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## 25.4mm Dia., 1030nm Highly-Dispersive Ultrafast Mirror with Reduced Thermal Lensing

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UltraFast Innovations (UFI) 1030nm Highly-Dispersive Ultrafast Mirrors with Reduced Thermal Lensing

Stock **#17-070** **5 In Stock**

⊖ 1 ⊕ £896.<sup>00</sup>

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### Volume Pricing

Qty 1-9	£896.00 each
Qty 10+	£812.00 each
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**!** Prices shown are exclusive of VAT/local taxes

### Product Downloads

### General

HD64 **Model Number:**

### Physical & Mechanical Properties

10 **Wedge Angle (arcmin):**

**Clear Aperture (%):**

Commercial Polish	<b>Back Surface:</b>
25.40 +0.00/-0.05	<b>Diameter (mm):</b>
6.35 ±0.20	<b>Thickness (mm):</b>
<b>Optical Properties</b>	
<b>Coating Specification:</b> R <sub>avg</sub> >99.5% @ 1010 - 1050nm (5° AOI, p-polarization)	
<b>GDD Specification:</b> -1000fs <sup>2</sup> @ 1010 - 1050nm (5° AOI, p-polarization)	
1010 - 1050	<b>Wavelength Range (nm):</b>
λ/10	<b>Irregularity (P-V) @ 632.8nm:</b>
Dielectric	<b>Coating Type:</b>
Highly Dispersive (1010-1050nm)	<b>Coating:</b>
1030	<b>Design Wavelength DWL (nm):</b>
5	<b>Angle of Incidence (°):</b>
<a href="#">Fused Silica</a> (Corning 7980)	<b>Substrate:</b> <input type="checkbox"/>
>0.3 J/cm <sup>2</sup> for 1 ps @ 5 kHz rep rate @ 1030nm	<b>Damage Threshold, Reference:</b> <input type="checkbox"/>

<b>Regulatory Compliance</b>	
<a href="#">Compliant</a>	<b>RoHS 2015:</b>
<a href="#">View</a>	<b>Certificate of Conformance:</b>
<a href="#">Compliant</a>	<b>Reach 235:</b>

## Product Details

- Ultrafast Highly-Dispersive Coating with Reduced Thermal Lensing
- Highly Negative GDD up to -1000 fs<sup>2</sup> at 5° AOI
- >99.5% Minimum Reflection (P-Polarization) across 50nm Bandwidth
- Ideal for the Generation of High-Power Ultrafast Laser Pulses

UltraFast Innovations (UFI) 1030nm Highly-Dispersive Ultrafast Mirrors with Reduced Thermal Lensing provide a GDD of -1000fs<sup>2</sup> and low loss with negligible thermal effects. Thermal lensing can occur if an active gain medium is hotter along the beam axis than the rest of the medium, resulting in a transverse refractive index gradient. This can misalign the laser cavity and lead to different laser mode profiles and drifts in beam pointing. These mirrors are designed to provide a high degree of control over beam stability and feature reflectance >99.5% (P-polarization) between 1010 - 1050nm. At a design angle of incidence (AOI) of 5°, these mirrors maximize the number of reflections between a pair of ultrafast mirrors and allow for pulse compression while limiting thermal lensing. UltraFast Innovations (UFI) 1030nm Highly-Dispersive Ultrafast Mirrors with Reduced Thermal Lensing are ideal for intra-cavity applications, ultrafast high energy oscillators, and amplifiers such as Yb:YAG thin-disk laser systems. Please contact us if your laser system requires a custom size, wavelength, or pulse profile.

## 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

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