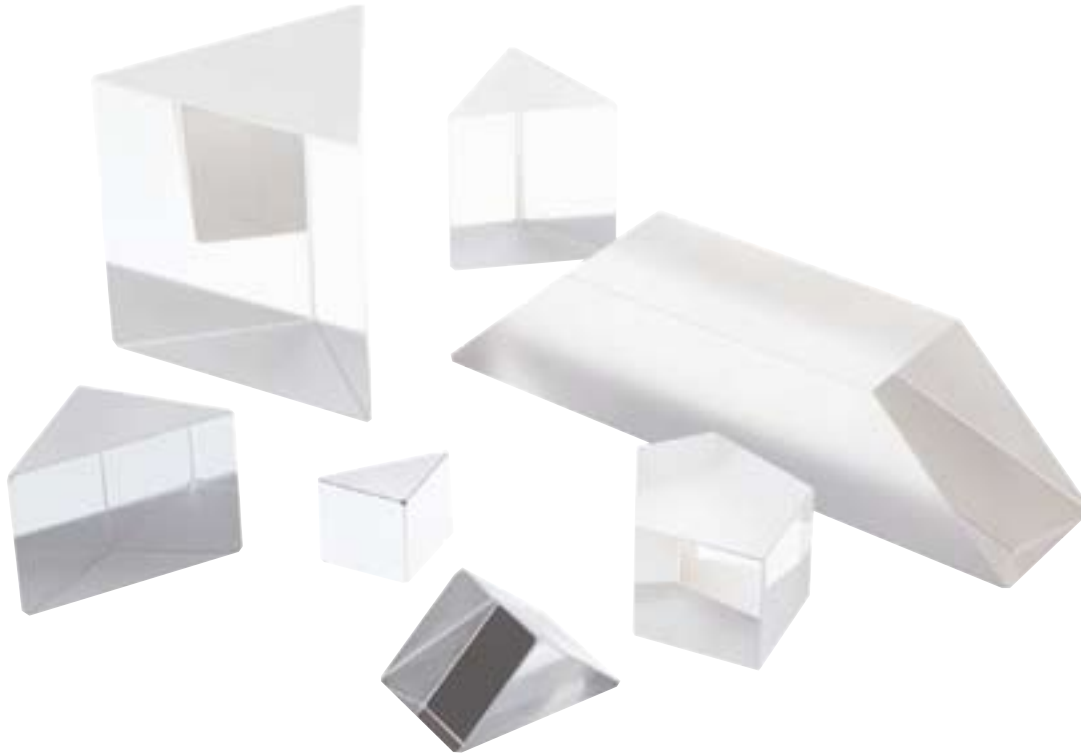


## Prisms

- **Right Angle and Knife Edge Prisms** for steering, bending and redirecting light
- **Dove Prisms** invert the output beam by 180 degrees
- **Penta Prisms** for precise right angle beam folding independent of input angle
- **Retro-reflectors** precisely return the input beam to its source
- **Equilateral Prisms** disperse the input beam into its component colors
- **Precision Wedge Prisms** make useful beam steerers



Prisms have two main uses - redirecting an optical beam and dispersing the beam into its component colors. By careful control of the prism angles it is possible to perform some interesting and useful manipulations on the imaging light entering the prism.

In this section we include the following deviating prisms: right angle prisms, dove prisms, penta prisms, retro-reflectors and precision wedge prisms. We also offer a range of equilateral dispersing prisms.

Prisms are made from solid pieces of optical material. All faces are flat with the non-optical surfaces being left in their as-ground condition. The optically active faces are all ground and polished to the specified degree of flatness. Prisms are more difficult to manufacture than mirrors or windows because several surfaces must be held in a precise geometrical relationship to each other. Some prisms (retro-reflectors, for example) rely greatly on the precision of these geometrical relationships.

Because prisms are made from solid materials the optical path within the prism is fairly long compared to other optical components. When prisms are used in optical systems where the beam is either convergent or divergent they will introduce optical aberrations - primarily spherical aberration. Therefore, when using prisms in imaging or focusing systems, it is important to have collimated or nearly-collimated beams in this portion of the system.

Let us know if you need different types of prism which are not listed in this catalog. We will consider requests for other types of prisms if we know your specifications.

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