

Polarizers

Polarizer Selector

Specac produce a wide range of substrate based holographic polarizers for use in spectroscopic measurement studies whereby a known orientation of light is required for discrimination.

There is a choice of polarizers for their discrimination performance offered at 2500 lines/mm or 4000 lines/mm as the photo-etched polarizing grid on a variety of different substrate materials. The substrate materials themselves are also available in different sizes, with a choice of different anti-reflection coatings, support ring mounts and compatible polarizer rotator mounts.

This Polarizer Selector Guide is designed to help you identify a particular polarizer from the particular features offered from our Family Series that will be ideal for your application. Supplementary Polarizer Family Series Datasheets are available for more specific information about the polarizer of your choice.



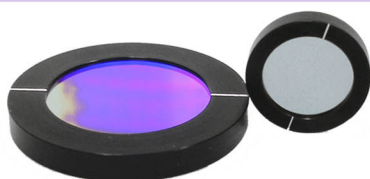
FTIR Infrared Polarizers (GS12000 Series) - These polarizers are offered on BaF₂, CaF₂, KRS-5, Ge, and ZnSe substrates. Spring ring mounted with a 25mm clear aperture size only, they fit directly into the aperture ports of all Benchmark baseplate compatible accessories.

Standard Infrared Polarizers (GS57010 Series) - These polarizers are offered on BaF₂, CaF₂, KRS-5, Ge, and ZnSe substrates, in a choice of support rings. Manufactured at 4000 lines/mm, they ensure enhanced performance at shorter wavelengths for precision applications.

High Extinction Ratio (HER) Infrared Polarizers (GS57010 Series) - These polarizers are offered on BaF₂, CaF₂, KRS-5, Ge, and ZnSe substrates in a choice of support rings. Manufactured at 4000 lines/mm, with an enhanced coating process, they ensure a higher degree of polarization extinction without jeopardising transmission throughput.



Image Quality (IQ) Infrared Polarizers (GS57010 Series) - These polarizers are offered on Ge and ZnSe substrates, in a choice of support rings. Anti-reflection coatings and a high specification of optical flatness and parallelism make these polarizers well suited for imaging applications.



Opto-Physics Infrared Polarizers (GS57500 Series) - These polarizers are offered on BaF₂, CaF₂, KRS-5, and ZnSe substrates, in standard 25 or 50 mm support rings. Manufactured at 2500 lines/mm, they provide acceptable polarization performance at an economical price.

Illustrations, descriptions and specifications in this datasheet were correct at the time of going to press. However, Specac's policy is one of continuous product development and we reserve the right to change descriptions and specifications at any time.

For the latest details please contact your local Specac office or representative.

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	GS12000 Series FTIR Infrared	Standard	GS57010 Series HER	IQ	GS57500 Series Opto-Physics
Wire Grid Spacing 2,500 lines/mm 4,000 lines/mm	✓	✓	✓	✓	✓
Substrate KRS-5 (2-35µm) BaF2 (1-12.5µm) CaF2 (1-10µm) Ge (8-12µm) ZnSe (1-15µm)	✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓*	✓ ✓ ✓ ✓ ✓
Coating None High Extinction Ratio Image Quality	✓	✓	✓	✓	✓
C. A. 18.0mm 25.0mm (Unmounted) 25.0mm (Mounted) 34.0mm 38.0mm 50.0mm 71.0mm	✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	✓ ✓
Compatible Polarizer Rotator Mount Series	GS12500	GS57340 GS12510***	GS57340 GS12510***	GS57340 GS12510***	Standard Commercial Rotator Mounts

Notes:

* ZnSe IQ Polarizers are available in 3-5µm or 8-12µm

** The KRS-5 substrate is not available in 71.0mm C.A.

*** For 38.0mm C.A. polarizer size only

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