

TECHSPEC® 2X, VIS-NIR Vega® Broadband Beam Expander



TECHSPEC® Vega™ Broadband Beam Expanders

Stock #39-736 In Stock

⊖ 1 ⊕ €430.⁰⁰

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Qty 1+

€430,00

Volume Pricing

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! Prices shown are exclusive of VAT/local taxes

Product Downloads



SPECIFICATIONS

General

Type:
Beam Expander

Style:
Fixed Magnification

Physical & Mechanical Properties

Length (mm):
88.90

Weight (g):
74

Housing Diameter (mm):
29.95

Optical Properties

Angle of Incidence (°):
0

Coating:
Laser VIS-NIR (500-1090nm)

Design Wavelength DWL (nm):
Broadband

Entrance Aperture (mm):
8

Exit Aperture (mm):
23

Expansion Power:
2X

Substrate:
[Fused Silica](#) (Coming 7980)

Transmission (%):
>96.0 (nominal)

Transmitted Wavefront, P-V:
λ/10 for 4.0mm input beam (nominal, λ = DWL)

Coating Specification:
 $R_{avg} \leq 1.5\%$ @ 500 - 1090nm @ 0° AOI

Wavelength Range (nm):
500 - 1090

Damage Threshold, By Design:
2 J/cm² @ 1064nm, 20ns, 20Hz

Divergence Adjustment:
Rotating Optics

Damage Threshold, Pulsed:
2 J/cm² @ 1064nm, 20ns, 20Hz

Threading & Mounting

Mounting Threads:
Input: Male M30 x 1
Output: Female M27 x 0.5

Regulatory Compliance

RoHS:
[Compliant](#)

Certificate of Conformance:
[View](#)

PRODUCT DETAILS

- AR Coated for Broadband Tunable Laser Sources
- Fixed Magnifications Available from 1.5X to 20X
- Divergence Adjustable through Rotating Optical Design

TECHSPEC® Vega® Broadband Beam Expanders are designed for demanding tunable laser sources. These compact beam expanders are optimized at a wide range of wavelengths, with designs achieving λ/10 transmitted wavefront error and no internally focusing ghost images for compatibility with high power lasers. TECHSPEC Vega Broadband Beam Expanders are easily integrated into prototype and advanced applications while maintaining quality across the adjustment range. They are ideal for medical laser applications employing Thulium and Holmium sources.

Note: The length of these beam expanders will change upon divergence adjustment, typically by 1 to 2mm from the specified length.

[TECHSPEC Vega® 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 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](#). For broadband or ultrafast applications, [TECHSPEC Canopus® Reflective Beam Expanders](#) are available.

To learn more about the difference between the 2μm and 2μm low OH⁻ content beam expanders, along with the different types of fused silica, review our [UV vs. IR Grade Fused Silica application note](#).

