

KO | BRINGING QUALITY INTO FOCUS

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Knight Optical's stock and custom equilateral prisms (uncoated & AR coated)

These dispersing equilateral dispersing prisms have a very simple triangular cross section. Equilateral dispersion prisms are commonly used for wavelength separations, i.e. refracting white light into a rainbow pattern effect. Depending on the material used [equilateral dispersion prisms](#) can be used over a wide range of wavelengths. We offer UV Fused silica prisms for use in the ultra-violet wavelength from 170nm and other high index materials which are used for visible applications. Antireflective coatings are applied to most of our high index grade of equilateral dispersion prisms as high index material is sceptical to staining and corrosion which anti-reflective coatings eliminate.

Antireflective coatings also help to improve output of the light as they prevent light loss due to surface reflection. The exit beam is in general at an angle to the input beam, this angle depending on the prism material, the wavelength and the incidence angle.

Equilateral prisms can be manufactured using Calcium Fluoride in the UV or silicon and germanium for thermal imaging use. Silicon is particularly useful at the 3-5 μ m wavelength and germanium at the 7-14 μ m wavelength.

Stock equilateral prisms are available to purchase directly from this website. To enquire about our custom prism capabilities, or to place a custom order, please contact our technical sales team.

Specification:

Materials: [UV grade fused silica, F2, SF11 or equivalent](#)
Dimensions: ± 0.2 mm
Surface quality: [<60-40 scratch/dig](#)
Coating: [Antireflective Coating for visible \(AV7\)](#)
Single layer MgF² AR for high index, R.avg<[0.2%@550nm](#))

[Capabilities prisms](#)

Options Available

- AR coatings.
- Mirror coatings
- Stock prisms can be machined thinner.

Our Equilateral prisms are checked for quality in our state-of-the-art Metrology laboratory using equipment from Trioptics, Varian and Starret allowing us to work to the highest [QA standards](#) and meet the tolerance specifications on these **precision components**.

[Contact our technical sales team](#) now and unlock the full potential of your system.

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- View our [QA and metrology information](#)
- Watch our [Corporate Video](#)
- [View Our Corporate Brochure](#)