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TECHSPEC[®] 50.8mm Dia. x 200mm FL, 3-12μm BBAR Coated, ZnSe Plano-Convex Lens

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TECHSPEC Zinc Selenide (ZnSe) Plano-Convex (PCX) Lenses

Stock **#11-434** [CONTACT US](#)

[Other Coating Options](#)

-

1

+

€1.395⁰⁰

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Volume Pricing	
Qty 1-10	€1.395,00 each
Qty 11-25	€1.260,00 each
Qty 26-49	€990,00 each
Need More?	Request Quote

ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Type:

Plano-Convex Lens

Physical & Mechanical Properties

Diameter (mm):

50.80 +0.00/-0.10

≤12.7	Centering, ETD (μm):
3.50 ±0.10	Center Thickness CT (mm):
2.35	Edge Thickness ET (mm):
45.72	Clear Aperture CA (mm):
Protective as needed	Bevel:
<50 RMS	Surface Roughness (□):

Optical Properties	
200.00 @ 10.6μm	Effective Focal Length EFL (mm):
198.55	Back Focal Length BFL (mm):
BBAR (3000-12000nm)	Coating:
Ravg ≤3.0% @ 3 - 12μm	Coating Specification:
Coherent® Infrared ZnSe	Substrate: □
40-20	Surface Quality:
λ	Power (P-V) @ 632.8nm:
λ/20	Irregularity (P-V) @ 10.6μm:
280.54	Radius R ₁ (mm):
3.94	f/#:
0.13	Numerical Aperture NA:
3000 - 12000	Wavelength Range (nm):
<0.0005 @ 10.6μm	Bulk Absorption Coefficient (cm ⁻¹):

Electrical	
λ/10	Power (P-V) @ 10.6μm:

Regulatory Compliance	
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 242:

Custom

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

Product Details

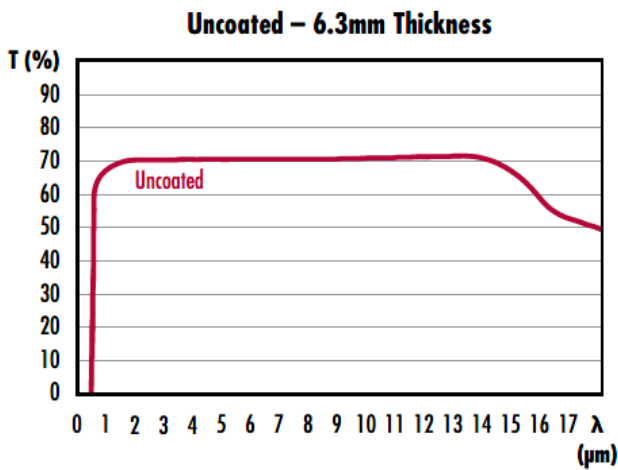
- Edmund Optics® Designed, Coherent® Manufactured
- Premier Grade ZnSe Material
- Uncoated or Broadband AR Coating Options

TECHSPEC® Zinc Selenide (ZnSe) Plano-Convex (PCX) Lenses are designed for focusing or collimation applications in the mid-wave and longwave infrared spectrum. Manufactured by Coherent®, these lenses feature Infrared ZnSe material with <0.0005cm⁻¹ bulk absorption at 10.6μm and are available uncoated or with a variety of broadband anti-reflection coating options. The 8-12μm coating is ideal for use with CO₂ lasers and thermal camera applications, whereas the dual band 3-12μm coating is ideal for hyperspectral applications. TECHSPEC® Zinc Selenide PCX Lenses feature an irregularity of <λ/20 at 10.6μm, 40-20 surface quality, and <50Å surface roughness. Three diameter options are available, with effective focal lengths ranging from 12.7mm to 250mm.

Notes: II-VI Incorporated is now Coherent Corp.

Special care should be taken when handling Zinc Selenide as it is a toxic material. Always wear rubber or plastic gloves to avoid risk of contamination.

Technical Information



AR COATED ZINC SELENIDE																	
ZnSe with 3-12μm AR Coating Typical Transmission <table border="1"><caption>Approximate data for ZnSe with 3-12μm AR Coating</caption><thead><tr><th>λ (μm)</th><th>T (%)</th></tr></thead><tbody><tr><td>3</td><td>95</td></tr><tr><td>4</td><td>97</td></tr><tr><td>6</td><td>96</td></tr><tr><td>8</td><td>95</td></tr><tr><td>10</td><td>96</td></tr><tr><td>12</td><td>94</td></tr><tr><td>14</td><td>85</td></tr></tbody></table> Typical transmission of a ZnSe window with BBAR (3000-12000nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{avg} < 5.0\%$ @ 3 - 12μm Data outside this range is not guaranteed and is for reference only. Click Here to Download Data	λ (μm)	T (%)	3	95	4	97	6	96	8	95	10	96	12	94	14	85	
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Special Handling

These optics require special handling to avoid damage and ensure long-term performance. Proper handling, cleaning, and storage are essential to maintain optical quality. Explore our [Optics Cleaning Resources](#) for step-by-step guides and best practices. For personalized assistance, [Email us](#) or [Chat](#) with our technical support team.



Component Handling Tools

Compatible Mounts

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