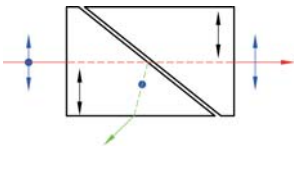
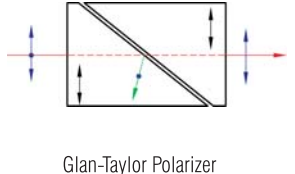
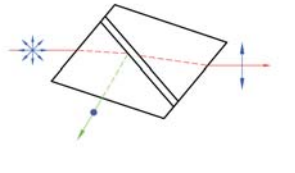
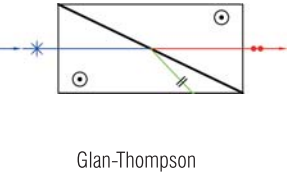
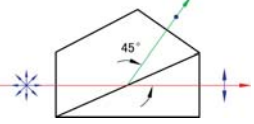
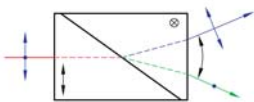
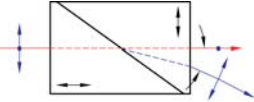


POLARIZERS OVERVIEW

Polarizer	Illustration	Damaged Threshold	Interface	Transmission	Part#	Material	Wavelength(nm)	Extinction Ratio	Angular Field(°)	Page
Glan-Laser Polarizer (PGL)	 <p>Glan-Laser Polarizer</p>	High Power 500MW/cm ² (with escape windows)	Air-space	Medium	PGL7xxx	Calcite	350-2300	<5x10 ⁻⁵	>7.7	21
					PGL6xxx	α -BBO	190-3500	<5x10 ⁻⁵	>6.0	
					PGL8xxx	YVO ₄	500-4000	<5x10 ⁻⁶	>6.5	
Glan-Taylor Polarizer (PGT)	 <p>Glan-Taylor Polarizer</p>	Low to Medium 200MW/cm ² (without escape windows)	Air-space	Medium	PGT7xxx	Calcite	350-2300	<5x10 ⁻⁵	>7.7	23
					PGT6xxx	α -BBO	190-3500	<5x10 ⁻⁶	>6.0	
					PGT8xxx	YVO ₄	500-4000	<5x10 ⁻⁶	>6.5	
High Transmission Glan-Laser Polarizer (PGH)	 <p>High Transmission Glan-Laser Polarizer</p>	High Power 500MW/cm ² (with escape windows)	Air-space	High	PGH7xxx	Calcite	350-2300	<5x10 ⁻⁵	>7.7	25
					PGH8xxx	YVO ₄	500-4000	<5x10 ⁻⁶	>6.5	
Glan-Thompson Polarizer (PGM)	 <p>Glan-Thompson Polarizer</p>	Low Power 100MW/cm ²	Cemented	Medium	PGM71xx	Calcite	350-2300	<5x10 ⁻⁵	14-16	27
					PGM72xx	Calcite	350-2300	<5x10 ⁻⁵	25-28	
					PGM6xxx	α -BBO	220-900	<5x10 ⁻⁶	>15	

POLARIZERS OVERVIEW

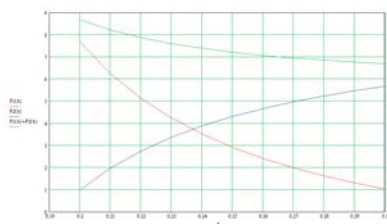
Polarizer	Illustration	Damaged Threshold	Interface	Transmission	Part#	Material	Wavelength(mm)	Extinction Ratio	Angular Field(°)	Page	
Glan-Thompson Polarizer Beamsplitter Cube (PGB)	 Glan-Thompson Polarizer Beamsplitter Cube	Low to Medium 150MW/cm ²	Cemented	Medium	PGB7xxx	Calcite	350-2300	<5x10 ⁵	14-16	29	
Wollaston Polarizer (PWS)	 Wollaston Polarizer	Medium Power 200MW/cm ²	Optical Contact	High	PWS6xxx	α - BBO	190-3500	<5x10 ⁶	15-27		
					PWS9xxx	Quartz	200-2300	<5x10 ⁵	2-3		
		Low Power 100MW/cm ²	Cemented	High	PWS7xxx	Calcite	350-2300	<5x10 ⁵	16.7-22.5		
					PWS8xxx	YVO ₄	500-4000	<5x10 ⁶	19.6-23.3		
Rochon Polarizer (PRH)	 Rochon Polarizer	Low Power 100MW/cm ²	Cemented	High	PRH8xxx	YVO ₄	500-4000	<5x10 ⁶	1-2		31
		Medium Power 200MW/cm ²	Optical Contact	High	PRH6xxx	α - BBO	190-3500	<5x10 ⁶	8-14		
					PRH9xxx	Quartz	200-2300	<5x10 ⁵	1-2		
					PRH5xxx	MgF ₂	120-8500	<5x10 ⁴	1-2		

HIGH POWER GLAN LASER POLARIZER

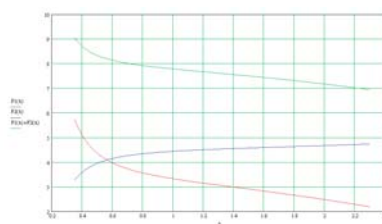
Glan Laser polarizer is made of two same birefringent material prisms that are assembled with an air space. The polarizer is a modification of the Glan Taylor type and is designed to have less reflection loss at the prism junction. The polarizer with two escape windows allows the rejected beam to escape out of the polarizer, which makes it more desirable for high energy lasers. The surface quality of these faces is relatively poor compare to that of entrance and exit faces. No scratch and dig surface quality specifications are assigned to these faces. The polarized field F1 and F2 of these is shown in the plot below.



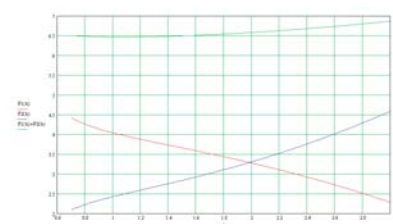
Angular Field vs Wavelength



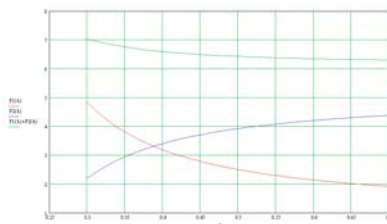
a-BBO, 200-300nm



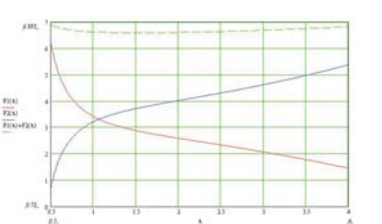
a-BBO, 300-700nm



a-BBO, 700-3000nm



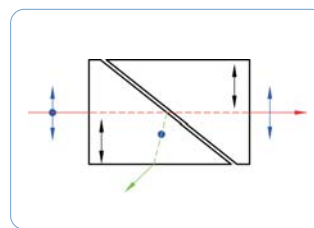
Calcite, 350-2300nm



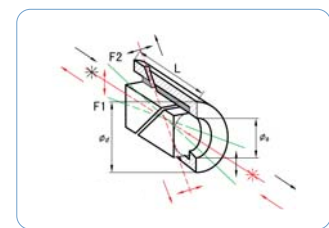
YVO₄, 500-4000nm

Features

- Air-spaced
- Close to Brewster's Angle Cutting
- High Polarization Purity
- Short Length
- Suitable for low to medium power application where the rejected beam is not required



Glan-Laser Polarizer



Glan-Laser Prism

Specifications

Material	a-BBO, Calcite or YVO ₄
Wavelength Range	a-BBO: 190-3500 nm, Calcite: 350-2300 nm, YVO ₄ : 500-4000 nm
Extinction Ratio	Calcite: $< 5 \times 10^{-5}$; a-BBO: $< 5 \times 10^{-6}$; YVO ₄ : $< 5 \times 10^{-6}$
Surface Quality	20-10 Scratch/Dig
Beam Deviation	< 3 arc minutes
Wavefront Distortion	$< \lambda / 4 @ 633\text{nm}$
Damage Threshold	$> 500 \text{ MW/cm}^2$
Coating	Single MgF ₂
Mount	Black Anodized Aluminium



HIGH POWER GLAN LASER POLARIZER

Standard Products

a -BBO High Power Glan Laser Polarizer							
Part No.	Wavelength Rang(nm)	Extinction Ratio	Angular Field(°)	C.A. ϕ a(mm)	O.D. ϕ d(mm)	L \pm 0.1(mm)	Unit Price
PGL6206	200-270	$<5 \times 10^{-6}$	>6.0	6.0	15.0	29.0	\$294
PGL6208	200-270	$<5 \times 10^{-6}$	>6.0	8.0	25.4	31.0	\$338
PGL6210	200-270	$<5 \times 10^{-6}$	>6.0	10.0	25.4	31.0	\$421
PGL6215	200-270	$<5 \times 10^{-6}$	>6.0	15.0	30.0	38.6	\$718
PGL6220	200-270	$<5 \times 10^{-6}$	>6.0	20.0	38.0	48.9	\$1098
PGL6306	300-700	$<5 \times 10^{-6}$	>6.0	6.0	15.0	25.0	\$294
PGL6308	300-700	$<5 \times 10^{-6}$	>6.0	8.0	25.4	25.0	\$338
PGL6310	300-700	$<5 \times 10^{-6}$	>6.0	10.0	25.4	26.0	\$421
PGL6315	300-700	$<5 \times 10^{-6}$	>6.0	15.0	30.0	33.4	\$718
PGL6320	300-700	$<5 \times 10^{-6}$	>6.0	20.0	38.0	43.6	\$1098
PGL6706	700-3000	$<5 \times 10^{-6}$	>6.0	6.0	15.0	23.0	\$294
PGL6708	700-3000	$<5 \times 10^{-6}$	>6.0	8.0	25.4	24.7	\$338
PGL6710	700-3000	$<5 \times 10^{-6}$	>6.0	10.0	25.4	25.9	\$421
PGL6715	700-3000	$<5 \times 10^{-6}$	>6.0	15.0	30.0	33.0	\$718
PGL6720	700-3000	$<5 \times 10^{-6}$	>6.0	20.0	38.0	43.6	\$1098
Calcite High Power Glan Laser Polarizer							
Part No.	Wavelength Rang(nm)	Extinction Ratio	Angular Field(°)	C.A. ϕ a(mm)	O.D. ϕ d(mm)	L \pm 0.1(mm)	Unit Price
PGL7006	350-2300	$<5 \times 10^{-5}$	>7.7	6.0	15.0	21.0	\$182
PGL7008	350-2300	$<5 \times 10^{-5}$	>7.7	8.0	25.4	24.5	\$221
PGL7010	350-2300	$<5 \times 10^{-5}$	>7.7	10.0	25.4	26.2	\$268
PGL7015	350-2300	$<5 \times 10^{-5}$	>7.7	15.0	30.0	33.3	\$508
PGL7020	350-2300	$<5 \times 10^{-5}$	>7.7	20.0	38.0	42.3	\$818
YVO4 High Power Glan Laser Polarizer							
Part No.	Wavelength Rang(nm)	Extinction Ratio	Angular Field(°)	C.A. ϕ a(mm)	O.D. ϕ d(mm)	L \pm 0.1(mm)	Unit Price
PGL8006	500-4000	$<5 \times 10^{-6}$	>6.5	6.0	15.0	15.5	\$238
PGL8008	500-4000	$<5 \times 10^{-6}$	>6.5	8.0	25.4	19.0	\$304
PGL8010	500-4000	$<5 \times 10^{-6}$	>6.5	10.0	25.4	22.5	\$476
PGL8015	500-4000	$<5 \times 10^{-6}$	>6.5	15.0	38.0	31.0	\$778

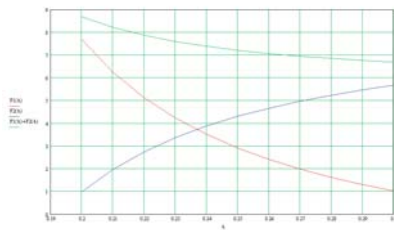


GLAN TAYLOR POLARIZERS

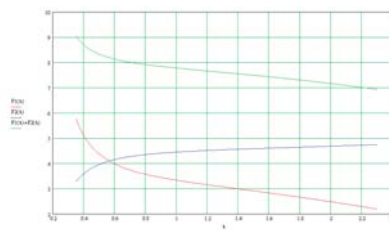
Glan Taylor polarizer is made of two same birefringent material prisms that are assembled with an air space. Its length to aperture ratio which is less than 1.0 makes it a relatively thin polarizer. The polarizer with no side escape windows is suitable for low to medium power application where the side rejected beams are not required. The angular field of different materials of polarizers is listed below for comparison.



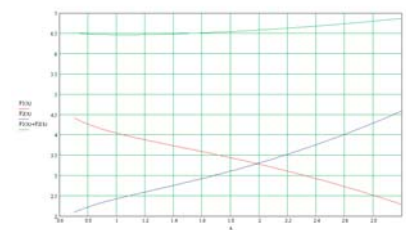
Angular Field vs Wavelength



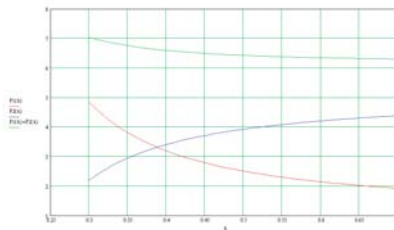
a-BBO, 200-300nm



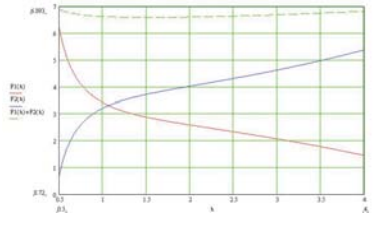
a-BBO, 300-700nm



a-BBO, 700-3000nm

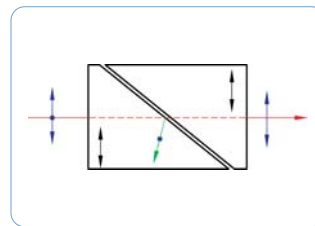


Calcite, 350-2300nm

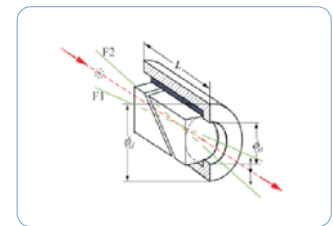
YVO₄, 500-4000nm

Features

- Air-spaced
- Close to Brewster's Angle Cutting
- High Polarization Purity
- Short Length
- Suitable for low to medium power application where the rejected beam is not required



Glan-Taylor Polarizer



Glan Taylor Prism

Specifications

Material	a-BBO, Calcite or YVO ₄
Wavelength Range	a-BBO: 190-3500 nm, Calcite: 350-2300 nm, YVO ₄ : 500-4000 nm
Extinction Ratio	Calcite: $< 5 \times 10^{-5}$; a-BBO: $< 5 \times 10^{-6}$; YVO ₄ : $< 5 \times 10^{-6}$
Surface Quality	20-10 Scratch/Dig
Beam Deviation	< 3 arc minutes
Wavefront Distortion	$< \lambda/4 @ 633\text{nm}$
Damage Threshold	$> 200 \text{ MW/cm}^2$
Coating	Single MgF ₂
Mount	Black Anodized Aluminium



GLAN TAYLOR POLARIZERS

Standard Products

α -BBO Glan Taylor Polarizer							
Part No.	Wavelength Rang(nm)	Extinction Ratio	Angular Field(°)	C.A. φ a(mm)	O.D. φ d(mm)	L ± 0.1 (mm)	Unit Price
PGT6206	200-270	<5x10 ⁻⁶	> 6.0	6.0	15.0	15.0	\$238
PGT6208	200-270	<5x10 ⁻⁶	> 6.0	8.0	25.4	17.0	\$279
PGT6210	200-270	<5x10 ⁻⁶	> 6.0	10.0	25.4	19.0	\$358
PGT6215	200-270	<5x10 ⁻⁶	> 6.0	15.0	30.0	23.0	\$648
PGT6220	200-270	<5x10 ⁻⁶	> 6.0	20.0	38.0	29.0	\$998
PGT6306	300-700	<5x10 ⁻⁶	> 6.0	6.0	15.0	15.0	\$238
PGT6308	300-700	<5x10 ⁻⁶	> 6.0	8.0	25.4	17.0	\$279
PGT6310	300-700	<5x10 ⁻⁶	> 6.0	10.0	25.4	19.0	\$358
PGT6315	300-700	<5x10 ⁻⁶	> 6.0	15.0	30.0	23.0	\$648
PGT6320	300-700	<5x10 ⁻⁶	> 6.0	20.0	38.0	29.0	\$998
PGT6706	700-3000	<5x10 ⁻⁶	> 6.0	6.0	15.0	15.0	\$238
PGT6708	700-3000	<5x10 ⁻⁶	> 6.0	8.0	25.4	17.0	\$279
PGT6710	700-3000	<5x10 ⁻⁶	> 6.0	10.0	25.4	19.0	\$358
PGT6715	700-3000	<5x10 ⁻⁶	> 6.0	15.0	30.0	23.0	\$648
PGT6720	700-3000	<5x10 ⁻⁶	> 6.0	20.0	38.0	29.0	\$998
Calcite Glan Taylor Polarizer							
Part No.	Wavelength Rang(nm)	Extinction Ratio	Angular Field(°)	C.A. φ a(mm)	O.D. φ d(mm)	L ± 0.1 (mm)	Unit Price
PGT7006	350-2300	<5x10 ⁻⁵	>7.7	6.0	15.0	15.0	\$166
PGT7008	350-2300	<5x10 ⁻⁵	>7.7	8.0	25.4	17.0	\$194
PGT7010	350-2300	<5x10 ⁻⁵	>7.7	10.0	25.4	19.0	\$250
PGT7015	350-2300	<5x10 ⁻⁵	>7.7	15.0	30.0	23.0	\$439
PGT7020	350-2300	<5x10 ⁻⁵	>7.7	20.0	38.0	29.0	\$778
YVO4 Glan Taylor Polarizer							
Part No.	Wavelength Rang(nm)	Extinction Ratio	Angular Field(°)	C.A. φ a(mm)	O.D. φ d(mm)	L ± 0.1 (mm)	Unit Price
PGT8006	500-4000	<5x10 ⁻⁶	>6.5	6.0	15.0	12.0	\$190
PGT8008	500-4000	<5x10 ⁻⁶	>6.5	8.0	25.4	15.0	\$228
PGT8010	500-4000	<5x10 ⁻⁶	>6.5	10.0	25.4	17.0	\$408
PGT8015	500-4000	<5x10 ⁻⁶	>6.5	15.0	30.0	20.0	\$618
PGT8020	500-4000	<5x10 ⁻⁶	>6.5	20.0	38.0	25.0	\$998



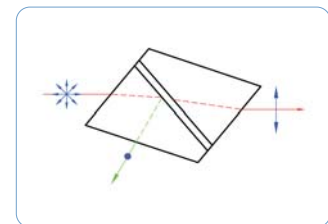
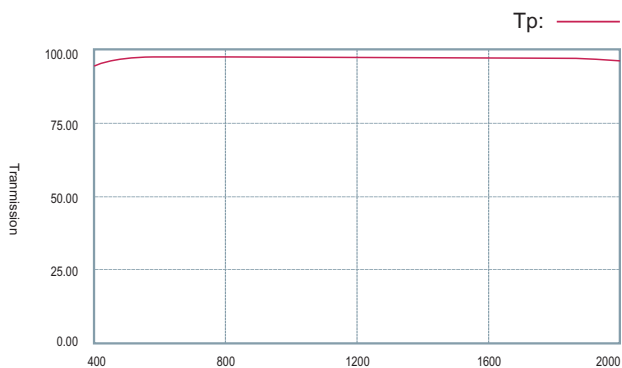
HIGH TRANSMISSION POLARIZER

High Transmission Glan Laser Polarizers (PGH) is a special type of Glan Laser Polarizers. The incidence angle of the PGH is Brewster angle cut which can greatly improve the transmission ray up to 98% in a wide range of wavelength without coating. The polarizer can be made from Calcite and YVO_4 crystals. In order to get high transmission of wide range of wavelength, the polarizers are not recommended to use for large acceptance angle. Typically used is within $\pm 5^\circ$.

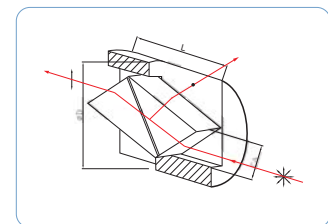


Features

- UV High Power Application, $> 20\text{J}/\text{cm}^2 @ 1064\text{nm}, 10\text{ns}, 20\text{Hz}$
- High Transmission: $T > 95\%$
- High Extinction Ratio, Wide Acceptance Angle
- Material: Calcite, α -BBO, YVO_4
- Dimension: $3 \times 3\text{mm} \sim 20 \times 20\text{mm}$



High Transmission
Glan-Laser Polarizer



Glan Laser Polarizer High Transmission
Curve Brewster Angle

Specifications

Material	Calcite, YVO_4
Wavelength Range	Calcite: 350-2300nm, YVO_4 : 500-4000nm
Extinction Ratio	Calcite: $< 5 \times 10^{-5}$, YVO_4 : $< 5 \times 10^{-6}$
Transmission	$> 98\%$ (typical)
Surface Quality	20-10 Scratch/Dig
Beam Deviation	< 3 arc minutes
Waveform Distortion	$\lambda/4 @ 633\text{nm}$
Damage Threshold	$> 500 \text{ MW}/\text{cm}^2$
Coating	Uncoated
Mount	Black Anodized Aluminium



HIGH TRANSMISSION POLARIZER

Standard Products

Calcite High Transmission Glan Laser Polarizer								
Part No.	Wavelength Rang	Extinction Ratio	Angular Field	C.A.f a (mm)	O.D.f d (mm)	L ± 0.1 (mm)	Beam offset	Unit Price
PGH7006	350-2300	<5X10 ⁻⁵	~5°(typical)	6.0	25.4	25.0	5.5mm	\$258
PGH7008	350-2300	<5X10 ⁻⁵	~5°(typical)	8.0	25.4	32.0	7.8mm	\$298
PGH7010	350-2300	<5X10 ⁻⁵	~5°(typical)	10.0	30.0	38.0	9.3mm	\$368
PGH7015	350-2300	<5X10 ⁻⁵	~5°(typical)	15.0	38.0	54.0	14.0mm	\$518
YVO4 High Transmission Glan Laser Polarizer								
Part No.	Wavelength Rang	Extinction Ratio	Angular Field	C.A.f a (mm)	O.D.f d (mm)	L ± 0.1 (mm)	Beam offset	Unit Price
PGH8006	500-4000	<5X10 ⁻⁶	~5°(typical)	6.0	25.4	28.0	5.5mm	\$258
PGH8008	500-4000	<5X10 ⁻⁶	~5°(typical)	8.0	30.0	38.0	13.3mm	\$428
PGH8010	500-4000	<5X10 ⁻⁶	~5°(typical)	10.0	38.0	45.0	16.0mm	\$518



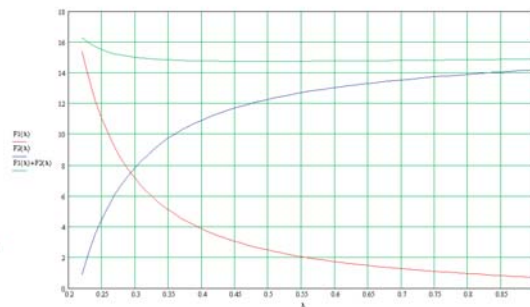
GLAN THOMPSON POLARIZERS

Glan Thompson polarizer is made of two calcite prisms or two α -BBO prisms cemented together. Two types of Glan Thompsons are available. One is the standard form and the other is the long form. Their length to aperture ratios are 2.5 : 1 and 3.0 : 1 respectively. Glan Thompson polarizers tend to have higher extinction ratio than air spaced polarizers. In the ultra violet spectrum, their transmission is limited by absorption in birefringent materials as well as the cement layer. α -BBO polarizers and Calcite polarizers can be used from about 220 to 900nm and 350 to 2300 nm respectively.

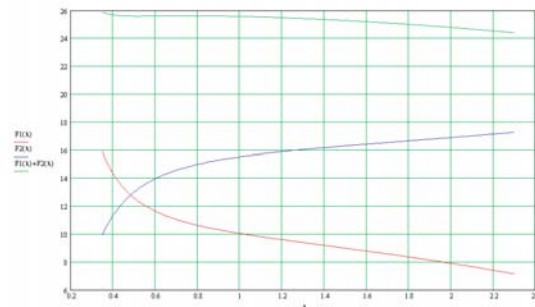
The polarizers have the widest field angle of any design. The standard form of this polarizer with 2.5:1 length to aperture ratio has a full acceptance cone angle of more than 15° @ 589nm, symmetric about the input axis, while the long form with 3:1 ratio has a field angle $>26^\circ$. The polarized field F1 and F2 of all these is shown in the plot below.



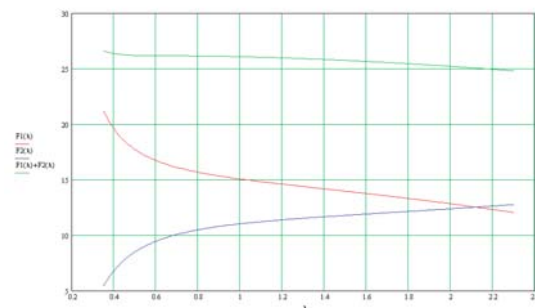
Angular Field vs Wavelength



a-BBO, 220-900nm



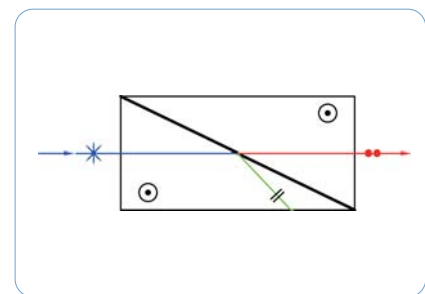
Calcite:L/A=2.5 (350-2300nm)



Calcite:L/A=3 (350-2300nm)

Specifications

Material	a-BBO, Calcite
Wavelength Range	a-BBO: 200-900 nm, Calcite: 350-2300 nm
Extinction Ratio	Calcite: $<5 \times 10^{-5}$; a-BBO: $<5 \times 10^{-6}$
Surface Quality	20-10 Scratch/Dig
Beam Deviation	< 3 arc minutes
Wavefront Distortion	$< \lambda/4$ @ 633nm
Damage Threshold	>200 MW/cm ²
Coating	Single MgF ₂
Mount	Black Anodized Aluminium



Glan-Thompson Polarizer



GLAN THOMPSON POLARIZERS

Standard Products

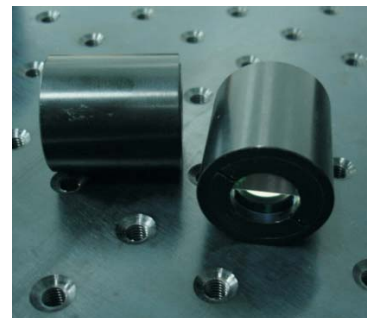
a -BBO Glan Thompson Polarizer Special for DUV, Visible and NIR(200-900nm)							
Part No.	L(Material)/CA	Extinction Ratio	Angular Field(°)	C.A. ϕ a(mm)	O.D. ϕ d(mm)	L \pm 0.1(mm)	Unit Price
PGM6006	1.6	$<5 \times 10^{-6}$	>15	6	15	18	\$398
PGM6008	1.6	$<5 \times 10^{-6}$	>15	8	25.4	21	\$438
PGM6010	1.6	$<5 \times 10^{-6}$	>15	10	25.4	24.5	\$538
PGM6012	1.6	$<5 \times 10^{-6}$	>15	12.7	25.4	29	\$648
PGM6015	1.6	$<5 \times 10^{-6}$	>15	15	30	32.5	\$808
PGM6020	1.6	$<5 \times 10^{-6}$	>15	20	38	41.5	\$1108
Calcite Glan Thompson Polarizer (350-2300nm)							
Part No.	L(Material)/CA	Extinction Ratio	Angular Field(°)	C.A. ϕ a(mm)	O.D. ϕ d(mm)	L \pm 0.1(mm)	Unit Price
PGM7106	2.5	$<5 \times 10^{-5}$	14-16	6	15	23	\$238
PGM7108	2.5	$<5 \times 10^{-5}$	14-16	8	25.4	28	\$268
PGM7110	2.5	$<5 \times 10^{-5}$	14-16	10	25.4	33	\$318
PGM7112	2.5	$<5 \times 10^{-5}$	14-16	12.7	25.4	39	\$368
PGM7115	2.5	$<5 \times 10^{-5}$	14-16	15	30	45.5	\$498
PGM7206	3	$<5 \times 10^{-5}$	25-28	6	15	26	\$308
PGM7208	3	$<5 \times 10^{-5}$	25-28	8	25.4	32	\$338
PGM7210	3	$<5 \times 10^{-5}$	25-28	10	25.4	38	\$458
PGM7212	3	$<5 \times 10^{-5}$	25-28	12.7	25.4	46	\$528
PGM7215	3	$<5 \times 10^{-5}$	25-28	15	30	53	\$628

Order information: 450-650nm PBS506-450-650nm

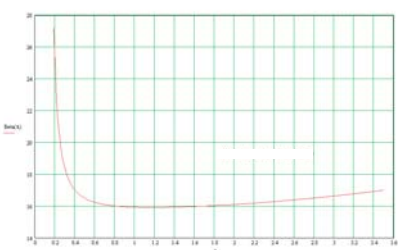


WOLLASTON POLARIZERS

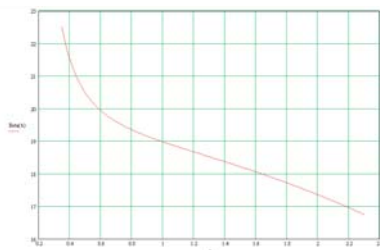
Wollaston polarizer is made of two birefringent material prisms that are cemented together. The deviations of the ordinary and extraordinary beams are nearly symmetrical about the input beam axis, so that the Wollaston polarizing beam splitter has approximately twice the deviation of the Rochon. The separation angle exhibits chromatic dispersion, as shown in the plot below. Any separation angle can be designed upon requirement. The separation angle of standard products vs wavelength is shown in the plot below.



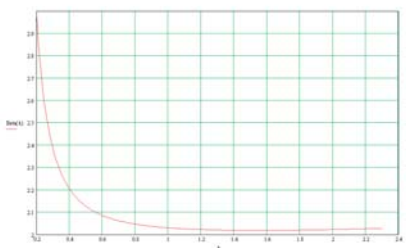
Angular Field vs Wavelength



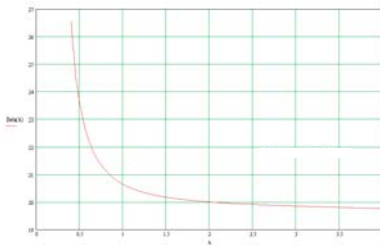
a-BBO, 190-3500nm



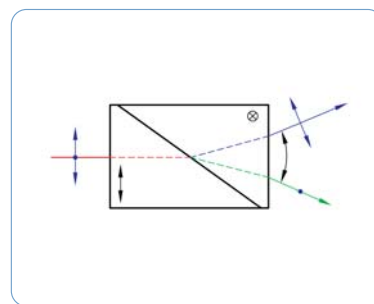
Calcite:350-2300nm



Quartz, 200-3300nm



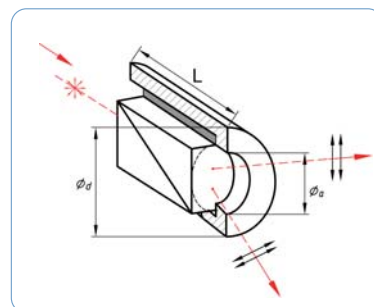
YVO₄, 500-4000nm



Wollaston Polarizer

Specifications

Material	α -BBO, Calcite, YVO ₄ , Quartz
Wavelength Range	α -BBO:190-3500 nm, Calcite:350-2300nm, YVO ₄ :500-4000nm, Quartz:200-2300nm
Extinction Ratio	Calcite, Quartz: <math> < 5 \times 10^{-5}</math>; a-BBO, YVO ₄ : <math> < 5 \times 10^{-6}</math>
Surface Quality	20/10 Scratch/Dig
Beam Deviation	<math> < 3</math> arc minutes
Wavefront Distortion	<math> < \lambda / 4 @ 633\text{nm}</math>
Damage Threshold	>500 MW/cm ²
Coating	Single MgF ₂
Mount	Black Anodized Aluminium





WOLLASTON POLARIZERS

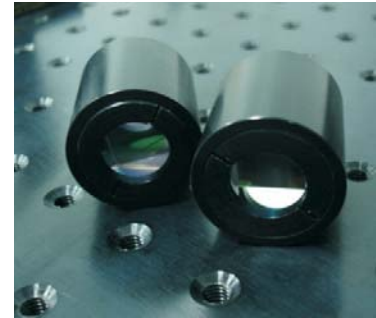
Standard Products

α -BBO Wollaston Polarizer						
Part No.	Extinction Ratio	Separate Field (°)	C.A. ϕ a(mm)	O.D. ϕ d(mm)	L \pm 0.1(mm)	Unit Price
PWS6006	$<5 \times 10^{-6}$	15-27 16@800nm	6.0	15.0	14.0	\$262
PWS6008	$<5 \times 10^{-6}$	15-27 16@800nm	8.0	25.4	16.0	\$338
PWS6010	$<5 \times 10^{-6}$	15-27 16@800nm	10.0	25.4	18.0	\$448
PWS6015	$<5 \times 10^{-6}$	15-27 16@800nm	15.0	30.0	23.0	\$708
PWS6020	$<5 \times 10^{-6}$	15-27 16@800nm	20.0	38.0	28.0	\$1128
Calcite Wollaston Polarizer						
Part No.	Extinction Ratio	Separate Field (°)	C.A. ϕ a(mm)	O.D. ϕ d(mm)	L \pm 0.1(mm)	Unit Price
PWS7006	$<5 \times 10^{-5}$	16.7-22.5 19@980nm	6.0	15.0	14.0	\$174
PWS7008	$<5 \times 10^{-5}$	16.7-22.5 19@980nm	8.0	25.4	16.0	\$219
PWS7010	$<5 \times 10^{-5}$	16.7-22.5 19@980nm	10.0	25.4	18.0	\$268
PWS7015	$<5 \times 10^{-5}$	16.7-22.5 19@980nm	15.0	30.0	23.0	\$508
PWS7020	$<5 \times 10^{-5}$	16.7-22.5 19@980nm	20.0	38.0	28.0	\$808
Quartz Wollaston Polarizer						
Part No.	Extinction Ratio	Separate Field (°)	C.A. ϕ a(mm)	O.D. ϕ d(mm)	L \pm 0.1(mm)	Unit Price
PWS9006	$<5 \times 10^{-5}$	2-3 2@1064nm	6.0	15.0	20.0	\$158
PWS9008	$<5 \times 10^{-5}$	2-3 2@1064nm	8.0	25.4	24.0	\$202
PWS9010	$<5 \times 10^{-5}$	2-3 2@1064nm	10.0	25.4	28.0	\$250
PWS9015	$<5 \times 10^{-5}$	2-3 2@1064nm	15.0	30.0	38.0	\$388
PWS9020	$<5 \times 10^{-5}$	2-3 2@1064nm	20.0	38.0	48.0	\$658
YVO4 Wollaston Polarizer						
Part No.	Extinction Ratio	Separate Field (°)	C.A. ϕ a(mm)	O.D. ϕ d(mm)	L \pm 0.1(mm)	Unit Price
PWS8006	$<5 \times 10^{-6}$	19.6-23.3 20@1550nm	6.0	15.0	14.0	\$223
PWS8008	$<5 \times 10^{-6}$	19.6-23.3 20@1550nm	8.0	25.4	16.0	\$268
PWS8010	$<5 \times 10^{-6}$	19.6-23.3 20@1550nm	10.0	25.4	16.0	\$359
PWS8015	$<5 \times 10^{-6}$	19.6-23.3 20@1550nm	15.0	30.0	20.0	\$588
PWS8020	$<5 \times 10^{-6}$	19.6-23.3 20@1550nm	20.0	38.0	25.0	\$968

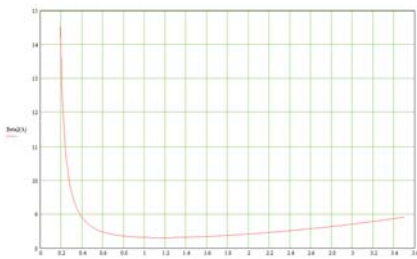


ROCHON POLARIZERS

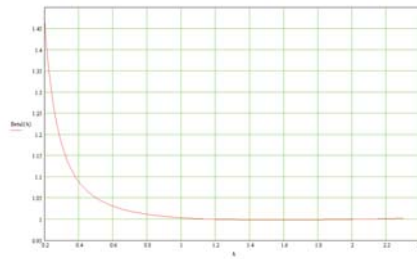
Rochon polarizer is one of the earliest designs, which is made of two birefringent material prisms cemented or optical contacted together. Both ordinary and extraordinary beams propagate collinearly down the optic axis in the first prism under the ordinary refractive index. Upon entering the second prism the ordinary beam experiences the same refractive index and continues undeviated. The extraordinary beam, however, now has a lower refractive index and is refracted at the interface. Any separation angle can be designed for specific wavelength upon requirement.



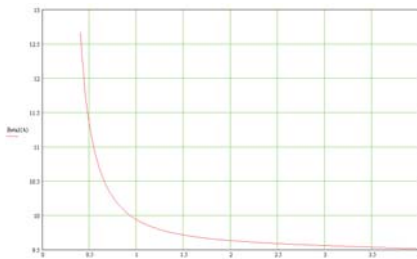
Angular Field vs Wavelength



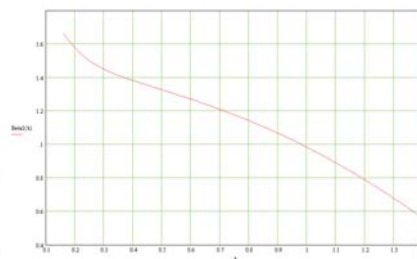
a-BBO, 220-900nm



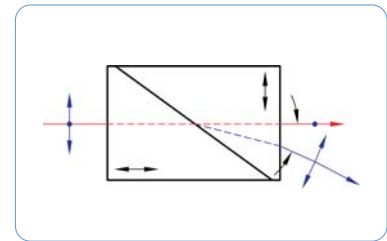
Quartz, 200-3300nm



YVO₄, 500-4000nm



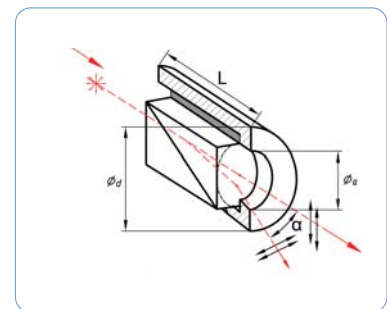
MgF₂, 160-1500nm



Rochon Polarizer

Specifications

Material	α -BBO, Calcite, YVO ₄ , Quartz, MgF ₂
Wavelength Range	a-BBO:190-3500nm, YVO ₄ :500-4000nm, Quartz:200-2300nm, MgF ₂ :130-7000nm
Extinction Ratio	Quartz: $< 5 \times 10^{-5}$; α -BBO, YVO ₄ : $< 5 \times 10^{-6}$, MgF ₂ : $< 10^{-4}$
Parallelism	< 1 arc Min
Surface Quality	20/10 Scratch/Dig
Beam Deviation	< 3 arc minutes
Wavefront Distortion	$< \lambda / 4 @ 633\text{nm}$
Damage Threshold	$> 500 \text{ MW/cm}^2$
Coating	Single MgF ₂
Mount	Black Anodized Aluminium



Rochon Prism



ROCHON POLARIZERS

Standard Products

MgF ₂ Rochon Polarizer						
Part No.	Extinction Ratio	Separate Field (°)	C.A. ϕ a(mm)	O.D. ϕ d(mm)	L \pm 0.1(mm)	Unit price
PRH5006	<1x10 ⁻⁴	1.0-2 1@980nm	6.0	15.0	14.0	\$230
PRH5008	<1x10 ⁻⁴	1.0-2 1@980nm	8.0	25.4	18.0	\$313
PRH5010	<1x10 ⁻⁴	1.0-2 1@980nm	10.0	25.4	28.0	\$403
PRH5015	<1x10 ⁻⁴	1.0-2 1@980nm	15.0	30.0	38.0	\$668
PRH5020	<1x10 ⁻⁴	1.0-2 1@980nm	20.0	38.0	48.0	\$998
α -BBO Rochon Polarizer						
Part No.	Extinction Ratio	Separate Field (°)	C.A. ϕ a(mm)	O.D. ϕ d(mm)	L \pm 0.1(mm)	Unit price
PRH6006	<5x10 ⁻⁶	8.0-14 8@800nm	6.0	15.0	14.0	\$318
PRH6008	<5x10 ⁻⁶	8.0-14 8@800nm	8.0	25.4	16.0	\$372
PRH6010	<5x10 ⁻⁶	8.0-14 8@800nm	10.0	25.4	18.0	\$502
PRH6015	<5x10 ⁻⁶	8.0-14 8@800nm	15.0	30.0	23.0	\$858
PRH6020	<5x10 ⁻⁶	8.0-14 8@800nm	20.0	38.0	28.0	\$1398
Quartz Rochon Polarizer						
Part No.	Extinction Ratio	Separate Field (°)	C.A. ϕ a(mm)	O.D. ϕ d(mm)	L \pm 0.1(mm)	Unit price
PRH9006	<5x10 ⁻⁵	1.0-1.5 1@1064nm	6.0	15.0	20.0	\$206
PRH9008	<5x10 ⁻⁵	1.0-1.5 1@1064nm	8.0	25.4	24.0	\$270
PRH9010	<5x10 ⁻⁵	1.0-1.5 1@1064nm	10.0	25.4	28.0	\$349
PRH9015	<5x10 ⁻⁵	1.0-1.5 1@1064nm	15.0	30.0	38.0	\$588
PRH9020	<5x10 ⁻⁵	1.0-1.5 1@1064nm	20.0	38.0	48.0	\$898
YVO ₄ Rochon Polarizer						
Part No.	Extinction Ratio	Separate Field (°)	C.A. ϕ a(mm)	O.D. ϕ d(mm)	L \pm 0.1(mm)	Unit price
PRH8006	<5x10 ⁻⁶	9.8-13.0 10@1550nm	6.0	15.0	14.0	\$259
PRH8008	<5x10 ⁻⁶	9.8-13.0 10@1550nm	8.0	25.4	16.0	\$331
PRH8010	<5x10 ⁻⁶	9.8-13.0 10@1550nm	10.0	25.4	16.0	\$426
PRH8015	<5x10 ⁻⁶	9.8-13.0 10@1550nm	15.0	30.0	20.0	\$668
PRH8020	<5x10 ⁻⁶	9.8-13.0 10@1550nm	20.0	38.0	25.0	\$998

