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# 12.7mm Dia. 5°, 1030nm Highly-Dispersive Broadband Ultrafast Mirror

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Stock #12-327 [CONTACT US](#)

⊖ 1 ⊕ A\$824<sup>00</sup>

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Qty 1-3	A\$824.00 each
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## Product Downloads

### General

Laser Mirror **Type:**

Yb:doped 1st Harmonic **Typical Applications:**

HD120 **Model Number:**

### Physical & Mechanical Properties

10 ±5	<b>Wedge Angle (arcmin):</b>
80	<b>Clear Aperture (%):</b>
Commercial Polish	<b>Back Surface:</b>
12.70 +0.0/-0.1	<b>Diameter (mm):</b>
6.35 ±0.2	<b>Thickness (mm):</b>

## Optical Properties

99.9 (typical, p-polarization)	<b>Reflection at DWL (%):</b>
R <sub>avg</sub> >99.8%, GDD = -200 fs <sup>2</sup> @ 950 - 1120nm (p-polarization) R <sub>abs</sub> >99.9% @ 1030nm (typical, p-polarization)	<b>Coating Specification:</b>
-200fs <sup>2</sup> @ 950 - 1120nm	<b>GDD Specification:</b>
950 - 1120	<b>Wavelength Range (nm):</b>
M10	<b>Irregularity (P-V) @ 632.8nm:</b>
Dielectric	<b>Coating Type:</b>
Ultrafast (950-1120nm)	<b>Coating:</b>
1030	<b>Design Wavelength DWL (nm):</b>
5	<b>Angle of Incidence (°):</b>
<a href="#">Fused Silica</a> (Coming 7980)	<b>Substrate:</b> <input type="checkbox"/>
>0.1 J/cm <sup>2</sup> for 190 fs @ 1 kHz rep rate @ 1030nm	<b>Damage Threshold, Reference:</b> <input type="checkbox"/>

## Regulatory Compliance

<a href="#">Compliant</a>	<b>RoHS 2015:</b>
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<a href="#">Compliant</a>	<b>Reach 235:</b>

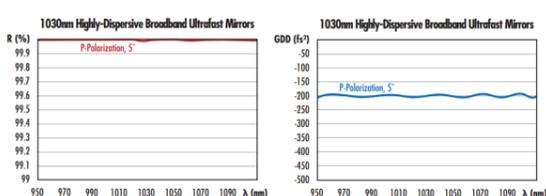
## Product Details

- Negative GDD of -200 fs<sup>2</sup> at 5° AOI
- >99.8% Reflection (p-polarization) between 950 - 1120nm
- Designed for Pulse Compression of Yb:doped Fiber Lasers
- Broadband Ultrafast Chirped Coating

UltraFast Innovations (UFI) 1030nm Highly-Dispersive Broadband Ultrafast Mirrors are used for pulse compression and dispersion compensation of near infrared (NIR) ultrafast pulses, such as from Yb:doped fiber lasers. These mirrors provide a minimum reflectance of 99.8% within their wavelength range and a typical reflectance of >99.9% at their design wavelength of 1030nm. Their multilayer chirped ultrafast coating is optimized to provide dispersive optical interference as well as a negative group delay dispersion (GDD) of -200fs<sup>2</sup> across their broad wavelength range. UFI 1030nm Highly-Dispersive Broadband Ultrafast Mirrors are designed to provide a high degree of control over beam stability, as well as control of third and higher-order dispersions. The 5° angle of incidence is ideal for maximizing the number of reflections between a pair of ultrafast mirrors in tight spaces, such as intra-cavity applications.

Standard imperial sizes of ½" or 1" (12.7mm or 25.4mm) are available; please contact us if your laser system requires a custom size, wavelength, or ultrashort pulses and we would be happy to find the right solution for your application.

## 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

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