

NEW PRODUCTS FOR 2008

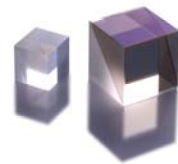


High Energy Laser-line Mirrors for 355nm and 266nm for 0° or 45°

PPC provides only ion-beam-sputtered (IBS) coatings because IBS coatings are significantly more dense, durable, and rugged than conventional e-beam coatings. In addition to our standard high power 1064nm and broadband laser mirrors, we have now introduced UV mirrors with laser damage thresholds exceeding 2 J/cm² at 266nm.

High Energy Laser-line Polarizing Cubes for 532nm and 355nm

PPC's expanded family of epoxy-free broadband and laser-line polarizing beamsplitter cubes now includes 0.5" versions at 1064nm, 532nm and 355nm, with LDT tests of greater than 2J/cm² at 355nm and > 12J/cm² at 1064nm. Custom versions are available from 266nm to 2200nm in sizes from 1 mm³ to 20 mm³.

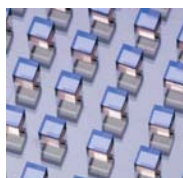
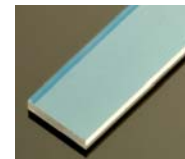


High Energy Brewster Plate Polarizers for 532nm and 355nm

These thin-film plate polarizers utilize PPC's advanced ion-beam-sputtered (IBS) coating technology to achieve superior high-power performance and guaranteed transmission at a specific angle of incidence, with no angle tuning required. These new wavelengths have been added to increase our selection of standard Brewster and 45° plate polarizers.

High Transmission Dichroic Mirrors for Multi-photon Microscopy (MPM)

For ultrafast Ti:Sapphire lasers, PPC produces a line of dispersion-free mirrors and dichroic beamsplitters that offer both broadband reflectivity and high laser-damage thresholds. The MPM mirror has been specially designed for multi-photon applications requiring high reflectivity, broad bandwidth, low dispersion and high transmission in the visible.



50GHz Nano-precise™ Solid Etalons for 1520-1630nm

Standard 2x2 mm² fused silica etalons are available for the 1520–1630-nm wavelength range with 50- and 100-GHz nominal FSR values. Solid, air-gap, Gire-Tournois (GT), VIPA, and multi-cavity versions are also available with superior free-spectral-range tolerances to as tight as ±0.001 GHz and optical thickness accuracies of ±1 nanometer.

Custom waveplates in round or square shapes from 1mm to 100mm

PPC uses laser-grade crystal quartz to produce multiple-order, true zero-order and compound zero-order waveplates with retardations of quarter-wave, half-wave or anything in-between. For compound zero-order waveplates and waveplate assemblies, we use our proprietary epoxy-free bonding technology—Chemically Activated Direct Bonding (CADB™), which results in precise, high-energy, epoxy-free components that are both stable and robust. Waveplates are available as stand-alone components, or as part of a more complex optical assembly as shown.



Custom anti-reflection (AR) coatings to < 0.05% reflectivity per surface

Damage thresholds > 20J/cm² and reflectivities down to < 0.05% per surface are available from 266nm to 2200nm on windows, waveplates, beamsplitter plates or polarizer cubes. We also coat customer-supplied substrates.