

Free-Standing Wire Grid Polarizers

Efficient polarizing filters for far-infrared, terahertz and millimeter wavelengths.

Wire grid polarizers wound onto metallic frames at spacings suitable for far-infrared and millimeter wave applications in spectroscopy and signal processing.

Key Features

- Customisable for applications in the far-IR, THz, and longer wavelengths
- Highly efficient polarization due to absence of substrate

These polarizers are highly efficient at wavelengths much larger than the spacing of the wires; this makes them suitable for practical applications at wavelengths of 25 μm and longer.

Specifications

Item	Specification
Wire thickness (standard)	5 or 10 μm
Wire spacing	Min. 12.5 μm , max. 1.8 mm
Wire materials	Tungsten or gold-plated tungsten
Frame materials	Anodized aluminium (standard). Others on request include stainless-steel, invar, and glass fiber.

All materials and specifications are customisable within limits. Please contact a Specac representative for more information.



Ordering Information

The following standard configurations are available to order. Note that due to manufacturing constraints, there is a premium charged for orders of individual or odd-numbered polarizers.

Part number	Wire thickness / spacing (μm)	Mounting diameter O.D. / I.D. (mm)	Mounting type
GS57200	5 / 12.5	50 / 25	Two 3.5 mm fixing holes
GS57201	10 / 25	50 / 25	
GS57202	5 / 12.5	80 / 50	
GS57203	10 / 25	80 / 50	
GS57204	5 / 12.5	105 / 75	
GS57205	10 / 25	105 / 75	

Part number	Wire thickness / spacing (μm)	Mounting diameter O.D. / I.D. (mm)	Mounting type
GS57206	5 / 12.5	130 / 100	Two 3.5 mm fixing holes
GS57207	10 / 25	130 / 100	
GS57100	10 / 25	140 / 120	Counterbored 3.5 mm fixings
GS57110	10 / 50	140 / 120	
GS57130	10 / 25	133.35 / 95.25	NPL cube interferometer
GS57135	5 / 12.5	133.35 / 95.25	

United Kingdom
sales@specac.co.uk
+44 (0) 1689 892 902

United States
sales@specac.com
+1 866 726 1126

China
frank.li@specac.com

Singapore
kamhar.woo@specac.com

