

12.5 x 12.5mm, Protective Overcoat Wire Grid Polarizer



Stock **#12-645** **20+ In Stock**

S\$333^{.20}

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| Qty 1-10 | S\$333.20 each |
| Qty 11+ | S\$284.20 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

10.5 x 10.5 **Clear Aperture CA (mm):**

| | |
|-------------|------------------------------------|
| 12.50 | Length (mm): |
| 12.5 x 12.5 | Dimensions (mm): |
| 0.70 ±0.07 | Thickness (mm): |
| ±0.2 | Dimensional Tolerance (mm): |
| Wire Grid | Construction: |
| ±1.0 | Alignment Tolerance (°): |
| 12.50 | Width (mm): |

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: <input type="checkbox"/> |
| 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.