



# Rochon Polarizer



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## Rochon Polarizer

Rochon Polarizer with good price and high quality .Rochon Polarizer made of MgF2,α-BBO,Calcite ,YVO4 or Quartz optical material.

Rochon polarizer is one of the earliest designs, which is made of two birefringent material prisms cemented together. Both ordinary and extraordinary beams propagate collinearly down the optic axis in the first prism under the ordinary refractive index. Upon entering the second prism the ordinary beam experiences the same refractive index and continues undeviated. The extra-ordinary beam, however, now has a lower refractive index and is refracted at the interface. The angle of refraction is further increased at the birefringent material/air exit surface. Any separation angle can be designed for specific wavelength upon the requirement. The separation angle of standard products vs wavelength is own in the plot below.

### Rochon polarizer Features:

Optical Cemented

High Polarization Purity

Suitable for Low or High Power Application

### Rochon polarizer Specifications:

Attribute	Specification
Material:	MgF2,α-BBO,Calcite ,YVO4 or Quartz
Wavelength Range:	MgF2:130-4000nm;α-BBO:190-3500nm; Calcite:350-2300nm;YVO4:400-5000nm; Quartz:200-2300nm
Extinction Ratio :	MgF2: $<5 \times 10^{-6}$ ; α-BBO: $<5 \times 10^{-6}$ ; Calcite: $<5 \times 10^{-5}$ ; YVO4 : $<5 \times 10^{-6}$ Quartz: $<5 \times 10^{-5}$
Surface Quality :	20/10 Scratch/Dig
Beam Deviation:	$<1$ arc minutes
Flatness:	$\lambda/4@633\text{nm}$
Damage Threshold :	$> 500\text{MW/cm}^2$
Coating :	Single Layer MgF2
Holder :	Black Anodized Aluminum

**MgF2 Wollaston Polarizer**

Part. No.	Wavelength Range(nm)	Extinction Ratio	Angular Field(°)	C.A.(φa) ±0.1(mm)	O.D.(φd) ±0.1(mm)	L±0.1 (mm)
PWS5006	130-4000nm	<5×10-6	2.7°@1064nm	6.0	15.0	19.5
PWS5008				8.0	25.4	23.5
PWS5010				10.0	25.4	27.5
PWS5015				15.0	30.0	37.5
PWS5020				20.0	38.0	47.5

**α-BBO Wollaston Polarizer**

Part. No.	Wavelength Range(nm)	Extinction Ratio	Angular Field(°)	C.A.(φa) ±0.1(mm)	O.D.(φd) ±0.1(mm)	L±0.1 (mm)
PWS6006	190-3500nm	<5×10-6	15-27° 16°@900nm	6.0	15.0	14.0
PWS6008				8.0	25.4	16.0
PWS6010				10.0	25.4	18.0
PWS6015				15.0	30.0	23.0
PWS6020				20.0	38.0	28.0

**Calcite Wollaston Polarizer**

Part. No.	Wavelength Range(nm)	Extinction Ratio	Angular Field(°)	C.A.(φa) ±0.1(mm)	O.D.(φd) ±0.1(mm)	L±0.1 (mm)
PWS7006	350-2300nm (Coating@990m)	<5×10-6	16.7-22.5° 19°@990nm	6.0	15.0	14.0
PWS7008				8.0	25.4	16.0
PWS7010				10.0	25.4	18.0
PWS7015				15.0	30.0	23.0
PWS7020				20.0	38.0	28.0

**YVO4 Wollaston Polarizer**

Part. No.	Wavelength Range(nm)	Extinction Ratio	Angular Field(°)	C.A.(φa) ±0.1(mm)	O.D.(φd) ±0.1(mm)	L±0.1 (mm)
PWS8006	400-4000nm (Coating@1550m)	<5×10-6	19.6-23.3° 20°@1550nm	6.0	15.0	14.0
PWS8008				8.0	25.4	16.0
PWS8010				10.0	25.4	18.0
PWS8015				15.0	30.0	20.0
PWS8020				20.0	38.0	25.0

## Quartz Wollaston Polarizer

Part. No.	Wavelength Range(nm)	Extinction Ratio	Angular Field(°)	C.A.(φa) ±0.1(mm)	O.D.(φd) ±0.1(mm)	L±0.1 (mm)
PWS9006	200-2300nm (Coating@1064nm)	<5×10 <sup>-5</sup>	2-3° 2°@1064nm	6.0	15.0	20.0
PWS9008				8.0	25.4	24.0
PWS9010				10.0	25.4	28.8
PWS9015				15.0	30.0	38.0
PWS9020				20.0	38.0	48.0

Note: Order based on client requirement, including non-standard product and holder.

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### Contact Info

🏠 Bldg.24#, Jinshan Juyuanzhou Industrial Park,Cangshan  
Dist.,Fuzhou,China,350002

☎ +86-591-88194625

☎ +86-18650050680

☎ +86-591-88194635

✉ [sales@astarphotonics.com](mailto:sales@astarphotonics.com)