

**TECHSPEC® 515, 1030nm, 50.8mm Dia., Dual Band Low GDD Mirror**



Stock #17-288 **14 In Stock**

- 1 + £576.<sup>00</sup>

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Volume Pricing	
Qty 1-5	£576.00 each
Qty 6-9	£508.00 each
Qty 10+	£448.00 each
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! Prices shown are exclusive of VAT/local taxes

Product Downloads

**General**

Laser Mirror **Type:**

**Typical Applications:**  
Beam transport of 1st and 2nd harmonic of Yb:doped lasers

**Physical & Mechanical Properties**

**Parallelism (arcmin):**

<3

Clear Aperture (%):

>86

Back Surface:

Commercial Polish

Diameter (mm):

50.80 +0/-0.1

Thickness (mm):

9.53 ±0.20

## Optical Properties

Surface Quality:

10-5

Coating Specification:

$R_s > 99.9\%$  @500-540nm  
 $R_p > 99.8\%$  @507-527nm;  
 $R_s > 99.9\%$  @1000-1070nm  
 $R_p > 99.8\%$  @1005-1070nm

GDD Specification:

$< 35\text{fs}^2$  @ 500 - 540nm (s-pol)  
 $< 50\text{fs}^2$  @ 510 - 525nm (p-pol)  
 $< 20\text{fs}^2$  @ 1000 - 1070nm (s-pol)  
 $< 40\text{fs}^2$  @ 1010 - 1055nm (p-pol)

Wavelength Range (nm):

500 - 540, 1000 - 1070

Surface Flatness (P-V):

$< \lambda/6$  @632.8nm over 40mm aperture

Coating Type:

S1: Dielectric  
S2: Stress-compensating

Coating:

Ultrafast (500-540, 1000-1070nm)

Design Wavelength DWL (nm):

515, 1030

Angle of Incidence (°):

45

Substrate:

[Fused Silica](#) (Corning 7980)

## Regulatory Compliance

Certificate of Conformance:

[View](#)

## Product Details

- High Reflectivity & Low Group Delay Dispersion (GDD) for Ultrafast Beam Steering
- Ion-Beam Sputtered (IBS) Coatings Minimize Scatter and Absorption Losses
- Near-Zero GDD for Both the First and Second Harmonics of Ti:sapphire and Yb-doped Lasers

TECHSPEC® Dual Band Low GDD Ultrafast Mirrors maintain high reflectivity and near-zero group delay dispersion over both the first and second harmonic of Ti:sapphire and Yb-doped lasers. Utilizing Ion-Beam Sputtered Coating Technology, these mirrors minimize scatter and absorption loss commonly observed when using other traditional coating application processes. TECHSPEC® Dual Band Low GDD Ultrafast Mirrors are often used in beam steering applications as they will maintain ultrashort pulse durations that can be difficult to preserve when using more conventional laser mirrors. These mirrors are ideal for second-harmonic generation (SHG) microscopy and spectroscopy applications as well as for frequency resolved optical gating (FROG).

## Compatible Mounts