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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](#).

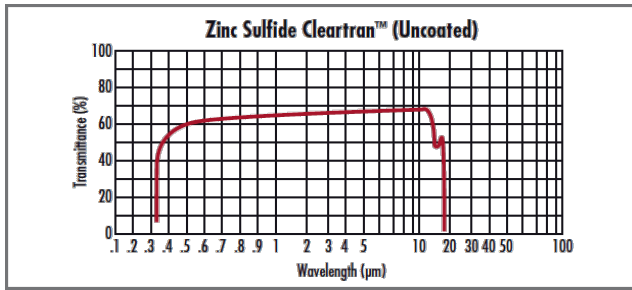
Product Details

- 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