12.5mm Ultra Broadband Wire Grid Linear Polarizer

Mounted Ultra Broadband Wire Grid Linear Polarizer

Stock **#34-314** **12 In Stock**

- 1 +

£972.00

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Volume Pricing	
Qty 1-10	**£972.00** each
Qty 11+	**£824.00** each
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Product Downloads

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General

Type:	Linear Polarizer

Physical & Mechanical Properties

Clear Aperture CA (mm):	8.5	**Diameter (mm):**	12.50
Thickness (mm):	5.80	**Dimensional Tolerance (mm):**	±0.4
Construction:	Wire Grid	**Alignment Tolerance (°):**	±1.0

Optical Properties

Angle of Incidence (°):	±20 without depolarization	**Extinction Ratio:**	5000:1 @ 3200nm
Substrate: ⓘ	**Fused Silica** (Corning 7980)	**Surface Quality:**	80-50
Transmission (%):	>80 (Typical) @ 450nm	**Wavelength Range (nm):**	300 - 3200

Material Properties

Thermal Expansion:	5.5 x 10^{-7}/°C		

Environmental & Durability Factors

Operating Temperature (°C):	-40 to +200		

Regulatory Compliance

RoHS 2015:	**Compliant**	**Reach 224:**	**Compliant**

Certificate of Conformance:	**View**

Product Details

- Reflect S-Polarized Light
- Transmit P-Polarized Light
- Excellent Performance from UV to IR

Ultra Broadband Wire Grid Polarizers consist of a thin layer of aluminum MicroWires layered between two Fused Silica windows. Designed for multi-wavelength applications, these polarizers have excellent heat resistance and performance beginning in the UV and extending into the infrared (IR). The polarizers feature a fused silica substrate. Ultra Broadband Wire Grid Polarizers reflect S-polarized light and transmit P-polarized light. These polarizers are available in a variety of thicknesses and clear apertures, in either a 12.5, 25, or 50mm diameter.

Note: The input beam should be oriented towards the cover glass side, indicated by a reference mark which also indicates the direction of the transmission axis.

Wire Grid Polarizers are constructed by attaching MicroWires to the first window, and then applying a thin cover glass onto the wire grid surface to protect the wire from damage. The light is polarized by the birefringent nature of the wire grid surface. When incident light strikes the wire grid, P-polarized light contacts a dielectric and is transmitted, while S-polarized light contacts a mirror and is reflected.

Technical Information

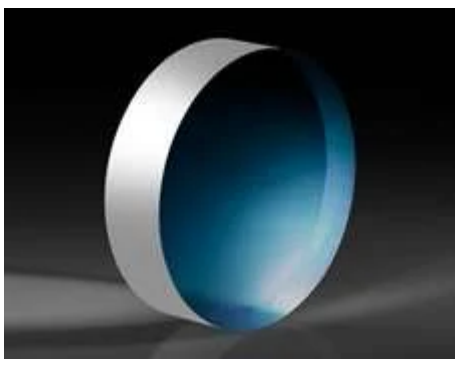
Related Products

#36-637 - 12.5/12.7mm Diameter Rotation Kinematic Mount, 2-Screws
£132.00
Qty

#11-145 - 12.5mm Diameter, S-Mount Polarizer Holder
£160.00
Qty

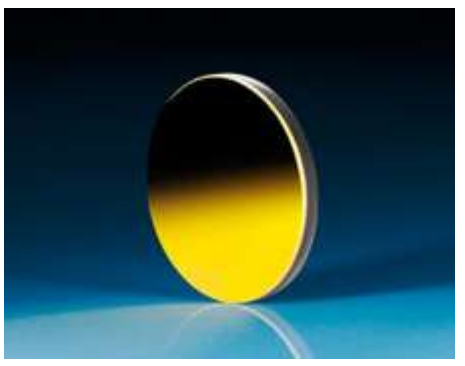
Frequently Purchased Together

#45-608 - 50mm Dia. UV Enhanced Aluminum, λ/4 Mirror
£107.20
Qty



#49-637 - 5mm Dia. 1mm Thick VIS-NIR Coated, 1λ Fused Silica Window
£87.20
Qty

#57-727 - Purosol Optical Cleaner 4 oz. Spray Bottle
£22.60
Qty



#64-082 - 50mm Dia x -129.2mm FL Protected Gold Coated, Convex Mirror
£56.00
Qty

Resources

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Introduction to Polarization

TECHNICAL TOOL

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Polarizer Selection Guide

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Understanding Waveplates and Retarders

VIDEO

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