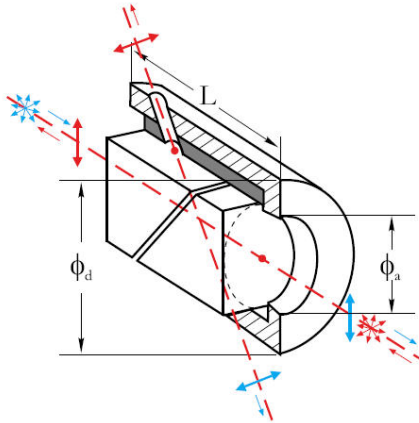


# Optical Polarizer

## Glan Laser Calcite Polarizers / Air Space Design

PHOTONIK<sup>hv</sup>



Photonik's Glan Laser Calcite Polarizer is a Glan Taylor polarizer that is specifically designed to deal with high energy laser light. These polarizers are manufactured from only select portions of the calcite crystal that pass a laser scattering sensitivity test. Like our Glan Taylor Prisms, these prisms are ideal for applications requiring extreme polarization purity(100,000:1), high damage threshold(500MW/cm<sup>2</sup>) and a broad wavelength range (250-2300nm). Two polished side exit ports are provided to allow bi-directional use of the prism polarizer. These side ports also ensure that the rejected light from high power lasers can safely exit the polarizer.

### General Specifications:

<b>Material:</b>	Calcite
<b>Wavelength Range:</b>	250 - 2300nm
<b>Extinction Ratio:</b>	100,000 : 1
<b>Angular Field:</b>	7.7°
<b>Dimensions Tolerance:</b>	± 0.1 mm
<b>Surface Quality:</b>	20 – 10 scratch and dig
<b>Wavefront Distortion:</b>	λ/4 @ 632.8nm over clear aperture
<b>Beam Deviation:</b>	< 3 arc minutes
<b>Transmission Efficiency:</b>	T <sub>p</sub> > 95%
<b>Optical Coating:</b>	Single layer MgF <sub>2</sub> (Input/Output surfaces)
<b>Laser Damage Threshold:</b>	500W/cm <sup>2</sup> for CW Laser / 500MW/cm <sup>2</sup> for pulsed laser @ 10ns

*Photonik reserves the rights to change product designs and specifications at any time without notice.*

### Ordering Information: (Any request for other dimensions, wavelengths and coatings, pls contact us!)

P/N	Material	Wavelength Range (nm)	Outside Diameter Ød (mm)	Clear Aperture Øa (mm)	Length L (mm)
PGLC5008	Calcite	250 – 2300	25.4	8	24.5
PGLC5010	Calcite	250 – 2300	25.4	10	26.2
PGLC5015	Calcite	250 – 2300	30.0	15	33.3

### Optional rotation stage parts compatible to PGLC polarizers (with included housing adaptor):



φ1" Precision 360° Rotation Stage  
P/N: PRM1S(1" Optics; Vertical/Horizontal Positioning)



φ1" Simple 360° Rotation Stage  
P/N: PRE1



φ2" Simple 360° Rotation Stage  
P/N: PRE2