

TECHSPEC[®] 12.5mm Dia. 1° Beam Dev. Fused Silica Wedge Prism 1064nm Laser V-Coat



TECHSPEC Fused Silica Wedge Prisms

Stock **#39-124** **1 In Stock**

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1

+

S\$232⁴⁰

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Volume Pricing	
Qty 1-5	S\$232.40 each
Qty 6-25	S\$186.20 each
Qty 26-49	S\$173.60 each
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General

Note:

Specificy this is S1 & S2 power and irregularity, not the overall power of the wedge

Physical & Mechanical Properties

Diameter (mm):

12.50

Thickness (mm):

1.50	
Protective as needed	Bevel:
2° 5'55"	Wedge Angle (arcmin):
Optical Properties	
30	Angle Tolerance (arcsec):
Laser V-Coat (1064nm)	Coating:
1064	Design Wavelength DWL (nm):
Fused Silica (Corning 7980)	Substrate: ☐
20-10	Surface Quality:
Beam Deviation	Image Orientation:
R _{abs} <0.25% @ 1064nm	Coating Specification:
15 J/cm ² @ 1064nm, 20ns, 20Hz	Damage Threshold, By Design: ☐
0.50	Power (fringes) @ 632.8nm:
0.20	Irregularity (fringes) @ 632.8nm:
1.00	Ray Deviation @ 355nm (°):
1.74	Power (diopters):
2.1°	Wedge Angle (°):
Material Properties	
0.52	Coefficient of Thermal Expansion CTE (10 ⁻⁶ /°C):
Regulatory Compliance	
Compliant	RoHS 2015:
Compliant	Reach 209:
View	Certificate of Conformance:

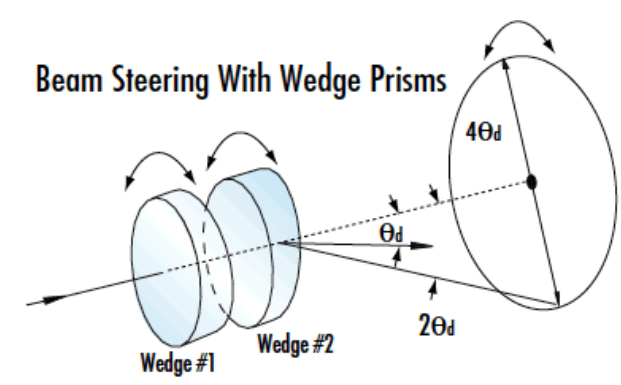
Product Details

- Deviates Laser Beam Path from 0.5° - 5.0°
- Ideal for UV to NIR Beam Steering Applications from 250 to 1064nm
- Ideal for High Power Beam Steering Applications

TECHSPEC® Fused Silica Wedge Prisms are designed for a range of laser beam steering applications requiring UV-VIS or first through fourth Nd:YAG harmonic Anti-Reflection Coatings. They are optimized to ensure the highest level of system performance using tightly controlled specifications including *λ*/10 surface flatness, 20-10 surface quality, and a wedge tolerance of 15 or 30 arcseconds. The Nd:YAG coated versions feature high transmittance and guaranteed laser damage thresholds specific to the design wavelength. TECHSPEC® Fused Silica Wedge Prisms utilize a wedge design to deviate laser beam path from 0.5° – 5°. By creating a risley prism pair using two wedge prisms with the same ray deviation, custom beam steering up to two times the wedge deviation is possible. A low coefficient of thermal expansion ensures accurate beam steering in high power laser applications.

Note: Power Diopter is defined as 1cm deviation at a distance of 1m from the prism. TECHSPEC® Wedge Prisms are also available in [N-BK7 versions](#).

Technical Information





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](#).
