Optical Windows Selection Guide

An Optical Window is an optically flat, transparent optical material that allows light into an instrument. Newport offers a wide variety of **Optical Windows** made from materials like BK7, Fused Silica, Sapphire, Germanium, Zinc Selenide, Calcium Fluoride, and Magnesium Fluoride. Parallel or wedged optical windows can be purchased with laser grade surface quality and surface flatness for common or very demanding interferometer measurements. Newport also offers anti reflection coated optical windows to improve the transmission from UV to IR wavelength regime.

Selecting an Optical Window

Click **Optical Windows** to shop or browse all of our standard models, or select a product series below for more information on our products and capabilities.

Optical Windows		Features
	Parallel Windows	• Parallel to less than 30 arc sec for minimal transmitted beam deviation • ≤Λ/20 surface flatness and 10-5 scratch-dig • High quality BK 7 or UV grade fused silica • Broadband AR coatings for UV, visible, or NIR applications
	High-Energy Laser Wedged Windows	• Damage resistant up to 10 J/cm^2 • UV fused silica for excellent thermal stability • Low wavefront distortion • Hard refractory coatings • 25.4 and 50.8 mm diameters
	Sapphire Windows	• High transmittance from 150 nm to 5 µm • Extremely hard and durable material • Ideal for thermally demanding environments • 1/2, 1, and 2 inch diameter
	Germanium Windows	• Minimize chromatic aberration due to low dispersion • Anti-reflection coated for 3 µm to 12 µm or 8 µm to 12 µm • Available in 7 sizes from 10.0 mm to 75.0 mm diameter • Ideal for IR applicaitons
	ZnSe Windows	• High transmission (>90%) from 3 µm to 12 µm • Low dispersion and low absorption coefficient • Ideal for thermally demanding environments • Available in 8 differencet sizes from 10.0 mm to 75.0 mm diameter
	CaF_2 Windows	• High average transmittance • Low chormatic aberrations • Ideal for UV to NIR applications (180 nm to 8 µm) • Availabe in 9 sizes from 5.0 mm to 50.0 mm diameter
	MgF_2 Windows	• High transmittance from 0.15µ m to 6.5 µm • High resistance to thermal and mechanical shock • Ideal for deep UV to infrared regions • Available in 4 sizes from 5.0 mm to 50.0 mm diameter
Specialty Optical Windows		Features
	Interferometer Flats	• UV fused silica for excellent thermal stability • Λ/10 surface flatness and 10-5 scratch-dig • Slight wedge virtually eliminates internal fringes • Interferogram included
	Shear Plate Collimation Tester	• For quick, easy testing of beam collimation • Useable in the visible wavelength range • Fused Silica Material • 2" diameter size
	UV Beam Viewer	• Glows green when exposed to UV radiation • Observe laser mode structure, beam shape, and beam alignment • Suitable for high power applications • Cleanroom compatible