

Rochon Polarizer

Polarizers

Rochon Polarizer is made of two birefringent material prisms cemented together, which is used in applications where good polarization selectivity is required across a large range of wavelengths. Rochon polarizer separates incident beam into ordinary ray and extraordinary ray like wollaston polarizer, but extraordinary ray is straight transmitted through, while ordinary ray is transmitted with a deviation angle.

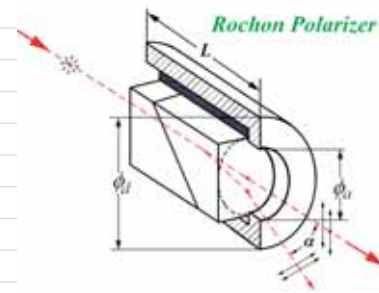
Advantages:

- Wide Wavelength Range
- High UV Transmission



Specification:

Material:	α -BBO, Calcite
Wavelength Range:	α -BBO: 190-3500 nm, Calcite: 350-2300 nm
Extinction Ratio:	α -BBO: $<5 \times 10^{-6}$; Calcite: $<5 \times 10^{-5}$
Parallelism:	<1 arc Min
Surface Quality:	20/10
Beam Deviation:	<3 arc minutes
Wavefront Distortion:	$\lambda/4$ @632.8nm
Damage Threshold:	>500 MW/cm ²
Coating:	Single MgF ₂
Mount:	Black Anodized Aluminium



1. α -BBO Rochon Polarizer

Part No.	Extinction Ratio	Separation Angle(°)	C.A. ϕ_a (mm)	O.D. ϕ_d (mm)	L ± 0.1 (mm)
RHP5-006	$<5 \times 10^{-6}$	8.0°-14° 8°@800nm	6.0	15.0	14.0
RHP5-008			8.0	25.4	16.0
RHP5-010			10.0	25.4	18.0
RHP5-015			15.0	30.0	23.0

2. Quartz Rochon Polarizer

Part No.	Extinction Ratio	Separation Angle(°)	C.A. ϕ_a (mm)	O.D. ϕ_d (mm)	L ± 0.1 (mm)
RHP8-006	$<4 \times 10^{-5}$	1.0°-1.5° 1°@980nm	6.0	15.0	36.0
RHP8-008			8.0	25.4	46.0
RHP8-010			10.0	25.4	28.0
RHP8-015			15.0	30.0	38.0