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**TECHSPEC® 50.8 x 59.5mm EFL 45° Protected Gold 100Å Off-Axis Parabolic Mirror**



Stock **#35-551** **4 In Stock**

[Other Coating Options](#)

⊖ 1 ⊕ C\$838<sup>00</sup>

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Volume Pricing	
Qty 1-5	C\$838.60 each
Qty 6-10	C\$754.60 each
Qty 11+	C\$721.00 each
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Product Downloads

**General**

Off-Axis Parabolic Mirror **Type:**

**Physical & Mechanical Properties**

42.08 **Y Offset (mm):**

50.80 +0.00/-0.38 **Diameter (mm):**

90 **Clear Aperture (%)**:

<100 RMS **Surface Roughness (□)**:

## Optical Properties

Metal **Coating Type**:

Protected Gold (700-10000nm) **Coating**:

45 **Off-Set Angle (°)**:

700 - 10000 **Wavelength Range (nm)**:

59.51 **Effective Focal Length EFL (mm)**:

Aluminum 6061-T6 **Substrate**: □

**Coating Specification**:  
R<sub>avg</sub> ≥ 94% @ 700 - 800nm  
R<sub>avg</sub> ≥ 97% @ 800 - 2,000nm  
R<sub>avg</sub> ≥ 98% @ 2,000 - 12,000nm

±1 **Focal Length Tolerance (%)**:

50.8 **Parent Focal Length PFL (mm)**:

λ/2 **Surface Figure, RMS**:

80-50 **Surface Quality**:

101.60 **Radius of Curvature (mm)**:

1λ **Reflected Wavefront, RMS**:

## Threading & Mounting

#47-112 **Compatible Mounting Plates**:

## Regulatory Compliance

**Compliant** **RoHS 2015**:

**View** **Certificate of Conformance**:

**Compliant** **Reach 247**:

## 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

- Bare or Protected Gold Coating for NIR and IR Applications
- 50Å and 100Å Surface Roughness Options
- 15°, 30°, 45°, 60°, or 90° Offset Angles
- Aluminum and Silver Coated Mirrors Also Available

TECHSPEC® Gold Off-Axis Parabolic Mirrors (OAPs) are designed for minimal scatter loss in light focusing applications. Available with bare or protected gold coatings, these OAP mirrors offer excellent reflectivity from the near infrared (NIR) to the far infrared (IR). Multiple surface roughness options are available in offset angles from 15 to 90°, providing flexibility for system designs. TECHSPEC® Gold Off-Axis Parabolic Mirrors are commonly used in IR systems such as FLIR and FTIR, as well as IR lasers including quantum cascade lasers (QCLs). Mounting plates with holes perpendicular to the optical axis for post mounting are also available.

## 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