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**TECHSPEC® 31.75mm Sq., 2.5X, Protected Aluminum Off-Axis Ellipsoidal Mirror**



Protected Aluminum Off-Axis Ellipsoidal Mirror

Stock **#12-497** **2 In Stock**

⊖ 1 ⊕ **\$452.20**

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Volume Pricing	
Qty 1-5	<b>\$452.20</b> each
Qty 6-25	<b>\$407.40</b> each
Qty 26-50	<b>\$362.60</b> each
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Product Downloads

**General**

Off-Axis Ellipsoidal Mirror **Type:**

**Physical & Mechanical Properties**

49.38 **Y Offset (mm):**

31.75 x 31.75 **Dimensions (mm):**

Length (mm):

31.75

Width (mm):

31.75

Surface Roughness ( $\square$ ):

<100 RMS

Image Distance (mm):

83.82

## Optical Properties

Coating Type:

Metal

Coating:

Protected Aluminum (400-2000nm)

Off-Set Angle ( $^{\circ}$ ):

65.44

Wavelength Range (nm):

400 - 2000

Substrate:

Aluminum 6061-T6

Coating Specification:

$R_{avg} > 85\%$  @ 400 - 700nm  
 $R_{avg} > 90\%$  @ 400 - 2000nm

Surface Quality:

60-40

Magnification:

2.5X

Object Distance (mm):

33.02

Reflected Wavefront, RMS:

$\lambda/4$

## Regulatory Compliance

Certificate of Conformance:

[View](#)

## 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

- <100Å Surface Roughness for Low Scatter
- Diamond Turned Alignment Surfaces
- Ideal for Finite Conjugate Reflection

TECHSPEC® Off-Axis Ellipsoidal Mirrors are finite conjugate focusing mirrors used to image at a set angle. These mirrors feature fixed conjugate image and object path lengths, providing up to 2.5X magnification from the object plane to the imaging plane. Off-Axis Ellipsoidal Mirrors are commonly found in Fourier-transform infrared spectroscopy (FTIR) systems where broadband light sources require the use of metallic reflectors with an off-axis design to meet space constraints. TECHSPEC Off-Axis Ellipsoidal Mirrors feature a diamond turned cylindrical surface on their base, with a radius equivalent to the distance to the major axis of the ellipse, for aligning the mirror to the major axis as well as a diamond turned flat reference surface that is perpendicular to the major axis. Please contact us if your application requires an Off-Axis Ellipsoidal Mirror with custom specifications.

## Technical Information

