



Glan Thompson Polarizer

What is Glan Thompson Polarizer

Photonchina's Glan-Thompson Polarizer is made of two cemented calcite (or a-BBO) prisms that are at the highest optical level. When the unpolarized light enters Glan-Thompson Polarizer, it will separate at the intersection of the two calcite crystals. S-polarized light (e-ray) then goes on and P-polarized light (o-ray) will be reflected.

Function of Glan Thompson Polarizer

Thanks to the large field of view, the polarizer is ideal for highly converging or diverging beams. They provide high polarization and great transmission in the two emerging beams which are useful if it is required to utilize both linear polarization states.

Features of Photonchina's Glan-Thompson Polarizer

- Wide field of view
- High extinction ratio
- Both coated and uncoated types are available:

350-2300 nm for uncoated; 350-700nm or 650-1050nm for AR coated

- You may choose from calcite or a-BBO crystal
- Both mounted and unmounted are provided by Photonchina

Limitation or warnings:

1. Calcite crystal is sensitive to temperature and will be seriously affected or even crack when are exposed to thermal shock. It is advised that customers open the shipping package 6-8 hours after arrived when it reach total thermal equilibrium.
2. Glan-Thompson Polarizer has limited optical intensity due to the cemented prism interface and it is suitable for low power applications. Customers, who have high power applications, please refer to Photonchina' s Glan Laser Polarizers.

Specifications of Photonchina's Glan-Thompson Polarizer

Material:	a-BBO, Calcite
Wavelength Range:	a-BBO: 200 ~ 3500 nm, Calcite: 350 ~ 2300 nm
Extinction Ratio:	a-BBO: <5x10 ⁻⁶ , Calcite: <5x10 ⁻⁵
Surface Quality:	20 / 10
Parallelism:	<1 arc Min
Beam Deviation:	< 3 arc minutes
Wavefront Distortion:	λ /4@633nm
Damage Threshold:	>200 MW/cm ²
Coating:	Single MgF2
Mount:	Black Anodized Aluminium

1. Calcite Glan-Thompson Polarizer (350-2300nm)

Part No.	Wavelength	Extinction Ratio	Angular Field	C.A. φ_a (mm)	O.D. φ_d (mm)	L (mm)
PC2106	350-2300nm	<5x10 ⁻⁵	> 14 ~ 16°	6.0	15.0	22.0
PC2108				8.0	25.4	28.0
PC2110				10.0	25.4	33.0
PC2112				12.7	25.4	39.0
PC2115				15.0	30.0	45.5
PC2206	350-2300nm	<5x10 ⁻⁶	> 25 ~ 28°	6.0	15.0	26.0
PC2208				8.0	25.4	32.0
PC2210				10.0	25.4	38.0
PC2212				12.7	25.4	46.0
PC2215				15.0	30.0	53.0

2. α -BBO Glan Thompson Polarizer (200-1100nm)

Part No.	Wavelength	Extinction Ratio	Angular Field	C.A. φ_a (mm)	O.D. φ_d (mm)	L (mm)
PC1006	200-3500nm	<5x10 ⁻⁶	>15°	6.0	15.0	22.0
PC1008				8.0	25.4	28.0
PC1010				10.0	25.4	33.0

PC1012		12.7	25.4	39.0
PC1015		15.0	30.0	45.5