25.4mm Dia. 5°, 1030nm Highly-Dispersive Broadband Ultrafast Mirror

See More by UltraFast Innovations (UFI)

Stock #12-328 20+ In Stock

- 1 + £640.00

ADD TO CART

Volume Pricing	
Qty 1-3	**£640.00** each
Qty 4-7	**£568.00** each
Qty 8+	**£504.00** each
Need More?	Request Quote

Prices shown are exclusive of VAT/local taxes

Product Downloads

SPECIFICATIONS

General

Type:

Laser Mirror

Typical Applications:
Yb:doped 1st Harmonic

Model Number:
HD120

Physical & Mechanical Properties

Wedge Angle (arcmin):
10 ±5

Clear Aperture (%):
80

Back Surface:
Commercial Polish

Diameter (mm):
25.40 +0.0/-0.1

Thickness (mm):
6.35 ±0.2

Optical Properties

Reflection at DWL (%):
99.9 (typical, p-polarization)

Coating Specification:
R_{avg} >99.8%, GDD = -200 fs^2 @ 950 - 1120nm (p-polarization)
R_{abs} >99.9% @ 1030nm (typical, p-polarization)

GDD Specification:
-200fs^2 @ 950 -1120nm

Wavelength Range (nm):
950 - 1120

Irregularity (P-V) @ 632.8nm:
λ/10

Coating Type:
Dielectric

Coating:
Ultrafast (950-1120nm)

Design Wavelength DWL (nm):
1030

Angle of Incidence (°):
5

Substrate:
Fused Silica (Corning 7980)

Damage Threshold, Reference:
>0.1 J/cm^2 for 190 fs @ 1 kHz rep rate @ 1030nm

Regulatory Compliance

RoHS 2015:
Compliant

Certificate of Conformance:
View

Reach 235:
Compliant

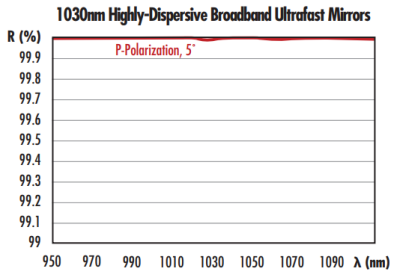
PRODUCT DETAILS

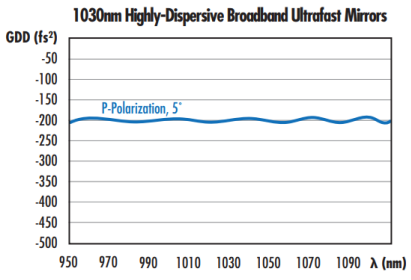
- Negative GDD of -200 fs^2 at 5° AOI
- >99.8% Reflection (p-polarization) between 950 - 1120nm
- Designed for Pulse Compression of Yb:doped Fiber Lasers
- Broadband Ultrafast Chirped Coating

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^2 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