

# TECHSPEC® DRACONIS™ Nd:YAG LASER LINE BEAM EXPANDERS

532nm • 3X #59-125

- Designed for Nd:YAG Wavelengths 532nm and 1064nm
- $\lambda/10$  Transmitted Wavefront
- Collimation Adjustment Using Non-Rotating Optics Minimizes Beam Wander
- TECHSPEC® Draconis™ Broadband Beam Expanders Also Available



TECHSPEC® Draconis™ Nd:YAG Laser Line Beam Expanders feature high performance optical designs that have been optimized and tested for YAG laser wavelengths. These beam expanders offer diffraction-limited performance over large input beam diameters and wide acceptance angles, eliminating the need for critical alignment. The provided focus adjustment can also be used for divergence correction or collimation. Due to the lack of ghost images focusing on internal surfaces, these beam expanders ensure compatibility with high power lasers. TECHSPEC® Draconis™ Nd:YAG Laser Line 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. Laser Beam Expanders are ideal for any Nd:YAG application including laser cutting, welding, or marking.

For more information on beam expanders and their application, please see online for our Technical Resource: [Application Note on Beam Expanders](#)

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|------------------------------------|---|
| <b>Wavelength Range:</b>           | 510-555nm   |
| <b>Expansion Power:</b>            | 3X  |
| <b>Entrance Aperture:</b>          | 11mm  |
| <b>Exit Aperture:</b>              | 33mm  |
| <b>Transmitted Wavefront, P-V:</b> | $\lambda/10$ @ 532nm @ 1mm Input Beam<br>$\lambda/4$ @ 532nm @ 4mm Input Beam     |
| <b>Mounting Threads:</b>           | Input: Male C-Thread (1" x 32 TPI)<br>Output: Male T2-Thread (M42 x 0.75)         |
| <b>Substrate:</b>                  | Fused Silica  |
| <b>Housing Diameter:</b>           | 46mm  |
| <b>Length:</b>                     | 88mm  |
| <b>Angle of Incidence:</b>         | 0°  |
| <b>Coating:</b>                    | Laser V-Coat (532nm)  |
| <b>Coating Specification:</b>      | $R_{\text{rms}} < 0.25\%$ @ 531 - 533nm<br>$R_{\text{avg}} < 0.5\%$ @ 510 - 555nm |
| <b>Divergence Adjustment:</b>      | Non-Rotating Optics   |

