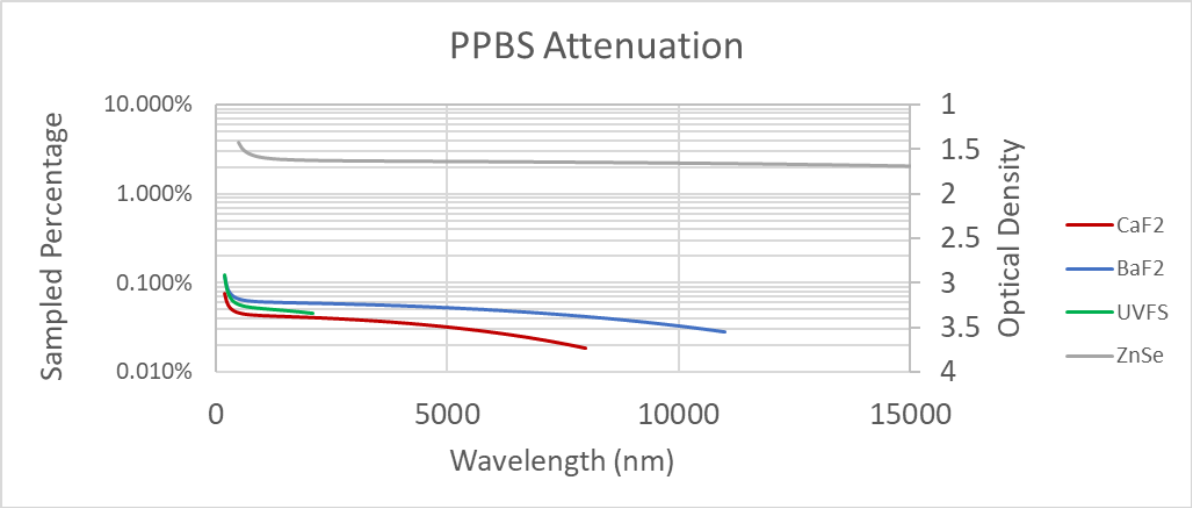
# Polarization Preserving Beam Sampler (PPBS)

The Polarization Preserving Beam Sampler (PPBS) uses a dual wedge design to sample a small percentage of a beam's power for laser beam profiling applications. The PPBS samples the reflections from two orthogonal wedge windows to safely reduce the power of high intensity light while preserving the original polarization of the input beam and eliminating the effects of multiple reflections from each air-glass interface.

## Product Features

- Wavelength range: 0.19 - 16 µm (model dependent)
- Clear aperture: 17.5 mm (custom options available)
- Input power up to hundreds of watts
- Sampled percentage: 0.03% to 3%
- Optical path length: 50 mm
- Wedge materials for different wavelengths
  - $CaF_2$, $BaF_2$, UV fused silica, ZnSe
- Beam traps available to capture residual beams
- SM1-threaded apertures for easy integration into systems
- Available with post mount kit (Post-Kit-2-A)


| Model | Wavelength (nm) | Average Transmission % | OD |
|---|---|---|---|
| PPBS-UV-FS | 190-2000 | 0.05 | 3.3 |
| PPBS-BaF2 | 3000 | 0.06 | 3.2 |
| PPBS-CaF2 | 3000 | 0.04 | 3.4 |
| PPBS-BaF2 | 10600 | 0.03 | 3.5 |
| PPBS-ZnSe | 10600 | 2.2 | 1.7 |

**Table 1:** Attenuation at Common Wavelengths