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TECHSPEC® 45mm EFL MgF₂ Coated, UV-NIR Corrected Triplet



Stock #64-837 [CONTACT US](#)

1 **C\$4,004⁰⁰**

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Volume Pricing	
Qty 1-5	C\$4,004.00 each
Qty 6-10	C\$3,402.00 each
Qty 11-25	C\$3,206.00 each
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General

Achromatic Triplet Lens **Type:**

Physical & Mechanical Properties

22.5 **Clear Aperture CA (mm):**

30.00 ±0.05 **Housing Diameter (mm):**

Housing Length (mm):
27.50 ±0.05

Optical Properties

Effective Focal Length EFL (mm):
45.00

Focal Length Tolerance (%):
±1.5 @248nm

Back Focal Length BFL (mm):
34.84

Back Focal Length BFL from Housing (mm):
33.3

Substrate:
CaF₂ / [Fused Silica](#) / CaF₂

Surface Quality:
60-40

f/#:
2.00

Numerical Aperture NA:
0.25

Coating:
MgF₂ (193-1000nm)

Coating Specification:
MgF₂ @600nm

Effective Focal Length EFL @ 248nm (mm):
45.00

Wavelength Range (nm):
193 - 1000

Regulatory Compliance

RoHS 2015:
[Compliant](#)

Reach 224:
[Compliant](#)

Certificate of Conformance:
[View](#)

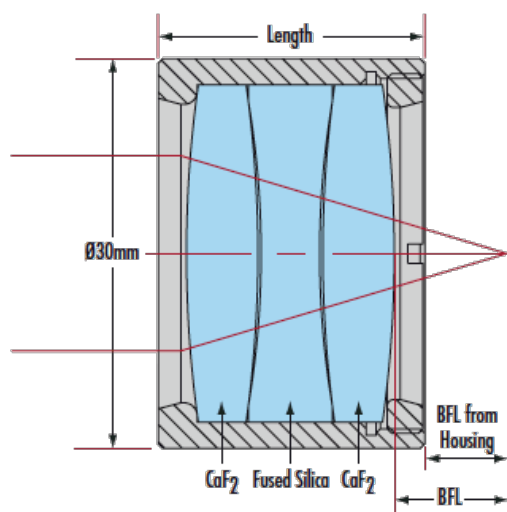
Product Details

- Calcium Fluoride and UV Fused Silica Elements
- Broadband Color-Corrected Design from 193nm to 1000nm
- Ideal for Fluorescence and Spectroscopy Applications

TECHSPEC® UV-to-NIR Corrected Triplet Lenses provide a consistent focal length (see chromatic shift information below) for wavelengths ranging from 193nm to 1000nm. These lenses were designed with broadband applications in mind. Manufactured with premier grades of Calcium Fluoride and Fused Silica, these infinite-conjugate triplets are perfect for imaging applications utilizing a wide spectrum of wavelengths. TECHSPEC® UV-to-NIR Corrected Triplet Lenses are typically used for fluorescence research in which the emitted light is in the visible and near infrared regions of the spectrum or in dual-pass systems in which the same lens is used to illuminate the excitation material as well as collect the emissions from it. Elements are uncoated and mounted in a 30mm diameter aluminum housing. Antireflection coatings available, however a minimum order quantity will apply.

Full [prescription](#) information available.

Technical Information



Effective Focal Length EFL	193 - 400nm		400 - 1000nm		193 - 1000nm	
	Chromatic Shift	RMS Spot Size	Chromatic Shift	RMS Spot Size	Chromatic Shift	RMS Spot Size
36mm	1.8mm	240µm	0.4mm	214µm	2.2mm	268µm
45mm	1.1mm	88µm	0.3mm	69µm	1.3mm	95µm
90mm	2.0mm	64µm	0.6mm	38µm	2.5mm	69µm

135mm	1.6mm	49µm	0.6mm	31µm	2.1mm	51µm
180mm	1.4mm	46µm	0.6mm	28µm	1.9mm	45µm

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