

40mm Sq x 200mm FL 24° Off-Axis Parabolic Mirror



High Performance Off-Axis Parabolic Mirrors

Stock **#90-977** [CONTACT US](#)

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+

€1.385⁰⁰

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Volume Pricing	
Qty 1-9	€1.385,00 each
Qty 10-25	€1.247,00 each
Qty 26-49	€1.180,00 each
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i Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Type:

Off-Axis Parabolic Mirror

Physical & Mechanical Properties

Dimensions (mm):

40.0 x 40.0

Dimensional Tolerance (mm):

+0.0/-0.2	
90.00	Clear Aperture (%):
16.00	Center Thickness CT (mm):
±0.2	Center Thickness Tolerance (mm):
Optical Properties	
209.00	Effective Focal Length EFL (mm):
418.00	Radius of Curvature (mm):
Bare Aluminum	Coating:
Metal	Coating Type:
R _{abs} >85% @ 250 - 700nm	Coating Specification:
24	Off-Set Angle (°):
200.0	Parent Focal Length PFL (mm):
λ/4	Surface Accuracy:
80-50	Surface Quality:
±0.5%	Parent Focal Length Tolerance (mm):
Float Glass	Substrate:
±2.0	Y Offset Tolerance (mm):
Regulatory Compliance	
View	Certificate of Conformance:

Product Details

- High Quality Glass Substrate
- λ/4 or λ/2 Surface Accuracy
- Ideal for UV and Visible Applications

Our High Performance Off-Axis Parabolic Mirrors feature a superior surface accuracy glass substrate, making them ideal for UV and visible applications. Unlike standard parabolic mirrors, these off-axis mirrors direct and focus incident collimated light at a specific angle, allowing unrestricted access to the focal point. Typical applications include use in Czerny-Turner and Littrow spectrometer configurations, and in general collimator and beam expander setups.

High Performance Off-Axis Parabolic Mirrors have been replicated from masters which have passed stringent inspection criteria, including zonal interferometric and Foucault testing. The aspheric optical profile is holographically recorded onto the mirror substrate.

Note: The bare aluminum coating on these optics is delicate and can be easily scratched. If cleaning is required, non-contact methods such as compressed air or an air-blower should be used.

Technical Information

Parent Focal Length PFL	Reflected Effective Focal Length EFL	Y Offset	V	Off-Set Angle	Stock No.
125mm	134mm	67mm	9mm	30°	#90-976
200mm	209mm	85mm		24°	#90-977
275mm	279.1mm	67.5mm	4.1mm	14°	#90-978
	277.6mm	53mm	2.6mm	11°	#90-979

The diagram illustrates the geometry of an off-axis parabolic mirror. A horizontal dashed line represents the parent focal length (PFL) from the central ray axis to the focus. A vertical line represents the Y offset from the central ray axis to the mirror's vertex. A horizontal line segment V represents the distance from the Y offset line to the mirror's vertex. The angle between the central ray axis and the reflected ray is labeled 'Angle'. The reflected ray's focal length is labeled 'Reflected EFL'. A 'Mark C' is indicated on the mirror's surface.

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

