

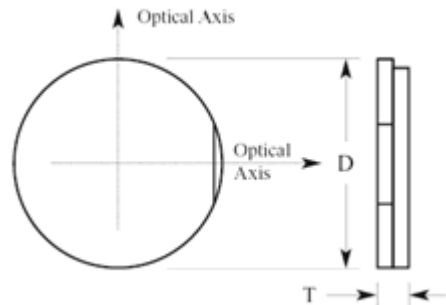
ZERO-ORDER WAVE PLATES 1/2,1/4

Zero Order Wave plates(1/2 and 1/4 wave plates) are made from two crystalline quartz plates of similar thickness, that are optically contacted together with orthogonally aligned optical axes. Retardation varies slowly with wavelength, thus they are useful with tunable or broadband sources. Retardation is a function of thickness difference between the two plates, and is essentially invariant with temperature.

Non-coated and AR coated products are available.

Standard Specifications:

Optical Material:	Crystal Quartz
Diameter Tolerance:	+0.0, -0.2mm
Wavefront Distortion:	$\lambda/8$ peak to peak
Retardation Tolerance:	$<\lambda/500$
Clear Aperture:	$>90\%$
Parallelism:	<1 arc second
Surface Quality:	20-10 scratch and dig
AR/AR Coating:	$R>0.2\%$ at central wavelength



Standard Zero-Order Waveplates

Dia(mm)	Product Number / Retardation	
	$\lambda/2$	$\lambda/4$
10.0	UQT-ZWLC0201	UQT-ZWLC0401
12.7	UQT-ZWLC0202	UQT-ZWLC0402
15.0	UQT-ZWLC0203	UQT-ZWLC0403
20.0	UQT-ZWLC0204	UQT-ZWLC0404
25.4	UQT-ZWLC0205	UQT-ZWLC0405
30.0	UQT-ZWLC0206	UQT-ZWLC0406

Please Contact [ultiQuest](#) for other dimensions in prototype and production quantities.

NOTES!

- ➔ Custom retardation and size is available upon request. And please advise us your central wavelength when you order our standard multi order wave plates
- ➔ These products can be used for the beams which wavelengths are in +/-1% of rated wavelengths.
- ➔ The surface flatness is the reflected wavefront distortion of the surface before coating.
- ➔ Be sure to wear laser safety goggles when checking optical path and adjusting optical axis.