

DUAL WAVELENGTH PLATES

- Operate at both first and second Nd:YAG laser harmonics
- Retardation tolerance $< \lambda/300$

SPECIFICATIONS

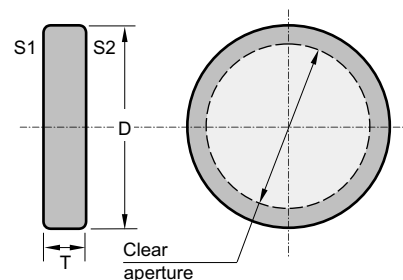
Material	Single crystal quartz
Optical axis	normal to facet on circumference of retarder
Wavefront distortion	$\lambda/10$ @ 633 nm
Clear aperture	Ø17 mm for Ø20 mm
Ring mount outer diameter	25.4 (or 25.0) +0.0 -0.12 mm
Surface quality	20-10 scratch & dig
Parallelism	< 10 arcsec
AR coating	$R < 0.5\%$
Nominal thickness of waveplate	0.2-1.2 mm

Retardation and Wavelength	Catalogue number	Price, EUR
λ @ 1064 nm + $\lambda/2$ @ 532 nm	463-4120	215
λ @ 1064 nm + $\lambda/4$ @ 532 nm	463-4140	215
$\lambda/2$ @ 1064 nm + λ @ 532 nm	463-4210	215
$\lambda/2$ @ 1064 nm + $\lambda/2$ @ 532 nm	463-4220	215
$\lambda/2$ @ 1064 nm + $\lambda/4$ @ 532 nm	463-4240	215
$\lambda/4$ @ 1064 nm + λ @ 532 nm	463-4410	215
$\lambda/4$ @ 1064 nm + $\lambda/2$ @ 532 nm	463-4420	215
$\lambda/4$ @ 1064 nm + $\lambda/4$ @ 532 nm	463-4440	215

POLARISATION PLANE ROTATORS

- Made of crystalline quartz
- Intended to rotate a beam polarisation plane strictly to an appropriate angle using the circular birefringent effect

As compared to a waveplate, a rotator has an intrinsic advantage, being independent of rotation around its own optical axis. It needs no adjustment, only to be installed normal to incident radiation. A polarisation plane rotator is normally used for the specific wavelength. It is only slightly dependent on ambient temperature.



SPECIFICATIONS

Material	Single crystal quartz
Optical axis	Normal to faces S1, S2 of rotator
Clear aperture	17 mm for 20 mm diameter
Ring mount outer diameter	$D = 25.4$ mm (or 25.0 mm) +0.0 mm -0.12 mm
Mount Thickness	$T = 6-20$ mm (depending on wavelength and rotation angle)
Surface quality	20-10 scratch & dig
Wavefront distortion	$\lambda/10$
Parallelism	< 10 arcsec
AR coating	$R < 0.2\%$ both sides

Polarisation plane rotators for any wavelength from 200 to 2300 nm are available.

Catalogue number	Wavelength, nm	Rotation angle of polarisation plane, deg	Price, EUR
470-4264	266	45	245
470-4269	266	90	245
470-4354	355	45	195
470-4359	355	90	195
470-4514	514	45	195
470-4519	514	90	195
470-4534	532	45	195
470-4539	532	90	195
470-4634	633	45	195
470-4639	633	90	195
470-4644	1064	45	215
470-4649	1064	90	215

Please contact us for other size or wavelengths requirements.