

TECHSPEC[®] 18.0mm Dia. x 27.0mm FL, NIR I Coated, Plano-Convex Lens



Stock **#48-753** 20+ In Stock

☐ [Other Coating Options](#)

-

1

+

€48^{.50}

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Volume Pricing	
Qty 1-9	€48,50 each
Qty 10-24	€43,50 each
Qty 25-49	€38,75 each
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 Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Plano-Convex Lens

Type:

Physical & Mechanical Properties

18.00 +0.0/-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):
NIR I (600-1050nm)	Coating:
R _{avg} ≤0.5% @ 600 - 1050nm	Coating Specification:
N-SF5	Substrate: □
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 R ₁ (mm):
1.5	f/#:
0.33	Numerical Aperture NA:
600 - 1050	Wavelength Range (nm):
7 J/cm ² @ 1064nm, 10ns	Damage Threshold, By Design: □

Regulatory Compliance	
Compliant	RoHS 2015:
Compliant	Reach 219:
View	Certificate of Conformance:

Product Details

- AR Coated to Provide <0.5% Reflectance per Surface for 600 - 1050nm
- Designed for 0° Angle of Incidence
- Various PCX Coating Options: [Uncoated](#), [MgF₂](#), [VIS 0°](#), [VIS-NIR](#), [NIR II](#), [VIS-EXT](#), and [YAG-BBAR](#)

TECHSPEC® NIR I 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, detectors, lasers, and fiber optics. TECHSPEC® NIR I Coated Plano-Convex (PCX) Lenses are available in a wide variety of diameters and focal lengths. Identical designs of these PCX lenses are also offered [uncoated](#) or with broadband anti-reflective (BBAR) coatings, which include [MgF₂](#), [VIS 0°](#), [VIS-NIR](#), [NIR II](#), [VIS-EXT](#), and [YAG-BBAR](#).

Technical Information



N-BK7																													
Uncoated N-BK7 Typical Transmission <table border="1"><caption>Approximate data for Uncoated N-BK7 Typical Transmission</caption><thead><tr><th>Wavelength (nm)</th><th>Transmission T (%)</th></tr></thead><tbody><tr><td>200</td><td>70</td></tr><tr><td>300</td><td>85</td></tr><tr><td>400</td><td>92</td></tr><tr><td>600</td><td>92</td></tr><tr><td>800</td><td>92</td></tr><tr><td>1000</td><td>92</td></tr><tr><td>1200</td><td>92</td></tr><tr><td>1400</td><td>92</td></tr><tr><td>1600</td><td>92</td></tr><tr><td>1800</td><td>92</td></tr><tr><td>2000</td><td>91</td></tr><tr><td>2200</td><td>89</td></tr></tbody></table>	Wavelength (nm)	Transmission T (%)	200	70	300	85	400	92	600	92	800	92	1000	92	1200	92	1400	92	1600	92	1800	92	2000	91	2200	89	Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra. Click Here to Download Data		
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provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

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- High-precision surface quality and flatness
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Compatible Mounts
