

TECHSPEC® 45mm, Aluminum & MgF₂ Coated, N-BK7 Right Angle Prism



N-BK7 Right Angle Prisms

Stock **#45-396** **9 In Stock**

⊖ 1 ⊕ **\$296⁰⁰**

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Volume Pricing	
Qty 1-5	\$296.80 each
Qty 6-25	\$238.00 each
Qty 26-49	\$222.60 each
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Product Downloads

General

Right Angle Prism **Type:**

Physical & Mechanical Properties

Dimensional Tolerance (mm):
±0.1

Bevel:
Protective as needed

Length of Hypotenuse (mm):

63.60

Length of Legs (mm):

45.00

Optical Properties

Coating:

MgF₂ & Aluminized

Substrate:

N-BK7

Surface Quality:

60-40

Angle Tolerance (arcmin):

±2

Image Orientation:

Left-Handed

Coating Specification:

Hypotenuse: R_{avg} >85% @ 400 - 700nm
Legs: R_{avg} ≤1.75% @ 400 - 700nm

Ray Deviation (°):

90

Wavelength Range (nm):

400 - 700

Damage Threshold, By Design:

Hypotenuse: 0.3 J/cm² @ 532nm & 1064nm, 10ns
Legs: 10 J/cm² @ 532nm, 10ns

Power (fringes) @ 632.8nm:

1.25

Irregularity (fringes) @ 632.8nm:

0.50

Regulatory Compliance

RoHS 2015:

Compliant

Certificate of Conformance:

[View](#)

Reach 235:

Compliant

Need different specs or modifications?

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

- Ray Deviation of 90°
- Left Handed Image
- Available with Aluminized and AR Coated Faces
- Additional [Right Angle Prism](#) Options Available

TECHSPEC® N-BK7 Right Angle Prisms are made from precision N-BK7 for use in a variety of visible light applications. Right angle prisms are generally used to bend image paths or redirect light at 90°. This produces a left-handed image, and depending on the orientation of the prism, the image may be inverted or reverted. TECHSPEC® N-BK7 Right Angle Prisms can also be used in combination for image/beam displacement. These right-angle prisms are additionally offered with aluminized and AR Coated surfaces.

Technical Information



Right Angle Prism Ray Path



Right Angle Prism Ray Path



Right Angle Prism Tunnel Diagram



Right Angle Prism Tunnel Diagram

