

## 50 x 50mm, Protective Overcoat Wire Grid Polarizer



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

A\$1,640<sup>00</sup>

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

50.00	<b>Length (mm):</b>
50.0 x 50.0	<b>Dimensions (mm):</b>
0.70 ±0.07	<b>Thickness (mm):</b>
±0.2	<b>Dimensional Tolerance (mm):</b>
Wire Grid	<b>Construction:</b>
±1.0	<b>Alignment Tolerance (°):</b>
50.00	<b>Width (mm):</b>

## Optical Properties

0 ±20	<b>Angle of Incidence (°):</b>
BBAR (400-700nm)	<b>Coating:</b>
348:1 @ 450nm 885:1 @ 550nm 1229:1 @ 650nm	<b>Extinction Ratio:</b>
<a href="#">Corning Eagle XG</a>	<b>Substrate:</b> <input type="checkbox"/>
80-50	<b>Surface Quality:</b>
87	<b>Transmission (%):</b>
±2.5 @ 420 - 700nm	<b>Transmission Tolerance (%):</b>
R <sub>avg</sub> <1% @ 400 - 700nm (Back of Substrate)	<b>Coating Specification:</b>
420 - 700	<b>Wavelength Range (nm):</b>

## Material Properties

31.7 x 10 <sup>-7</sup> °C	<b>Thermal Expansion:</b>
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## Environmental & Durability Factors

-40 to +200	<b>Operating Temperature (°C):</b>
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## Regulatory Compliance

<a href="#">Compliant</a>	<b>RoHS 2015:</b>
<a href="#">Compliant</a>	<b>Reach 224:</b>
<a href="#">View</a>	<b>Certificate of Conformance:</b>

## 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