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TECHSPEC® **5X, Ultrafast-Enhanced Silver Canopus® Reflective Beam Expander**
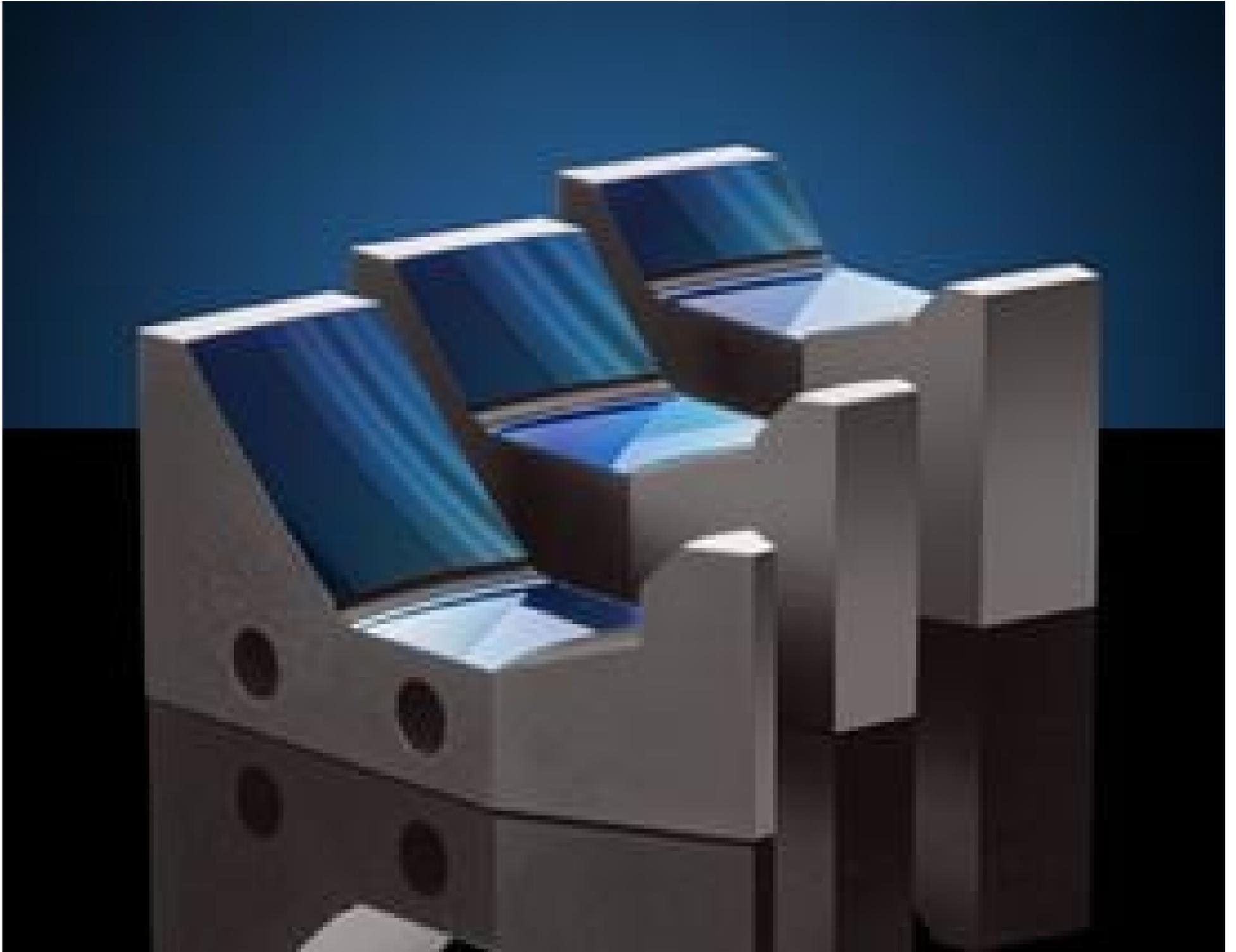
TECHSPEC® Canopus™ Reflective Beam Expanders
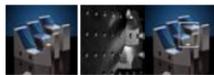
Stock **#13-075**   **4 In Stock**

(-)   1   (+)   **C$973**.⁰⁰

ADD TO CART

Volume Pricing	
Qty 1-5	**C$973.00** each
Qty 6+	**C$861.00** each
Need More?	Request Quote

Product Downloads

General

Type:	
Beam Expander	
Style:	
Fixed Magnification	

Physical & Mechanical Properties

Height (mm):

	25.4
Length (mm):	
78.30	
Weight (g):	
94	
Width (mm):	
38.10	
Surface Roughness (□):	
<50 RMS	

Optical Properties

Entrance Aperture (mm):	
4	
Exit Aperture (mm):	
20	
Expansion Power:	
5X	
Substrate: □	
Aluminum 6061-T6	
Surface Quality:	
40-20	
Angle of Incidence (°):	
0	
Coating:	
Ultrafast-Enhanced Silver	
Design Wavelength DWL (nm):	
Broadband	
Wavelength Range (nm):	
600 - 1050	

Coating Specification:
R_{avg} >99% @ 600 - 1000nm, 0°
R_s >99% @ 540 - 1000nm, 45°
R_p >98.5% @ 730 - 870nm, 45°

Damage Threshold, Reference: □
0.3 J/cm^2 @ 800nm, 48fs, 100Hz, 1 pulse (typical)
0.16 J/cm^2 @ 800nm, 48fs, 100Hz, 1000 pulses (typical)

Wavefront Error, P-V:
≤λ/8 on-axis for a 1mm Dia. Input Beam

GDD Specification:
0 ±20fs^2 @ 600 - 1050nm

Damage Threshold, Pulsed:
0.3 J/cm^2 @ 800nm, 48fs, 100Hz, 1 pulse (typical)
0.16 J/cm^2 @ 800nm, 48fs, 100Hz, 1000 pulses (typical)

Regulatory Compliance

Certificate of Conformance:
View

Product Details

- HR Coated for UV, Visible, and IR Applications from 250nm to 10µm
- Multiple Reflective Magnifications from 2X to 5X
- Monolithic Design for Reduced Thermal Effects and **Simplified Alignment**
- Manufactured Using Patented Diamond Turning Technique

TECHSPEC® Canopus® Reflective Beam Expanders are ideal for applications requiring broadband or achromatic beam expansion and a wide variety of light sources. The all-reflective design enables these beam expanders to be used with a variety of lasers including tunable, ultraviolet, and ultrafast sources, while the innovative design ensures high precision with minimal wavefront distortion. A variety of integrated design elements, including reflective flats, threaded holes, and thru-holes, simplify alignment, mounting, and integration into any laser application. The monolithic design ensures performance and stability independent of changes in temperature. TECHSPEC Canopus Reflective Beam Expanders are available in 2X, 3X, and 5X magnifications, along with coating options for the UV, Visible, and IR spectra.

For more cost sensitive applications, Edmund Optics also offers **TECHSPEC Scorpii® Nd:YAG Beam Expanders**. For HeNe laser applications, **TECHSPEC Arcturus® HeNe Beam Expanders** are available. For applications where rotating optics are acceptable, the **TECHSPEC Vega® Laser Line Beam Expanders** and **TECHSPEC Vega® Broadband Beam Expanders** are available. For higher precision applications where sliding optics are necessary, please see our **TECHSPEC Draconis® Nd:YAG Laser Line Beam Expanders** or **TECHSPEC Draconis® Broadband Beam Expanders**.

Compatible Light Sources

- UV Lasers (Excimer, Nd:YAG, etc)
- Infrared Lasers (Nd:YAG, CO_2, Quantum Cascade, etc)
- Ultrafast Lasers (Ti:Sapphire, Fiber, etc)
- Tunable Lasers (Ti:Sapphire, Dye, Quantum Cascade, etc)
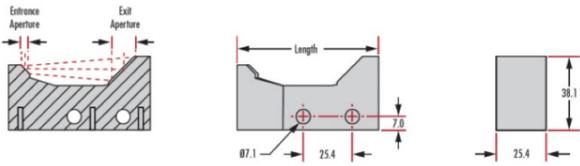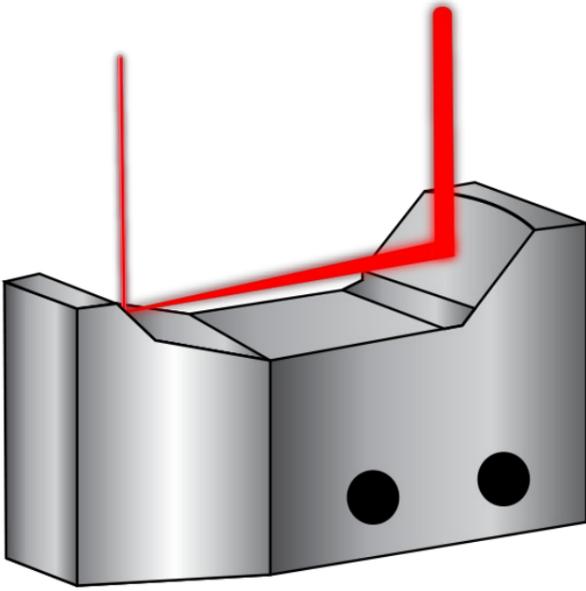
Custom

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.**