

PROTECTIVE FILTERS

Protective Windows are designed to shield lenses and enclosures from dirt, dust, liquids, impact and harsh environments without sacrificing image quality and are useful for imaging in the ultraviolet (UV), visible (VIS), near-infrared (NIR) and long-wave infrared (LWIR) spectrums. MidOpt offers a variety of glass and acrylic Protective Windows depending on the application and environment. Glass Protective Windows offer superior durability, can withstand high operating temperatures and are a great solution for applications requiring exceptional surface quality. Acrylic Protective Windows are a cost-effective, lightweight solution for protecting the lens. MidOpt Protective Windows are offered with anti-reflection (AR) and oleophobic (anti-smudge) coating options.

Protective



Left: No Coating | Right: Anti-Reflection Coating

Left: No Coating | Right: Oleophobic Coating

WINDOW TYPES:

Acrylic

- Resistant to abrasions, breakage and solvents
- Half the weight of glass Protective windows
- Durable, economical, and precision laser cut to achieve any size and shape
- Optical-grade and anti-reflection coated
- Available with an oleophobic (anti-smudge) coating

Borofloat®

- Resistant to high impact, chemicals and alkalis
- Withstands temperatures of up to 450° C
- Transmits wavelengths ranging from UV, VIS and NIR
- Coated with a durable multi-layer anti-reflection coating
- Available with an oleophobic (anti-smudge) coating

Industrial-Grade Glass

- Economical glass Protective window for industrial applications
- Coated with a durable multi-layer anti-reflection coating
- Available uncoated or with an oleophobic (anti-smudge) coating

Precision Windows

- Made with precision polished N-BK7
- Low image distortion and stain-resistant
- Free of bubbles and inclusions
- Excellent transmission in the VIS and NIR
- Durable multi-layer anti-reflection coating



Fused Silica

- Ultra-low thermal expansion / shock resistant
- Withstands temperatures of up to 1100° C
- Superior transmission in the UV
- Available with a multi-layer anti-reflection coating

Sapphire

- Stronger than standard glass windows
- Durable surface to withstand harsh environments
- Resistant to high impact, chemicals and alkalis
- Transmits wavelengths ranging from UV, VIS and short-wave infrared (SWIR)

Germanium

- Transmits wavelengths in the long-wave infrared (LWIR) used in thermal imaging applications
- Protects against abrasive airborne particles, salt water, and most acids
- Coated with a durable multi-layer anti-reflection coating
- Available with a DLC (diamond-like carbon) coating

Protective



PART#	DESCRIPTION	USEFUL RANGE (nm)	CUT-ON WL 50% T	PEAK TRANSMISSION	
AC & LP SERIES – PROTECTIVE FILTERS					
○ AC370	Acrylic Oleophobic A/R Protective Window	380-850nm	370nm	≥98%	•
○ AC380	Acrylic A/R Protective Window	450-850nm	380nm	≥95%	•
○ AC400	Acrylic Oleophobic A/R Protective Window	415-1100nm	400nm	≥95%	•
○ LP170	Fused Silica Protective Window	200-2300nm	170nm	≥94%	•
○ LP171	Fused Silica Multi-Layer A/R Coated Protective Window	200-2300nm	170nm	≥94%	•
○ LP190	Sapphire Protective Window	250-2300nm	190nm	≥88%	•
○ LP285	Borofloat® Multi-Layer A/R Coated Protective Window	350-1100nm	285nm	≥98%	•
○ LP286	Borofloat® Oleophobic A/R Coated Protective Window	350-1100nm	285nm	≥98%	•
○ LP330	Industrial-Grade Glass Protective Window	350-1100nm	330nm	≥90%	•
○ LP340	Industrial-Grade Multi-Layer A/R Coated Glass Protective Window	350-800nm	340nm	≥98%	•
○ LP341	Industrial-Grade Oleophobic A/R Coated Glass Protective Window	350-800nm	340nm	≥98%	•
○ LP345	Precision Multi-Layer A/R Coated Glass Protective Window	350-800nm	340nm	≥98%	•
○ LP390	UV-Absorbing Protective Window	410-1100nm	390nm	≥90%	•
○ LP415	UV Dichroic Block Protective Window	415-1100nm	415nm	≥95%	•
● LP8000	Germanium DLC Coated LWIR Protective Window	7.5-12.5μ	5250nm	≥90%	•

For more information, visit midopt.com/protective