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TECHSPEC®

800-1150nm, 50.8mm Dia. x 250mm EFL, Ultrafast-Enhanced Silver Concave Mirror



TECHSPEC® Ultrafast-Enhanced Silver Concave Laser Mirrors

Stock **#17-276** **4 In Stock**

⊖ 1 ⊕ €276.⁰⁰

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Volume Pricing	
Qty 1-5	€276,00 each
Qty 6-9	€245,00 each
Qty 10+	€217,00 each
Need More?	Request Quote

ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Concave Mirror **Type:**

Physical & Mechanical Properties

50.80 +0.00/-0.2 **Diameter (mm):**

Clear Aperture (%):
>90

Edge Thickness ET (mm):
10 ±0.20

Optical Properties

Substrate:
Fused Silica (Corning 7980)

Surface Quality:
20-10

Effective Focal Length EFL (mm):
250.00

Radius of Curvature (mm):
500.00

Coating:
Ultrafast-Enhanced Silver (800-1150nm)

Coating Specification:
 $R_{avg} >99\%$ @ 850 - 1100nm, 0°
 $R_s >99\%$ @ 800 - 1150nm, 45°
 $R_p >98.5\%$ @ 850 - 1100nm, 45°

GDD Specification:
 $0 \pm 30 \text{ fs}^2$ @ 800 - 1150nm

Coating Type:
Ultrafast-Enhanced Silver

Wavelength Range (nm):
800 - 1150

Irregularity (P-V) @ 632.8nm:
0.15 λ

Power (P-V) @ 632.8nm:
2 Rings

Damage Threshold, Reference:
 0.35 J/cm^2 @ 1030nm, 200fs, 1 pulse (typical)
 0.10 J/cm^2 @ 1030nm, 200fs, 100Hz, 1000 pulses (typical)

Regulatory Compliance

Certificate of Conformance:
[View](#)

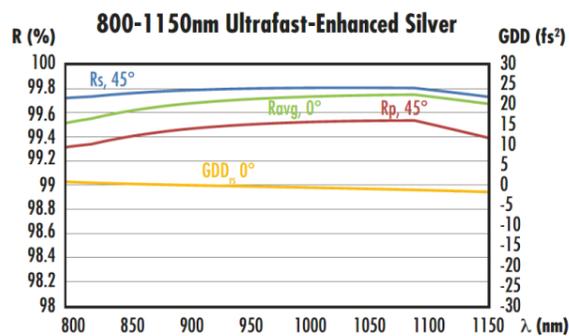
Product Details

- Ideal for Focusing Ti:sapphire and Yb:doped Laser Pulses
- Reflectivity >99% at 600 – 1000nm or 800 – 1150nm
- Low Group Delay Dispersion as Low as $0 \pm 20 \text{ fs}^2$
- Effective Focal Lengths from 25 to 500mm
- **TECHSPEC® Ultrafast-Enhanced Silver Laser Mirrors** Available

TECHSPEC® Ultrafast-Enhanced Silver Concave Laser Mirrors feature silver coatings that are enhanced with a dielectric coating to provide increased reflectivity at 600 – 1000nm or 800 – 1150nm. These mirrors have an intrinsically low group delay dispersion (GDD) across their wavelength range, making them ideal for focusing or redirecting laser light from femtosecond lasers such as Ti:sapphire and Yb:doped lasers. Their broad wavelength range allows them to be used in applications that require a larger bandwidth than dielectric coated low GDD mirrors can provide. TECHSPEC® Ultrafast-Enhanced Silver Concave Laser Mirrors are available in standard imperial sizes and with effective focal lengths up to 500mm.

Note: TECHSPEC® Ultrafast-Enhanced Silver Concave Laser Mirrors can be designed with different wavelength ranges for other ultrafast laser types.

Technical Information



800-1150nm Ultrafast-Enhanced Silver

Custom

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](#).
