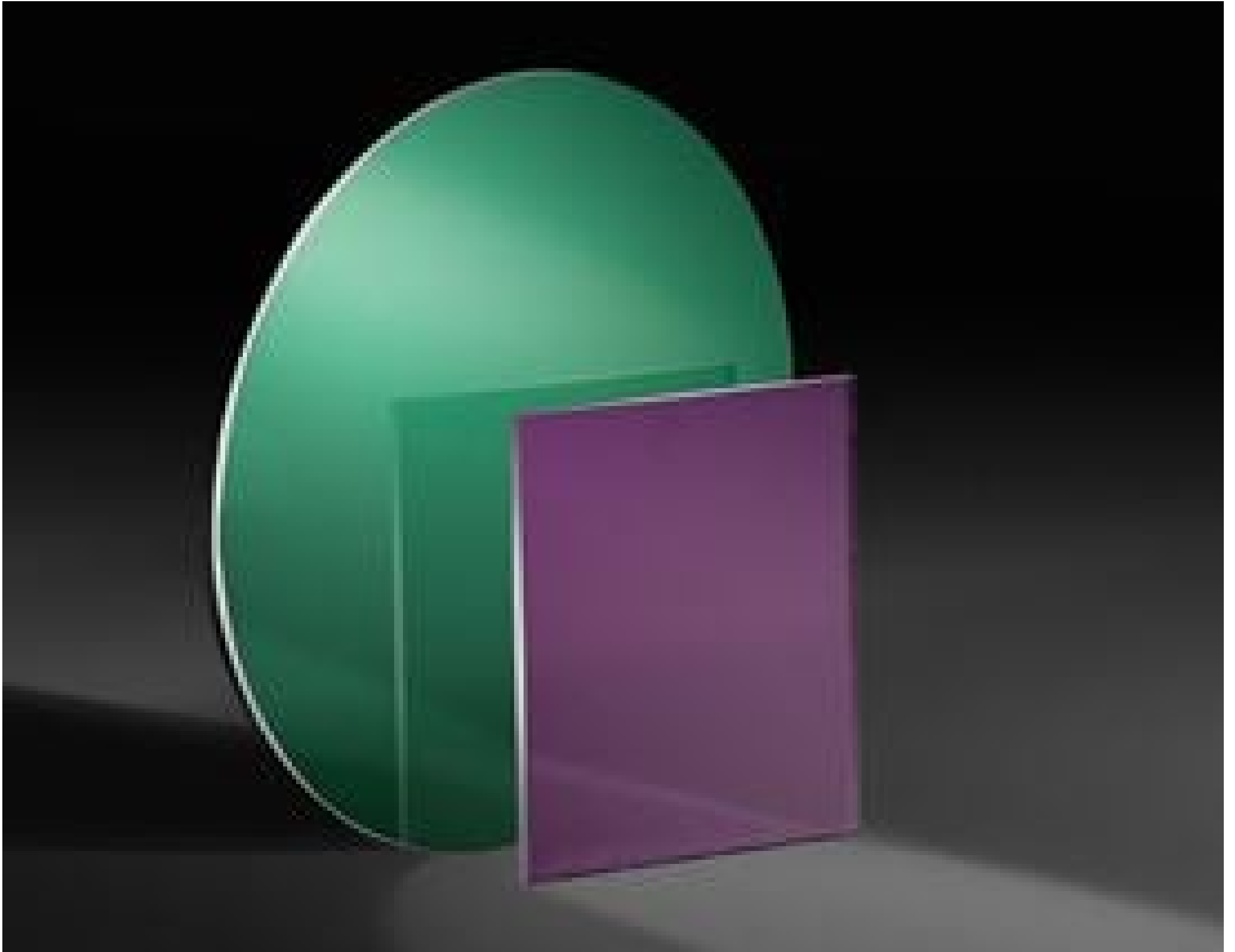


50mm Dia., Protective Overcoat Wire Grid Polarizer



Protective Overcoat Wire Grid Polarizers



Stock #12-650 **2 In Stock**

⊖ 1 ⊕ £1,052⁰⁰

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Volume Pricing	
Qty 1-10	£1,052.00 each
Qty 11+	£928.00 each
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Product Downloads

General

Linear Polarizer

Type:

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

48 **Clear Aperture CA (mm):**

50.00 **Diameter (mm):**

0.70 ±0.07 **Thickness (mm):**

±0.2 **Dimensional Tolerance (mm):**

Wire Grid **Construction:**

±1.0 **Alignment Tolerance (°):**

Optical Properties

0 ±20 **Angle of Incidence (°):**

BBAR (400-700nm) **Coating:**

348:1 @ 450nm
885:1 @ 550nm
1229:1 @ 650nm **Extinction Ratio:**

Corning Eagle XG **Substrate:**

80-50 **Surface Quality:**

87 **Transmission (%):**

±2.5 @ 420 - 700nm **Transmission Tolerance (%):**

R_{avg} <1% @ 400 - 700nm (Back of Substrate) **Coating Specification:**

420 - 700 **Wavelength Range (nm):**

Material Properties

31.7 x 10⁻⁷/°C **Thermal Expansion:**

Environmental & Durability Factors

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

Regulatory Compliance

Compliant **RoHS 2015:**

Compliant **Reach 224:**

View **Certificate of Conformance:**

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.