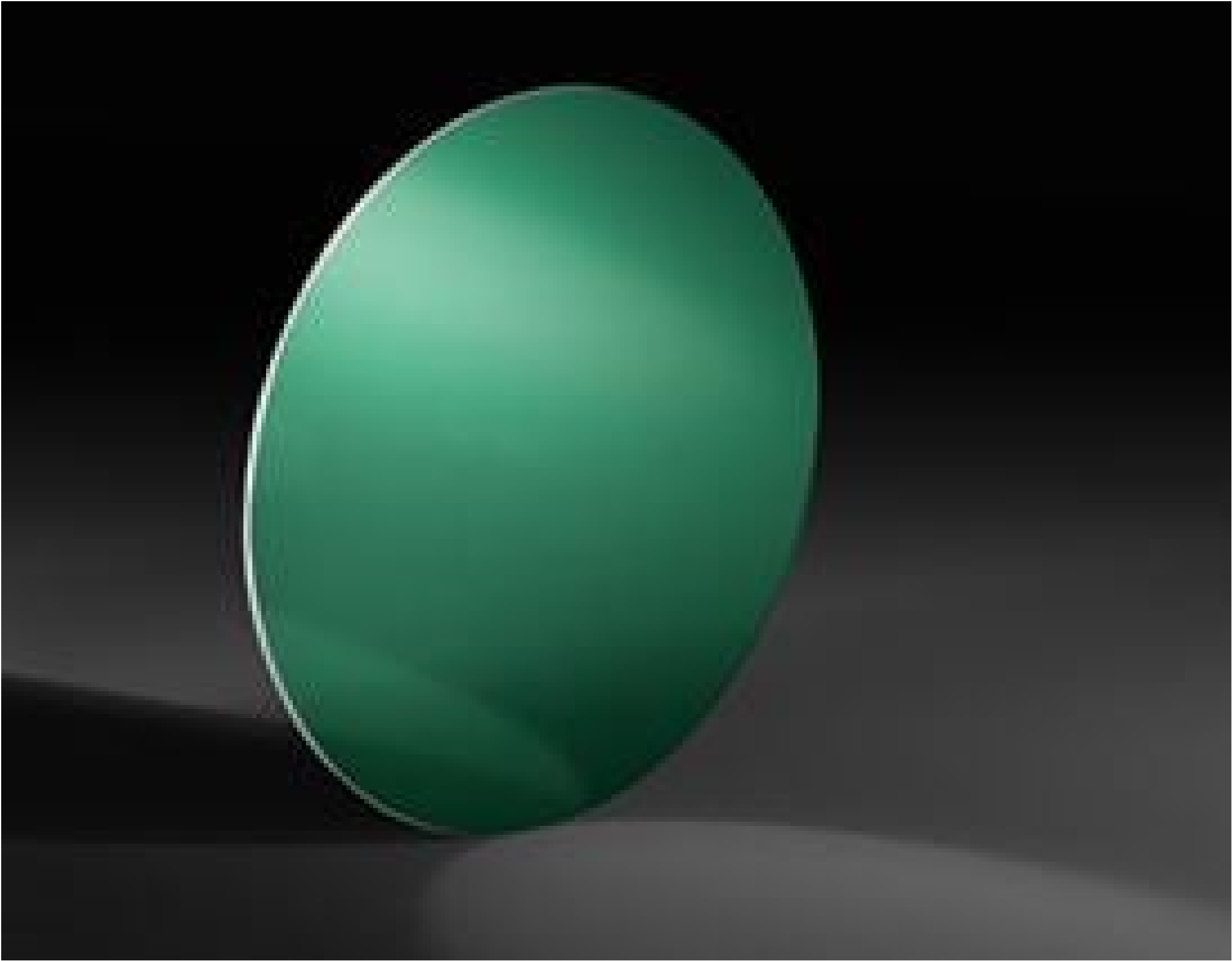


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12.5mm Dia., Protective Overcoat Wire Grid Polarizer



Stock **#12-648** 8 In Stock

-

1

+

£299^{.20}

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Volume Pricing	
Qty 1-10	£299.20 each
Qty 11+	£255.20 each
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Product Downloads

General

Type:

Linear Polarizer

Note:

When the Reference Mark is orientated to the 3 or 9 o'clock position, the transmission axis runs left to right.

Physical & Mechanical Properties

Clear Aperture CA (mm):

10.5	
	Diameter (mm):
12.50	
	Thickness (mm):
0.70 ±0.07	
	Dimensional Tolerance (mm):
±0.2	
	Construction:
Wire Grid	
	Alignment Tolerance (°):
±1.0	

Optical Properties	
	Angle of Incidence (°):
0 ±20	
	Coating:
BBAR (400-700nm)	
	Extinction Ratio:
348:1 @ 450nm 885:1 @ 550nm 1229:1 @ 650nm	
	Substrate: ☐
Corning Eagle XG	
	Surface Quality:
80-50	
	Transmission (%):
87	
	Transmission Tolerance (%):
±2.5 @ 420 - 700nm	
	Coating Specification:
R _{avg} <1% @ 400 - 700nm (Back of Substrate)	
	Wavelength Range (nm):
420 - 700	

Material Properties	
	Thermal Expansion:
31.7 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
- Protective Overcoat for Easy Handling and Cleaning
- Lighter, Thinner Design than Traditional [Wire Grid Polarizers](#)
- Overcoat Temperature Stability up to 200°C

Protective Overcoat Wire Grid Polarizers are used to reflect s-polarized light while transmitting p-polarized light in the visible spectrum. These polarizers consist of a thin aluminum wire grid attached to a glass substrate that is treated with a hard, protective coating. The overcoat protects the wire grid structure from scratches or other damage due to mechanical stress while enabling lighter, thinner designs compared to traditional [Wire Grid Polarizers](#) that use cover glass. The protective coating on these polarizers allows for them to be easily handled and cleaned, unlike [bare wire grid polarizers](#) where handling and cleaning is not recommended. Protective Overcoat Wire Grid Polarizers can be used in environments with high temperatures up to 200°C for over 1000 hours with minimal impact on performance.

Note: Reference marks indicate the axis of polarization.