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TECHSPEC® 18.0mm Dia. x 27.0mm FL, Inked, YAG-BBAR Coated Plano-Convex Lens



YAG-BBAR Coated Plano-Convex (PCX) Lenses



Stock **#88-864-INK** [CONTACT US](#)

[Other Coating Options](#)

- 1 + MRP ₹6,691

! Price inclusive of all taxes

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Volume Pricing	
Qty 1-9	₹6,691 each
Qty 10-24	₹6,053 each
Qty 25-49	₹5,363 each
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General

Plano-Convex Lens **Type:**

Physical & Mechanical Properties

18.00 ±0.025	Diameter (mm):
<1	Centering (arcmin):
3.80 ±0.10	Center Thickness CT (mm):
1.41	Edge Thickness ET (mm):
17	Clear Aperture CA (mm):
Protective as needed	Bevel:

Optical Properties

27.00 @ 587.6nm	Effective Focal Length EFL (mm):
24.73	Back Focal Length BFL (mm):
YAG-BBAR (500-1100nm)	Coating:
R _{abs} <0.25% @ 532nm R _{abs} <0.25% @ 1064nm R _{avg} <1.0% @ 500 - 1100nm	Coating Specification:
N-SF5	Substrate: <input type="checkbox"/>
40-20	Surface Quality:
1.5λ	Power (P-V) @ 632.8nm:
λ/4	Irregularity (P-V) @ 632.8nm:
±1	Focal Length Tolerance (%):
18.16	Radius R₁ (mm):
1.5	f#:
0.33	Numerical Aperture NA:
532 - 1100	Wavelength Range (nm):
5 J/cm ² @ 532nm, 10ns	Damage Threshold, By Design: <input type="checkbox"/>

Regulatory Compliance

View	Certificate of Conformance:
Japan	Country of Origin:
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	Imported By:

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](#), [MgF₂](#), [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;">Uncoated N-BK7 Typical Transmission</p> <p>The graph shows the typical transmission of a 3mm thick, uncoated N-BK7 window. The Y-axis is Transmission T (%) from 70 to 100, and the X-axis is Wavelength (nm) from 200 to 2200. The transmission starts at approximately 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>Click Here to Download Data</p>
<p style="text-align: center;">N-BK7 with MgF₂ Coating Typical Transmission</p> <p>The graph shows the typical transmission of a 3mm thick N-BK7 window with MgF₂ coating. The Y-axis is Transmission T (%) from 70 to 100, and the X-axis is Wavelength (nm) from 200 to 2200. A blue shaded region highlights the design wavelength range from 400 nm to 700 nm. Transmission is approximately 95% in this range and slightly higher (around 98%) at 500 nm. Outside this range, transmission decreases, reaching about 90% at 2200 nm.</p>	<p>Typical transmission of a 3mm thick N-BK7 window with MgF₂ (400-700nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p>$R_{avg} \leq 1.75\% @ 400 - 700\text{nm}$ (N-BK7)</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p>Click Here to Download Data</p>
<p style="text-align: center;">N-BK7 with VIS-EXT Coating Typical Transmission</p> <p>The graph shows the typical transmission of a 3mm thick N-BK7 window with VIS-EXT coating. The Y-axis is Transmission T (%) from 70 to 100, and the X-axis is Wavelength (nm) from 200 to 1200. A blue shaded region highlights the design wavelength range from 350 nm to 700 nm. Transmission is approximately 98% in this range and slightly higher (around 99%) at 500 nm. Outside this range, transmission decreases, reaching about 78% 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>$R_{avg} \leq 0.5\% @ 350 - 700\text{nm}$</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p>Click Here to Download Data</p>
<p style="text-align: center;">N-BK7 with VIS-NIR Coating Typical Transmission</p> <p>The graph shows the typical transmission of a 3mm thick N-BK7 window with VIS-NIR coating. The Y-axis is Transmission T (%) from 80 to 100, and the X-axis is Wavelength (nm) from 200 to 1200. A blue shaded region highlights the design wavelength range from 400 nm to 1000 nm. Transmission is approximately 98% in this range, with a slight dip at 880 nm. Outside this range, transmission decreases, reaching 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>$R_{abs} \leq 0.25\% @ 880\text{nm}$ $R_{avg} \leq 1.25\% @ 400 - 870\text{nm}$ $R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}$</p>



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

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**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.

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**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.

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Compatible Mounts
