produced with up to 3600 grooves per millimeter for greater theoretical resolving power. Due to their sinusoidal cross section, holographic gratings cannot be easily blazed and their efficiency is usually considerably less than a comparable ruled grating. There are, however, special exceptions which should be noted. When groove spacing to wavelength ratio is near one, a holographic grating has virtually the same efficiency as the ruled version. Also, a holographic grating with 1800 grooves per millimeter has the same efficiency at 500nm as a blazed ruled grating. Holographic master gratings are replicated by a process identical to that used for ruled gratings.

Handling Gratings: Gratings require special handling, making them prone to fingerprints and aerosols. Gratings should only be handled by the edges. Before attempting to clean a grating, please [contact us](#).

Technical Information

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



Adjustable Grating Mounts

Frequently Purchased Together



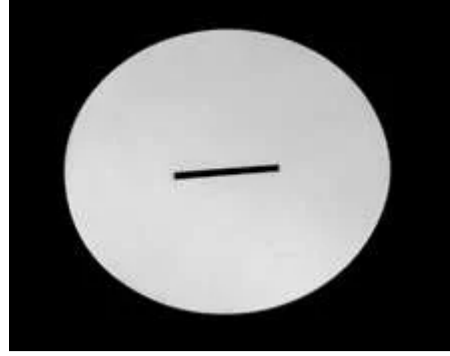
#32-492 - 25mm Dia. x 125mm FL, MgF₂ Coated, Achromatic Doublet Lens
₹12,309

Qty



#32-500 - 30mm Dia. x 100mm FL, MgF₂ Coated, Achromatic Doublet Lens
₹14,630

Qty



#38-558 - 25µm x 3mm. Unmounted, Precision Air Slit
₹14,730

Qty



#45-014 - 12.0mm Dia. x -12 FL, Uncoated, Plano-Concave Lens
₹3,380

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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