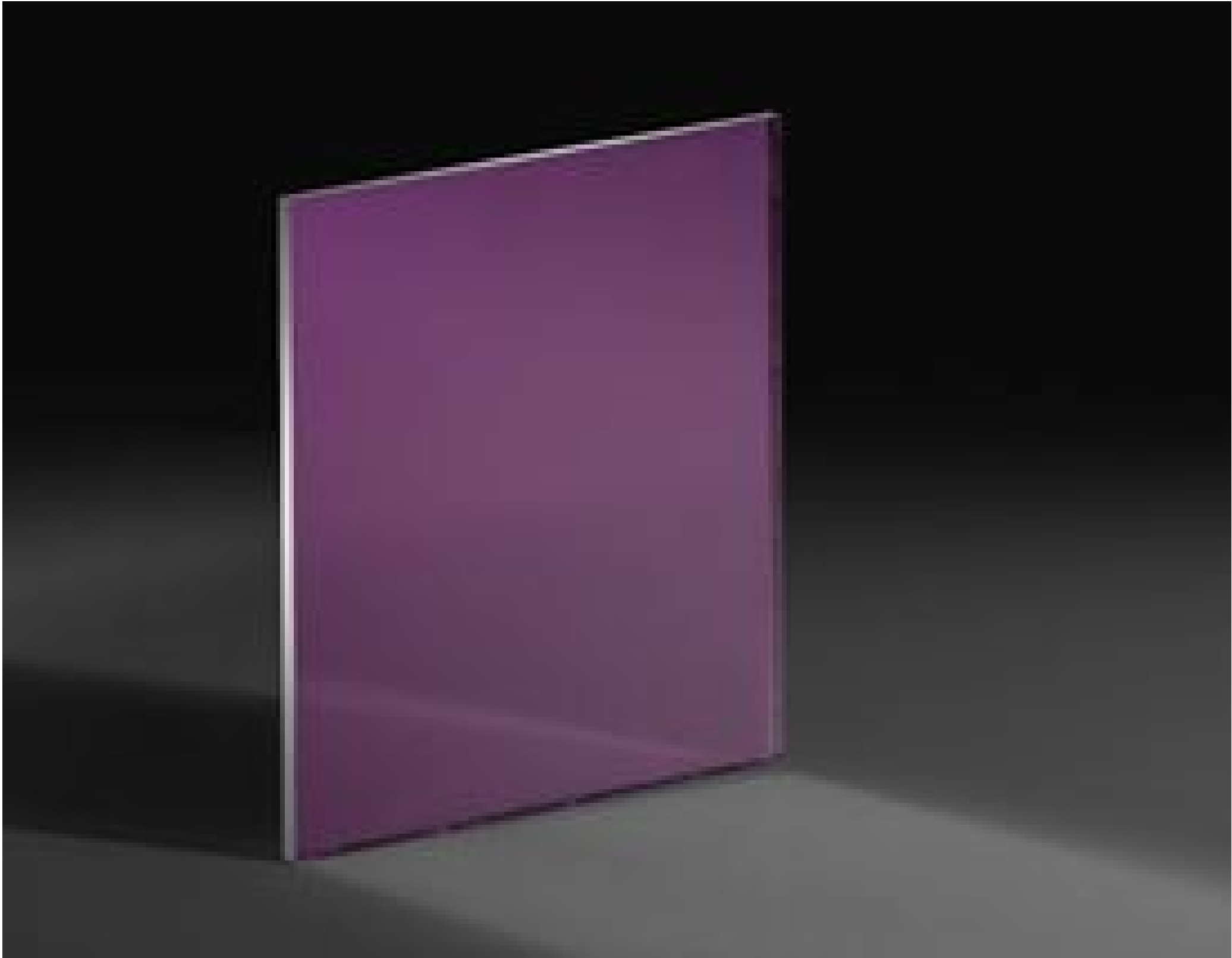


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# 50 x 50mm, Protective Overcoat Wire Grid Polarizer



Stock **#12-647** 1 In Stock

-

1

+

£820.00

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| Qty 1-10       | £820.00 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):

|            |                             |
|------------|-----------------------------|
| 48 x48     |                             |
| 50.00      | Length (mm):                |
| 50.0 x50.0 | Dimensions (mm):            |
| 0.70 ±0.07 | Thickness (mm):             |
| ±0.2       | Dimensional Tolerance (mm): |
| Wire Grid  | Construction:               |
| ±1.0       | Alignment Tolerance (°):    |
| 50.00      | Width (mm):                 |

|                                                        |                             |
|--------------------------------------------------------|-----------------------------|
| Optical Properties                                     |                             |
| 0 ±20                                                  | Angle of Incidence (°):     |
| BBAR (400-700nm)                                       | Coating:                    |
| 348:1 @ 450nm<br>885:1 @ 550nm<br>1229:1 @ 650nm       | Extinction Ratio:           |
| Corning Eagle XG                                       | Substrate: <div></div>      |
| 80-50                                                  | Surface Quality:            |
| 87                                                     | Transmission (%):           |
| ±2.5 @ 420 - 700nm                                     | Transmission Tolerance (%): |
| R <sub>avg</sub> <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.

## Compatible Mounts