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TECHSPEC® 50mm Diameter 3-12µm AR, Zinc Sulfide Multispectral Window



TECHSPEC® Zinc Sulfide Multispectral Windows

Stock #64-147 [CONTACT US](#)

⊖ 1 ⊕ €935⁰⁰

ADD TO CART

Volume Pricing	
Qty 1-10	€935,00 each
Qty 11-25	€845,00 each
Qty 26-49	€795,00 each
Need More?	Request Quote

ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Protective Window **Type:**

Crystal **Type of Window:**

Physical & Mechanical Properties

Clear Aperture CA (mm):

45.00	Diameter (mm):
50.00 +0.0/-0.1	
	Thickness (mm):
3.00 ±0.1	
	Parallelism (arcmin):
<1	
	Dimensional Tolerance (mm):
+0.0/-0.1	
	Bevel:
Protective as needed	
	Clear Aperture (%):
90.00	
	Edges:
Fine Ground	
	Poisson's Ratio:
0.27	
	Young's Modulus (GPa):
74.5	
	Knoop Hardness (kg/mm²):
210.00	

Optical Properties

	Coating:
BBAR (3000-12000nm)	
	Substrate: <input type="checkbox"/>
Zinc Sulfide Multispectral	
	Index of Refraction (n_d):
2.371	
	Surface Quality:
60-40	
	Coating Specification:
R _{avg} <5.0% @ 3 - 12μm	
	Wavelength Range (nm):
3000 - 12000	
	Surface Flatness (P-V):
λ/10 @ 10.6μm	

Material Properties

	Density (g/cm³):
4.08	
	Coefficient of Thermal Expansion CTE (10⁻⁶/°C):
6.8	

Regulatory Compliance

Compliant	RoHS 2015:
Compliant	Reach 224:
View	Certificate of Conformance:

Need different specs or modifications?

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

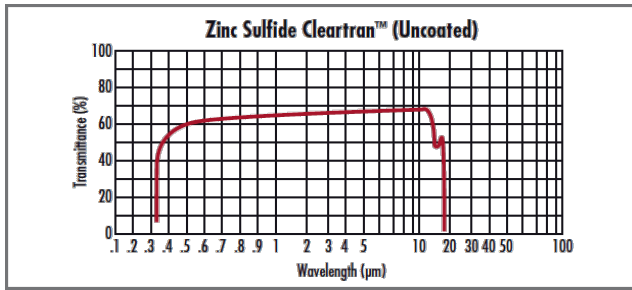
Product Details

- Multispectral Grade Zinc Sulfide Substrate
- Low Absorption and Low Scatter from 0.4 - 12μm
- Available Uncoated or 3 - 12μm Broadband AR Coated Option

TECHSPEC® Zinc Sulfide Multispectral Windows are manufactured from a water-free, multi-spectral grade of zinc sulfide that has low absorption and scatter properties over its broad transmission range of 0.4 - 12μm. Like our TECHSPEC® Zinc Selenide Windows, Zinc Sulfide Multispectral is a chemical vapor deposited material which is commonly used in thermal imaging. With its excellent transmission properties in the visible and infrared, Zinc Sulfide Multispectral is the material of choice for systems that have both visible and mid-wave or long-wave infrared sensors. It is slightly harder and more chemically resistant than zinc selenide. TECHSPEC® Zinc Sulfide Multispectral Windows are offered uncoated or in a 3 - 12μm Broadband AR Coated Option. These windows are available in diameters ranging from 12.5 to 50.80mm with a 2, 3, or 4mm thickness.

Note: Although special handling is required, acetone may be used to remove particles or debris from the windows.

Technical Information



Special Handling

These optics require special handling to avoid damage and ensure long-term performance. Proper handling, cleaning, and storage are essential to maintain optical quality. Explore our [Optics Cleaning Resources](#) for step-by-step guides and best practices. For personalized assistance, [Email us](#) or [Chat](#) with our technical support team.



Component Handling Tools

Compatible Mounts