# Low Order Ultra High LDT Waveplate λ/2 532nm 50.8mm Dia

Stock #70-195 CONTACT US

- 1 +

£2,184.00

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| Qty 1+ | £2,184.00 each |
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ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

STEP:step | PDF Drawing:pdf | IGES:igs | eDrawing:eprt | EO Spec Sheet | Download All

## General

| | |
|---|---|
| **Type:** | Crystalline Waveplate |

## Physical & Mechanical Properties

| | | | |
|---|---|---|---|
| **Clear Aperture CA (mm):** | >45 | **Diameter (mm):** | 50.80 +0.00/-0.25 |
| **Construction:** | Air-Spaced | **Parallelism (arcsec):** | <3 |

## Optical Properties

| | | | |
|---|---|---|---|
| **Coating:** | $R_{avg}$<0.1% on each surface | **Design Wavelength DWL (nm):** | 532 |
| **Substrate:** ⓘ | Crystal Quartz | **Retardance:** | λ/2 |
| **Surface Quality:** | 20-10 | **Transmitted Wavefront, P-V:** | <λ/10 @ 632.8mm over 38.1mm |
| **Retardance Tolerance:** | <λ/500 @ 20C | **Damage Threshold, By Design:** ⓘ | >20J/cm² @ 532nm;10ns;10 Hz |

## Threading & Mounting

| | | | |
|---|---|---|---|
| **Mount Thickness (mm):** | 6.00 +0.00/-0.25 | | |

## Regulatory Compliance

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|---|---|---|---|
| **RoHS 2015:** | Compliant | **Certificate of Conformance:** | View |
| **Reach 247:** | Compliant | | |

# Product Details

- High Laser Damage Threshold at Common Laser Processing Wavelengths
- λ/500 Retardance Tolerance
- Ideal for Material Machining Applications

Precision Waveplates for Laser Processing offer an exceptional damage threshold making them ideal for material processing and other high energy applications. These waveplates feature a premium retardance tolerance of λ/500, enabling their use in sensitive applications requiring high precision and stability. Designed as zero order, these waveplates allow for a greater than ±1% wavelength deviation due to their increased bandwidth and lower sensitivity to temperature change. Precision Waveplates for Laser Processing are available in 25.4 and 50.8mm diameters and are designed for commonly used material machining wavelengths of 532, 1030, and 1064nm. The waveplates designed for use with Nd:YAG laser wavelengths feature damage thresholds up to 35J/cm2 @ 1064nm with 10ns pulses while the waveplates designed for Yb:YAG feature damage thresholds up to 0.5 J/cm$^2$ @ 1030 nm with 200fs pulses.

## Related Products

Compact Direct Mounts

Metric Polarizer Mounts


Cotton-Tipped Swab Applicators

High Energy Quartz Waveplates

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