

ZERO ORDER AIR-SPACED WAVEPLATES

- For high power laser application



Most of the Retardation Plates are available for fast off-the-shelf delivery. Check the availability at www.eksmaoptics.com



HOUSING ACCESSORIES

Polarizer Holders
840-0180
See page 8.86



SPECIFICATIONS

Material	Single crystal quartz
Optical axis	normal to facet on circumference of retarder
Clear aperture	Ø17 mm
Ring mount outer diameter	25.4 +0.0 / -0.2 mm
Wavefront distortion	$\lambda/10$ @ 633 nm
Surface quality	20-10 scratch & dig (MIL-PRF-13830B)
Parallelism	< 10 arcsec
AR coating	R < 0.5%
Laser damage threshold	10 J/cm ² , 10 nsec pulse, 1064 nm

Center wavelength, nm	Retardation $\lambda/2$		Retardation $\lambda/4$	
	Catalogue no.	Price, EUR	Catalogue no.	Price, EUR
1064	464-4205	310	464-4405	310
1030	464-4208	310	464-4408	310
800	464-4215	310	464-4415	310
780	464-4220	310	464-4420	310
532	464-4230	310	464-4430	310
515	464-4232	310	464-4432	310
400	464-4235	310	464-4435	310
355	464-4240	335	464-4440	335
343	464-4241	335	464-4441	335
266	464-4245	345	464-4445	345
257	464-4246	345	464-4446	345

ACHROMATIC AIR-SPACED WAVEPLATES



Achromatic waveplates are made from two different materials: crystal quartz and magnesium fluoride with highly efficient broadband antireflection coatings in an air spaced design.

Retardation tolerance of our achromatic waveplates is better than $\lambda/100$ over the entire wavelength range. The flat response of these waveplates is ideal for use with tunable lasers, multiple laser-line systems and other broad spectrum sources.

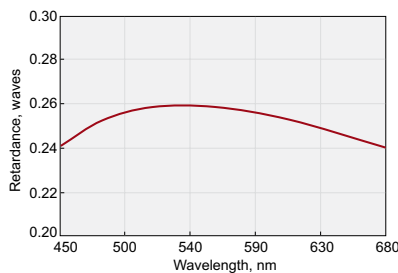
Our achromatic waveplates are available for four wavelength ranges: VIS (450-680 nm), NIR (700-1000 nm), 950-1300 nm, 1200-1650 nm. The waveplates are provided in a black anodized aluminum housing.

SPECIFICATIONS

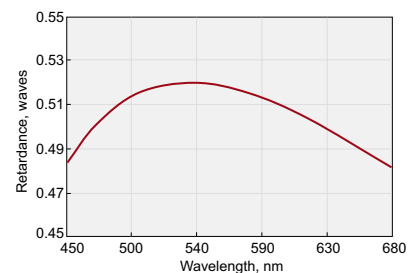
Material	Single crystal quartz and MgF ₂
Clear aperture	Ø12.7 mm
Ring mount outer diameter	25.4 +0.0 / -0.12 mm
Ring mount thickness	8.0 ± 0.2 mm
Retardation tolerance	< $\lambda/100$ over wavelength range
Surface quality	40-20 scratch & dig (MIL-PRF-13830B)
Wavefront distortion	< $\lambda/8$ @ 632 nm
Parallelism	< 1 arcmin
AR coating	R < 0.8%
Laser damage threshold	>3 J/cm ² , 10 nsec, 1064 nm typical

Operating wavelength, nm	Retardation $\lambda/2$		Retardation $\lambda/4$	
	Catalogue no.	Price, EUR	Catalogue no.	Price, EUR
450-680	467-4205	480	467-4405	480
700-1000	467-4210	480	467-4410	480
950-1300	467-4215	480	467-4415	480
1200-1650	467-4220	480	467-4420	480

Retardance Curve samples:



$\lambda/4$ @ 450-680 nm



$\lambda/2$ @ 450-680 nm