



Laser-line Non-Polarizing plates and beamsplitter cubes by PPC

Like our wide selection of high-energy polarizing beamsplitters and beam combiners, these components utilize PPC's advanced ion-beam-sputtering (IBS) coatings and Telcordia-qualified CADB™ epoxy-free bonding technique to produce stable, low-loss optical components that are both athermal and suitable for high power applications in the visible and near-infrared wavelength regions.

Non-polarizing plate beamsplitters can be manufactured at center wavelengths from 500-2100nm with damage thresholds in excess of $5\text{J}/\text{cm}^2$ at 1064nm. The phase-preserving all-dielectric designs achieve polarization separation of less than 5% in both transmission and reflection with a 50/50 split ratio. Typical applications include phase sensitive heterodyne detection, optical demodulation and as components in Michelson interferometers used for dispersion compensation and interleaving.

Custom non-polarizing beamsplitter cubes are available at 1550nm with a phase separation of less than 10 degrees. Cube sizes range from 1mm to 25mm with angle tolerances as low as 30 arcseconds and transmitted wavefront error of less than $\lambda/10$ at 633nm.

Non-polarizing Beamsplitter 633nm 45° AOI

