

TECHSPEC® 5X, NIR Draconis® Broadband Beam Expander



5X Beam Expander NIR Broadband, #59-135

Stock #59-135 **1 In Stock**

- 1 + €1.010⁰⁰

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Volume Pricing	
Qty 1-4	€1.010,00 each
Qty 5-24	€895,00 each
Qty 25-99	€795,00 each
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ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Beam Expander **Type:**

Fixed Magnification **Style:**

Physical & Mechanical Properties

Length (mm):

85.00

Weight (g):

129

Housing Diameter (mm):

46

Optical Properties

Entrance Aperture (mm):

10

Exit Aperture (mm):

33

Expansion Power:

5X

Focus Range (mm):

1.5m - ∞

Substrate:

Fused Silica (Corning 7980)

Angle of Incidence (°):

0

Coating:

BBAR (750-1100nm)

Design Wavelength DWL (nm):

Broadband

Transmitted Wavefront, P-V:

M10 @ 1mm Input Beam, M4 @ 3mm Input Beam

Reflection at CWL (%):

Absolute <0.5

Wavelength Range (nm):

750 - 1100

Coating Specification:

R_{avg} <0.5% @ 780 - 950nm
R_{avg} <1.0% @ 750 - 1100nm

Divergence Adjustment:

Non-Rotating Optics

Threading & Mounting

Mounting Threads:

Input: Male C-Thread (1" x 32 TPI)
Output: Male T2-Thread (M42 x 0.75)

Regulatory Compliance

Certificate of Conformance:

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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

- AR Coated for Broadband Tunable Laser Sources
- Fixed Magnifications Available from 3X to 10X
- Divergence Adjustable through Non-Rotating Optical Design for Reduced Beam Wander

TECHSPEC® Draconis® Broadband Beam Expanders feature high performance optical designs that have been optimized and tested for broadband use. These beam expanders eliminate the need for critical alignment due to their diffraction-limited performance over large input beam diameters and wide acceptance angles. Their broadband designs enable use with multiple laser lines or tunable lasers, reducing the number of beam expanders required in optical systems. Additionally, the optical design ensures internal focusing of ghost images is not present, which allows compatibility with high power lasers. Mechanical adjustment through a sliding optical design corrects errors in divergence or collimation. TECHSPEC Draconis Broadband Beam Expanders' C and T input/output mounting threads are compatible with Edmund Optics' line of threaded mounting components, or mounting can be achieved using an optional mounting clamp.

TECHSPEC Draconis® Nd:YAG Laser Line Beam Expanders are also available. 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 broadband or ultrafast applications, TECHSPEC Canopus® Reflective Beam Expanders are available.

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Technical Information

