

Spherical Lenses

Cylindrical Lenses

Lens Kits

Achromatic Doublets

Multi-Element

Micro Optics

Mirrors

Prisms

Substrates &amp; Windows

Beamsplitters

Polarizers

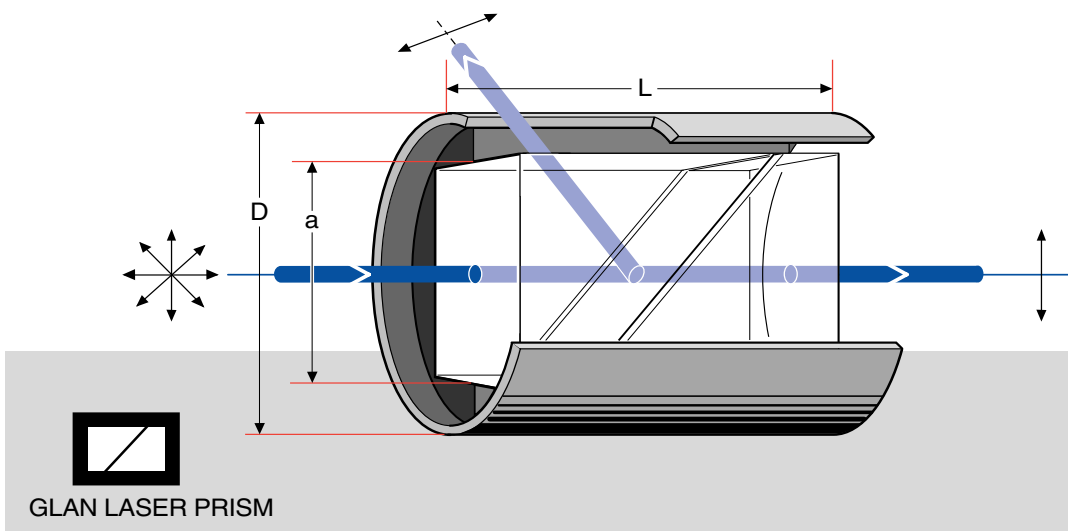
Filter &amp; Apertures



## Glan Laser Prisms

- High power capacity: up to 500MW/cm<sup>2</sup> pulsed
- Made from high optical quality natural calcite
- Conveniently mounted in a metal cell
- Available with two, one or no escape ports for extra power capacity
- Excellent extinction ratio of  $5 \times 10^{-5}$

Glan laser prisms are a form of calcite prism which has been adapted for high power laser use. The two prism sections are polished at an angle between the critical angles of the e and o rays for the incoming light and are air-spaced and mounted within absorbing black glass in a cell. As light enters the polarizer one polarization orientation of the beam is refracted at a different angle from the other. Thus the e-ray hits the air-spaced interface at an angle below Brewster's angle and is transmitted. The o-ray is totally reflected out of the prism into either the black glass or the escape port. Normally they are supplied in a cylindrical cell but the cell can be cut away on one or both sides to provide an exit path for the unwanted beam. The escape port type has a greater power handling capacity than the plain metal mounts because the unwanted energy can be dumped outside the cell rather than being absorbed within it. The advantage of 2 ports is that light can enter the prism from either direction.



## Specifications & Tolerances

Dimensions:

±0.2mm

Extinction ratio:

 $5 \times 10^{-5}$ 

Angular field: ±1.5°

Length/Aperture

ratio: 1.5:1

Cell: Black finished aluminum

Material: Optical quality natural calcite

Surface quality:

40-20

Wavelength range:

400-2300nm

Maximum beam

deviation:

≤2.5arcmin

Maximum power level:	No Ports	1 Port	2 Ports
CW	100 W/cm <sup>2</sup>	500W/cm <sup>2</sup>	500W/cm <sup>2</sup>
Pulsed	100MW/cm <sup>2</sup>	500MW/cm <sup>2</sup>	500MW/cm <sup>2</sup>

## Glan Laser Prisms

C E L L

Prism Side, a (mm)	Diameter, D (mm)	Length, L (mm)	Price	PART NUMBER
8	18.90	16.00		066-2220
10	22.00	21.00		066-2230
12	25.30	23.00		066-2240
15	28.50	26.00		066-2250
17	31.75	28.00		066-2260
20	34.80	32.00		066-2270

For a **single** escape port **append -1P** and add \$75 to the price.  
For a **double** escape port **append -2P** and add \$150 to the price.

ORDERING  
&  
TECHNICAL SUPPORT

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