

# High Energy Waveplates



## Description

Altechna provides standard (air-spaced) and high power (optically bonded) waveplates. They are made from materials that has a birefringence property. Most common types are designed so ordinary ray would exhibit half ( $\lambda/2$ ) or quarter ( $\lambda/4$ ) wave retardation with respect to an extraordinary one. Such waveplates are used to rotate the plane of polarization, convert linear polarization to circular and vice versa. Such elements are used for electro-optic modulation and as a variable ratio beamsplitter, when used in conjunction with a polarization cube. Although latter two types of waveplates are the most common, Altechna offers custom retardation values on request.

## Features

- High extinction ratio
- Wide acceptance angle
- Wide temperature bandwidth
- Exceptional durability in UV applications
- Wide wavelength range available

## Typical items\*

Wavelength, nm	Product ID		
	Mount size $\varnothing 12.7 \times 6$ mm	Mount size $\varnothing 25.4 \times 6$ mm	Mount size $\varnothing 25.4 \times 6$ mm
	$\lambda/2$ retardation, clear aperture >8 mm	$\lambda/2$ retardation, clear aperture >18 mm	$\lambda/4$ retardation, clear aperture >18 mm
266		2-CPW-TSO-L2-0266	2-CPW-T40-L4-0266-W
343	2-CPW-TFO-L2-0343-S	2-CPW-TFO-L2-0343-W	2-CPW-TFO-L4-0343-W
355	2-CPW-TFO-L2-0355-S	2-CPW-TFO-L2-0355-W	2-CPW-TSO-L4-0355-W
400	2-CPW-TFO-L2-0400-S	2-CPW-TFO-L2-0400	2-CPW-TSO-L4-0400
515	2-CPW-TZO-L2-0515-S	2-CPW-TFO-L2-0515	2-CPW-TSO-L4-0515
532	2-CPW-TZO-L2-0532-S	2-CPW-TFO-L2-0532	2-CPW-TFO-L4-0532
800	2-CPW-TZO-L2-0800-S	2-CPW-TZO-L2-0800	2-CPW-TFO-L4-0800
1030	2-CPW-TZO-L2-1030-S	2-CPW-TZO-L2-1030	2-CPW-TFO-L4-1030
1064	2-CPW-TZO-L2-1064-S	2-CPW-TZO-L2-1064	2-CPW-TFO-L4-1064
1550	2-CPW-TZO-L2-1550-S	2-CPW-TZO-L2-1550	2-CPW-TZO-L4-1550

\* Customized solutions are available on request.