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**TECHSPEC® 50.0mm Dia. x 175.0mm FL, YAG-BBAR, Inked, Plano-Convex Lens**



YAG-BBAR Coated Plano-Convex (PCX) Lenses



Stock **#88-923-INK** [CONTACT US](#)

[Other Coating Options](#)

1  MRP ₹9,399

Price inclusive of all taxes

**ADD TO CART**

Volume Pricing	
Qty 1-9	₹9,399 each
Qty 10-24	₹8,443 each
Qty 25-49	₹7,540 each
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**General**

Plano-Convex Lens **Type:**

**Physical & Mechanical Properties**

50.00 ±0.025	<b>Diameter (mm):</b>
<1	<b>Centering (arcmin):</b>
9.00 ±0.10	<b>Center Thickness CT (mm):</b>
5.48	<b>Edge Thickness ET (mm):</b>
49	<b>Clear Aperture CA (mm):</b>
Protective as needed	<b>Bevel:</b>

## Optical Properties

175.00 @587.6nm	<b>Effective Focal Length EFL (mm):</b>
169.05	<b>Back Focal Length BFL (mm):</b>
YAG-BBAR (500-1100nm)	<b>Coating:</b>
R <sub>abs</sub> <0.25% @ 532nm R <sub>abs</sub> <0.25% @ 1064nm R <sub>avg</sub> <1.0% @ 500 - 1100nm	<b>Coating Specification:</b>
N-BK7	<b>Substrate:</b> <input type="checkbox"/>
40-20	<b>Surface Quality:</b>
1.5λ	<b>Power (P-V) @ 632.8nm:</b>
λ/4	<b>Irregularity (P-V) @ 632.8nm:</b>
±1	<b>Focal Length Tolerance (%):</b>
90.44	<b>Radius R<sub>1</sub> (mm):</b>
3.5	<b>f#:</b>
0.14	<b>Numerical Aperture NA:</b>
500 - 1100	<b>Wavelength Range (nm):</b>
5 J/cm <sup>2</sup> @ 532nm, 10ns	<b>Damage Threshold, By Design:</b> <input type="checkbox"/>

## Regulatory Compliance

View	<b>Certificate of Conformance:</b>
Japan	<b>Country of Origin:</b>
Edmund Optics India Private Limited 267, Greystone Building, Second Floor, 6th Cross Rd, Binnamangala, Stage 1, Indiranagar, Bengaluru, Karnataka, India 560038 Phone: +91- 80-6845 0000	<b>Imported By:</b>

## 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

- Optimized for R<0.25% @ Both 532nm and 1064nm
- AR Coated to Provide <1.0% Reflectance per Surface for 500 - 1100nm
- Designed for 0° Angle of Incidence
- Various PCX Coating Options: [Uncoated](#), [MgF<sub>2</sub>](#), [VIS 0°](#), [VIS-NIR](#), [NIR I](#), [NIR II](#), and [VIS-EXT](#)

TECHSPEC® YAG-BBAR Coated Plano-Convex (PCX) Lenses have a positive focal length, making them ideal for collecting and focusing light in imaging applications. They are also useful in a variety of applications involving emitters,

## Technical Information



N-BK7	
<p style="text-align: center;"><b>Uncoated N-BK7 Typical Transmission</b></p> <p>The graph shows the typical transmission of a 3mm thick, uncoated N-BK7 window. The Y-axis is T (%) from 70 to 100. The X-axis is Wavelength (nm) from 200 to 2200. The transmission is low (around 70%) at 200 nm, rises sharply to about 92% by 400 nm, and remains relatively constant between 90% and 92% up to 2200 nm.</p>	<p>Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra.</p> <p><a href="#">Click Here to Download Data</a></p>
<p style="text-align: center;"><b>N-BK7 with MgF<sub>2</sub> Coating Typical Transmission</b></p> <p>The graph shows the typical transmission of a 3mm thick N-BK7 window with MgF<sub>2</sub> coating. The Y-axis is T (%) from 70 to 100. The X-axis is Wavelength (nm) from 200 to 2200. A blue shaded region indicates the coating design wavelength range from approximately 350 nm to 700 nm. Transmission is low at 200 nm, rises to about 95% at 400 nm, peaks at 98% around 500 nm, and then gradually decreases to about 90% at 2200 nm.</p>	<p>Typical transmission of a 3mm thick N-BK7 window with MgF<sub>2</sub> (400-700nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{avg} \leq 1.75\% @ 400 - 700\text{nm}</math> (N-BK7)</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>
<p style="text-align: center;"><b>N-BK7 with VIS-EXT Coating Typical Transmission</b></p> <p>The graph shows the typical transmission of a 3mm thick N-BK7 window with VIS-EXT coating. The Y-axis is T (%) from 70 to 100. The X-axis is Wavelength (nm) from 200 to 1200. A blue shaded region indicates the coating design wavelength range from approximately 350 nm to 700 nm. Transmission is low at 200 nm, rises to about 95% at 350 nm, reaches a plateau of 98% between 400 nm and 700 nm, and then gradually decreases to about 75% at 1200 nm.</p>	<p>Typical transmission of a 3mm thick N-BK7 window with VIS-EXT (350-700nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{avg} \leq 0.5\% @ 350 - 700\text{nm}</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>
<p style="text-align: center;"><b>N-BK7 with VIS-NIR Coating Typical Transmission</b></p> <p>The graph shows the typical transmission of a 3mm thick N-BK7 window with VIS-NIR coating. The Y-axis is T (%) from 80 to 100. The X-axis is Wavelength (nm) from 200 to 1200. A blue shaded region indicates the coating design wavelength range from approximately 400 nm to 870 nm. Transmission is low at 200 nm, rises to about 95% at 400 nm, peaks at 98% around 880 nm, and then gradually decreases to about 80% at 1200 nm.</p>	<p>Typical transmission of a 3mm thick N-BK7 window with VIS-NIR (400-1000nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{abs} \leq 0.25\% @ 880\text{nm}</math>  <math>R_{avg} \leq 1.25\% @ 400 - 870\text{nm}</math>  <math>R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}</math></p>



Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

**N-BK7 with VIS 0° Coating  
Typical Transmission**



Typical transmission of a 3mm thick N-BK7 window with VIS 0° (425-675nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 0.4\% @ 425 - 675\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

**N-BK7 with YAG-BBAR Coating  
Typical Transmission**



Typical transmission of a 3mm thick N-BK7 window with YAG-BBAR (500-1100nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{abs} \leq 0.25\% @ 532\text{nm}$$

$$R_{abs} \leq 0.25\% @ 1064\text{nm}$$

$$R_{avg} \leq 1.0\% @ 500 - 1100\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

**N-BK7 with NIR I Coating  
Typical Transmission**



Typical transmission of a 3mm thick N-BK7 window with NIR I (600 - 1050nm) coating at 0° AOI.

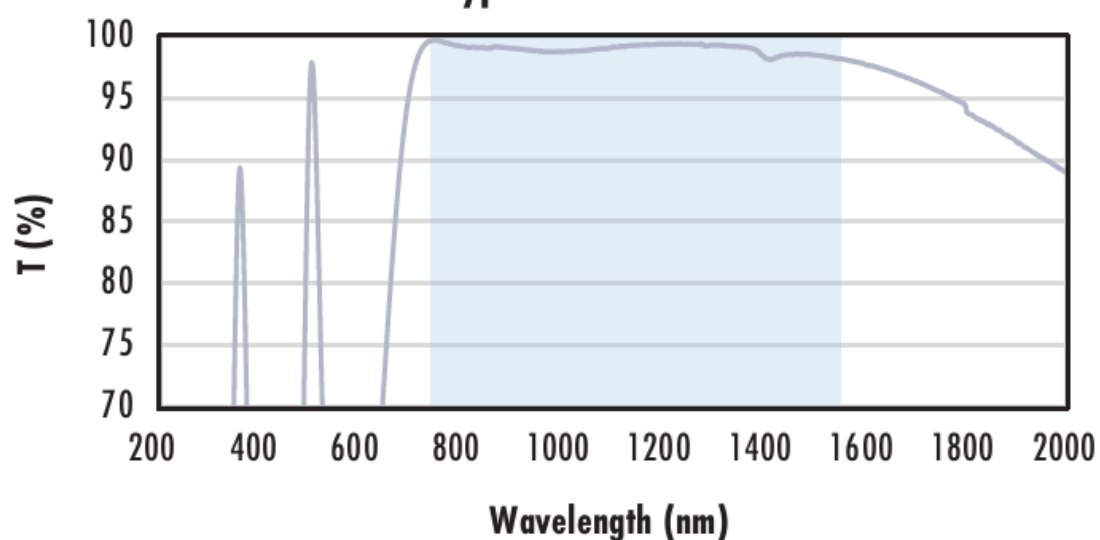
The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{avg} \leq 0.5\% @ 600 - 1050\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

**N-BK7 with NIR II Coating  
Typical Transmission**



Typical transmission of a 3mm thick N-BK7 window with NIR II (750 - 1550nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$$R_{abs} \leq 1.5\% @ 750 - 800\text{nm}$$

$$R_{abs} \leq 1.0\% @ 800 - 1550\text{nm}$$

$$R_{avg} \leq 0.7\% @ 750 - 1550\text{nm}$$

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

## Compatible Mounts

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