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12.5 x 12.5mm, Protective Overcoat Wire Grid Polarizer



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

£190⁴⁰

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Volume Pricing	
Qty 1-10	£190.40 each
Qty 11+	£162.40 each
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i Prices shown are exclusive of VAT/local taxes

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

Clear Aperture CA (mm):

10.5 x 10.5	
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:
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Environmental & Durability Factors

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