405/488/594 nm lasers BrightLine® triple-edge laser-flat dichroic beamsplitter





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(within US and Canada)

Your filter spectrum may differ slightly from the typical spectrum above, but is certified to meet the optical specifications noted below.



405/488/594 nm lasers BrightLine® triple-edge laser-flat dichroic beamsplitter

Optimized beamsplitters for the most popular lasers used in fluorescence imaging, including newer all-solid-state lasers. All beamsplitters in this category have exceptional reflectance at the laser wavelengths, improved ("laser-grade") flatness, and anti-reflection (AR) coatings to minimize imaging artifacts resulting from the coherent laser light.

Part Number	Size	Price1	Stock Status
Di01-R405/488/594-25x36	25.2 mm x 35.6 mm x 1.1 mm (unmounted)	\$515	In Stock
Di01-R405/488/594-22x29	22.0 mm x 29.0 mm x 1.1 mm (unmounted)	\$515	2nd Day Ship

Don't see a size you need? Contact us for custom sizing - available in less than a week (sizing fee applies).

1) US domestic pricing only. If you are ordering from outside the US, please contact your nearest regional distributor for the correct list price.

Optical Specifications

Reflection Band 1 Rabs > 94% 370 - 410 nm Reflection Band 1 (p-pol) Rabs > 90% 370 - 410 nm Reflection Band 1 (s-pol) Rabs > 98% 370 - 410 nm Edge Wavelength 1 420.4 nm Transmission Band 1 Tavg > 93% 429.5 - 462.0 nm Reflection Band 2 Rabs > 94% 473 - 491 nm Reflection Band 2 (p-pol) Rabs > 90% 473 - 491 nm Reflection Band 2 (s-pol) Rabs > 98% 473 - 491 nm Edge Wavelength 2 497.8 nm Transmission Band 2 Tavg > 93% 502.5 - 574.5 nm Reflection Band 3 Rabs > 94% 588 3 - 594 3 nm	Specification	Value
Reflection Band 1 (s-pol) Rabs > 98% 370 - 410 nm Edge Wavelength 1 420.4 nm Transmission Band 1 Tavg > 93% 429.5 - 462.0 nm Reflection Band 2 Rabs > 94% 473 - 491 nm Reflection Band 2 (p-pol) Rabs > 90% 473 - 491 nm Reflection Band 2 (s-pol) Rabs > 98% 473 - 491 nm Edge Wavelength 2 497.8 nm Transmission Band 2 Tavg > 93% 502.5 - 574.5 nm	Reflection Band 1	Rabs > 94% 370 - 410 nm
Edge Wavelength 1 420.4 nm Transmission Band 1 Tavg > 93% 429.5 - 462.0 nm Reflection Band 2 Rabs > 94% 473 - 491 nm Reflection Band 2 (p-pol) Rabs > 90% 473 - 491 nm Reflection Band 2 (s-pol) Rabs > 98% 473 - 491 nm Edge Wavelength 2 497.8 nm Transmission Band 2 Tavg > 93% 502.5 - 574.5 nm	Reflection Band 1 (p-pol)	Rabs > 90% 370 – 410 nm
Transmission Band 1 Tavg > 93% 429.5 - 462.0 nm Reflection Band 2 Rabs > 94% 473 - 491 nm Reflection Band 2 (p-pol) Rabs > 90% 473 - 491 nm Reflection Band 2 (s-pol) Rabs > 98% 473 - 491 nm Edge Wavelength 2 497.8 nm Transmission Band 2 Tavg > 93% 502.5 - 574.5 nm	Reflection Band 1 (s-pol)	Rabs > 98% 370 - 410 nm
Reflection Band 2 Rabs > 94% 473 – 491 nm Reflection Band 2 (p-pol) Rabs > 90% 473 – 491 nm Reflection Band 2 (s-pol) Rabs > 98% 473 – 491 nm Edge Wavelength 2 497.8 nm Transmission Band 2 Tavg > 93% 502.5 – 574.5 nm	Edge Wavelength 1	420.4 nm
Reflection Band 2 (p-pol) Rabs > 90% 473 – 491 nm Reflection Band 2 (s-pol) Rabs > 98% 473 – 491 nm Edge Wavelength 2 497.8 nm Transmission Band 2 Tavg > 93% 502.5 – 574.5 nm	Transmission Band 1	Tavg > 93% 429.5 - 462.0 nm
Reflection Band 2 (s-pol) Rabs > 98% 473 – 491 nm Edge Wavelength 2 497.8 nm Transmission Band 2 Tavg > 93% 502.5 – 574.5 nm	Reflection Band 2	Rabs > 94% 473 – 491 nm
Edge Wavelength 2 497.8 nm Transmission Band 2 Tavg > 93% 502.5 - 574.5 nm	Reflection Band 2 (p-pol)	Rabs > 90% 473 – 491 nm
Transmission Band 2 Tavg > 93% 502.5 – 574.5 nm	Reflection Band 2 (s-pol)	Rabs > 98% 473 – 491 nm
(A) The state of t	Edge Wavelength 2	497.8 nm
Reflection Band 3 Rahs > 94% 588 3 = 594 3 nm	Transmission Band 2	Tavg > 93% 502.5 – 574.5 nm
Trans 2 34 70 500.5 534.5 IIII	Reflection Band 3	Rabs > 94% 588.3 – 594.3 nm
Reflection Band 3 (p-pol) Rabs > 90% 588.3 – 594.3 nm	Reflection Band 3 (p-pol)	Rabs > 90% 588.3 – 594.3 nm
Reflection Band 3 (s-pol) Rabs > 98% 588.3 – 594.3 nm	Reflection Band 3 (s-pol)	Rabs > 98% 588.3 - 594.3 nm
Edge Wavelength 3 602.3 nm	Edge Wavelength 3	602.3 nm
Transmission Band 3 Tavg > 93% 612.0 – 800.0 nm	Transmission Band 3	Tavg > 93% 612.0 – 800.0 nm
Laser Wavelengths 1 375 +/- 3 nm, 405 +/- 5 nm	Laser Wavelengths 1	375 +/- 3 nm, 405 +/- 5 nm
Laser Wavelengths 2 473 +2/-0 nm, 488 +3/-2 nm	Laser Wavelengths 2	473 +2/-0 nm, 488 +3/-2 nm
Laser Wavelengths 3 593.5 nm, 594.1 nm, 594.0 +/- 0.3 nm	Laser Wavelengths 3	593.5 nm, 594.1 nm, 594.0 +/- 0.3 nm

General Filter Specifications

Specification	Value	
Angle of Incidence	45 degrees with a shift of 0.35%/degree (40 – 50 degrees)	

Cone Half-angle	0.5 degrees
Optical Damage Rating	2 J/cm ² at 532 nm (for a 532nm filter)
Flatness	Laser Flat
Steepness	Steep
Effective Index	1.85

Physical Filter Specifications (applies to standard sized parts; contact us regarding other sizes)

Specification	Value
Transverse Dimensions (L x W)	25.2 mm x 35.6 mm
Transverse Tolerance	± 0.1 mm
Filter Thickness (unmounted)	1.05 mm
Filter Thickness Tolerance (unmounted)	± 0.05 mm
Clear Aperture	≥ 80% (elliptical)
Scratch-Dig	60-40
Substrate Type	Fused Silica
Substrate Thickness (unmounted)	1.05 mm
Substrate Thickness Tolerance (unmounted)	± 0.05 mm
Orientation	Reflective surface marked with part number - Orient in direction of incoming light