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Visible, 0.5-2.5mm FL, Visible Metalens Array



Stock #86-933 NEW CONTACT US

⊖ 1 ⊕ £680⁰⁰

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Volume Pricing	
Qty 1-9	£680.00 each
Qty 10+	£612.00 each
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ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Note:
Black absorptive aperture applied to metasurface

Physical & Mechanical Properties

Thickness (mm):
0.70 ±0.07

Outer Dimensions (mm):
20.0 x 20.0

Inner Diameter (mm):

1

Optical Properties

Effective Focal Length EFL (mm):

0.50 , 2.5 ±0.5%

Substrate:

Eagle XG

Coating:

Broadband 420-670nm AR Coating, backside
Protective Overcoat, frontside

Coating Specification:

Broadband 420-670nm AR-Coating (Back surface only)
 $R_{\text{rms}} \leq 1\%$ from 420-670nm
 $R_{\text{avg}} \leq 0.4\%$ from 420-670nm

Design Wavelength DWL (nm):

532, 632

Index of Refraction (n_d):

1.5198 (435.8 nm), 1.5078 (643.8 nm)

Transmission (%):

70 (2.5mm FL @ 532nm) 47.5 (0.5mm FL @ 532nm)
60 (2.5mm FL @ 632nm) 46 (0.5mm FL @ 633nm)

Numerical Aperture (NA) Range:

0.196 (2.5mm FL lenses), 0.707 (0.5mm FL lenses)

Material Properties

Thermal Expansion:

$31.7 \times 10^{-7} \text{ } ^\circ\text{C}^{-1}$ (0-300°C)

Environmental & Durability Factors

Environmental Durability:

$\geq 200\text{C}$, 1000hrs

Regulatory Compliance

Certificate of Conformance:

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Product Details

- Flat, Space Saving Alternative to Traditional Lenses
- Nanostructure Design Enables Efficient Manipulation of Light
- Compact 0.7mm Thickness for Easy Integration into a Variety of Applications

Visible Metalens Plates are designed with an innovative nanostructure design to manipulate and focus light, offering a highly compact and high-performance alternative to traditional curved lenses. Featuring ultra-thin Eagle XG substrates, these lens plates are available for 532nm and 632nm design wavelengths in a range of focal lengths. These metalenses are available in a single lens construction, where an individual metalens is centered on the plate and surrounded by an absorptive aperture to reduce stray light, or an array construction, where one of each of the four smaller Metalenses are arranged on a single plate for versatility. Visible Metalens Plates are ideal for low SWaP, LIDAR, imaging, and beam shaping applications.

Note: The Metalens surface is very delicate, and contact should be avoided during cleaning and handling. Visible Metalens Plates should be cleaned only using compressed air.