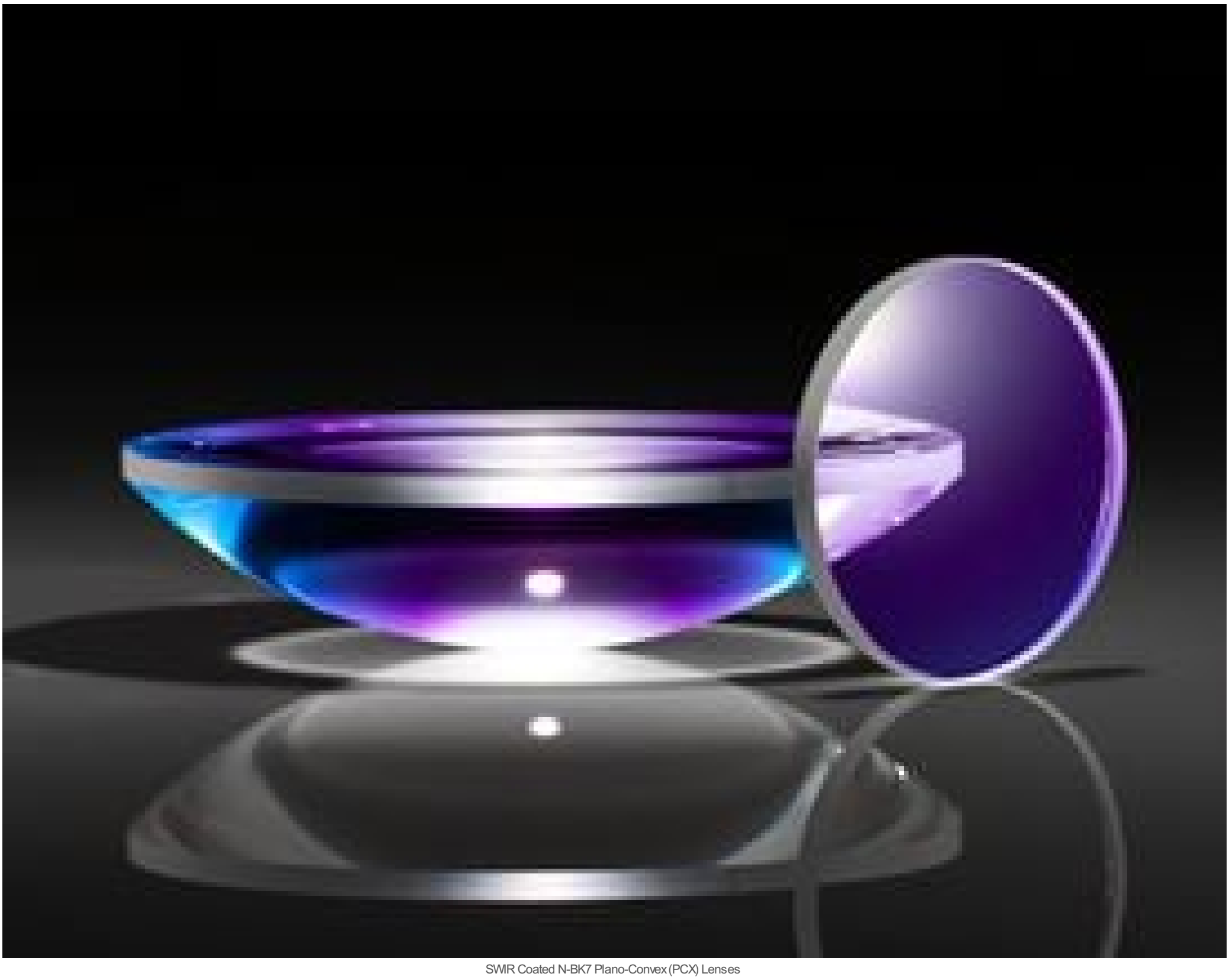
TECHSPEC® 50mm Dia. x 200mm FL, SWIR Coated N-BK7 PCX Lens



SWIR Coated N-BK7 Plano-Convex (PCX) Lenses

Stock **#70-279** **2 In Stock**

- 1 + C$129.28

ADD TO CART

Volume Pricing	
Qty 1-9	**C$129.28** each
Qty 10-24	**C$116.42** each
Qty 25-49	**C$103.57** each
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SPECIFICATIONS

General

Type:

Plano-Convex Lens

Physical & Mechanical Properties

Diameter (mm):
50.00 +0.00/-0.025

Bevel:
Protective as needed

Center Thickness CT (mm):
5.07 ±0.10

Centering (arcmin):
<1

Clear Aperture CA (mm):
45.00

Edge Thickness ET (mm):
2.00

Optical Properties

Effective Focal Length EFL (mm):
200.00 ±1% and/or 587.6nm

Substrate:
N-BK7

f/#:
4.00

Numerical Aperture NA:
0.13

Coating:
BBAR (1650-3000nm)

Wavelength Range (nm):
1650 - 3000

Back Focal Length BFL (mm):
196.76

Coating Specification:
R_{avg} <1% @ 1650 - 3000nm @ 0° AOI
R_{abs} <2% @ 1650 - 3000nm @ 0° AOI

Radius R_1 (mm):
103.36

Surface Quality:
40-20

Power (P-V) @ 632.8nm:
1.5/λ

Irregularity (P-V) @ 632.8nm:
λ/4

Regulatory Compliance

Certificate of Conformance:
View

PRODUCT DETAILS

- Low Cost Alternative to Silicon, ZnSe, and Germanium Lenses
- Suitable for Applications in the 1650 – 2500nm Wavelength Range
- Various Coating Options: Uncoated, MgF_2, VIS 0°, VIS-NIR, NIR I, NIR II, VIS-EXT, and YAG-BBAR

TECHSPEC® SWIR Coated N-BK7 Plano-Convex (PCX) Lenses have a positive focal length, making them ideal for collecting and focusing light in imaging applications. Featuring an AR Coating designed to provide less than 0.1% reflection from 1650 – 3000nm, these lenses are ideal for applications utilizing InGaAs sensors with detection ranges up to 2500nm. TECHSPEC® SWIR Coated N-BK7 Plano-Convex (PCX) Lenses are a low cost, lightweight alternative to common infrared lenses manufactured from Silicon, Zinc Selenide, and Germanium substrates. Identical designs of these lenses are also offered uncoated or with broadband anti-reflective (BBAR) coatings, which include MgF_2, VIS 0°, VIS-NIR, NIR I, NIR II, VIS-EXT, and YAG-BBAR. **Note:** While the coating is designed to provide low reflection out to 3000nm, N-BK7's reduced transmission above 2200nm should be considered when integrating these lenses into sensitive applications.

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.**