



Discover how we can improve your
instrumentation and supply chain
experience today!

KO | BRINGING QUALITY INTO FOCUS

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Precision 1/4 range plate beamsplitters

Precision grade plate beam splitters offer higher flatness and parallel specifications particularly useful in laser and imaging applications. Both faces of these precision beamsplitters are polished to a high degree of flatness of $\lambda/4$ and have excellent surface quality. Precision splitters are made from high quality optically polished BK7 with both surfaces controlled to a high degree of parallelism.

Our stock ranges of precision beamsplitters are available for use in Visible, Near Infrared and Telecoms wavelengths with 50/50 split ratio. The beamsplitter coating is a high quality dielectric coating, the non-splitting face of the beamsplitter is multilayer antireflective coated to eliminate second face ghosting effects.

Material:	N-BK7
Diameter:	+0/-0.1mm
Length/Width:	+/-0.1mm
Thickness:	+/-0.1mm
Surface Quality:	<40:20 scratch/dig
Flatness:	$\lambda/4$ over 90% aperture (bothfaces)
Parallel:	<30 arcsec
Beamsplitter Coating:	Visible 50%, NIR 50%, NIR/Telecom 50%

Standard polarising type:

Standard range polarising beamsplitter cubes are designed as a cost effective solution to most common polarisation applications. Polarised cubes are suitable where the control needs to be maintained over the S and P polarisation of the optics inside a system. This includes applications where two polarisation dependent components are tested simultaneously. Standard range polarised beamsplitter cubes are manufactured with narrow bandwidths to suit clearly defined specifications such as individual laser wavelengths. If you are unsure about the polarisation requirements of your system our technical sales team will be happy to offer advice.

Broadband polarising type:

Broadband polarising beamsplitter cubes share similarities with the standard range, the key difference being the broad bandwidth over which the cube can operate. This makes broadband polarising cubes ideal for general UV, VIS and NIR use as well as polarisation dependant telecoms applications and are less restricted to individual applications. The transmitted and reflected polarised light is maintained at a constant level over the operating wavelength.

High power polarising type:

Knight Optical's range of polarising high energy laser line beamsplitter cubes are designed for key laser applications in the visible and NIR spectrums and offer a superior laser damage threshold for high power systems. These

beamsplitters operate in the same way as the standard type but are typically designed with precision tolerances and high laser damage thresholds.

Knight Optical's plate beamsplitters are available in 1mm and 3mm thicknesses. The 1mm thick beamsplitters are useful where compactness and weight are an issue. The white float glass used can be particularly useful in the near infrared plate beamsplitter as it avoids strong IR absorption.

Contact our multilingual technical sales team and discover how Knight Optical's high quality optical components and superior service can improve your instrumentation and supply chain experience.

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