

12.7mm Dia., 45°, 725 - 1000nm Ultrafast Chirped Mirror

See More by [UltraFast Innovations \(UFI\)](#)



Stock #12-420 16 In Stock

-

1

+

€412⁰⁰

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Volume Pricing	
Qty 1-3	€412,00 each
Qty 4-7	€360,50 each
Qty 8+	€319,30 each
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ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

SPECIFICATIONS

General

Laser Mirror

Type:

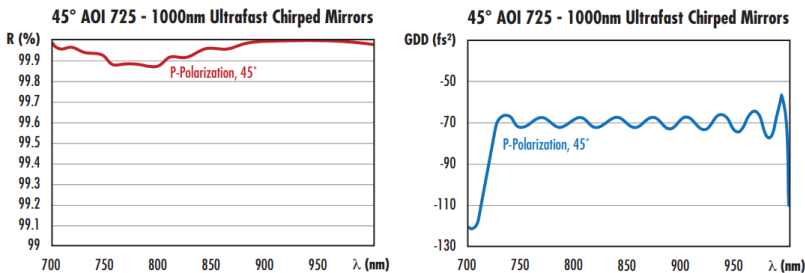
Typical Applications: Pulse Compression @45° of Ti:sapphire Ultrafast Lasers	
CM68	Model Number:
Physical & Mechanical Properties	
<10	Wedge Angle (arcmin):
80	Clear Aperture (%):
Commercial Polish	Back Surface:
12.70 +0.00/-0.10	Diameter (mm):
6.35 ±0.2	Thickness (mm):
Optical Properties	
99.8	Reflection at DWL (%):
R _{avg} >99.8% @ 725 - 1000nm (P-Polarization)	Coating Specification:
-70fs ² @ 725 - 1000nm (P-Polarization)	GDD Specification:
725 - 1000	Wavelength Range (nm):
λ/10	Irregularity (P-V) @ 632.8nm:
Dielectric	Coating Type:
Ultrafast Chirped (725-1000nm)	Coating:
800	Design Wavelength DWL (nm):
45	Angle of Incidence (°):
Fused Silica (Corning 7980)	Substrate: ☐
0.2 J/cm ² @ 800nm, 50fs, 1kHz, 100μm Beam Diameter	Damage Threshold, By Design: ☐
Regulatory Compliance	
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 235:

PRODUCT DETAILS

- High Reflectivity and Negative Group Delay Dispersion (GDD)
- Ideal for Dispersion Compensation and Beam Compression @ 45° AOI
- Designs for Femtosecond Lasers, Including Ti:sapphire

UltraFast Innovations (UFI) 45° AOI Ultrafast Chirped Mirrors are designed with a 45° angle of incidence for compression or dispersion compensation of ultrafast beams during beam transport. These ultrafast mirrors have a multilayer magnetron sputtered coating optimized to provide a negative group delay dispersion (GDD) and high reflectivity from 725 to 1000nm. They also feature laser grade substrates with high surface quality to minimize light scatter and low irregularity, allowing for reflected ultrafast pulses to maintain their optical power and intensity. UFI 45° AOI Ultrafast Chirped Mirrors are ideal for pulse compression and dispersion compensation of ultrafast pulses from femtosecond lasers, such as Ti:sapphire, during beam transport. Please contact us if your application requires an Ultrafast Chirped Mirror with a custom angle, size, or design wavelength.

TECHNICAL INFORMATION



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](#).

COMPATIBLE MOUNTS

