

TECHSPEC® 12mm Focal Length, UAV Series Fixed Focal Length Lens



12mm Focal Length, UAV Series Fixed Focal Length Lens



Stock #22-835 **NEW** 3 In Stock

- 1 + €984^{.50}

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Volume Pricing

Qty 1+	€984,50 each
Need More?	Request Quote

Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Fixed Focal Length Lens **Type:**
Infinite Conjugate **Imaging Lens Type:**

Physical & Mechanical Properties

Iris Option:

Variable	
59.60	Length (mm):
43.50	Maximum Diameter (mm):
43.50	Outer Diameter (mm):
131	Weight (g):
4.4	Maximum Rear Protrusion (mm):
59.60	Maximum Length (mm):
59.60	Minimum Length (mm):

Optical Properties

65.1°	Horizontal Field of View @ Max Sensor Format:
65.1°	Horizontal Field of View, 1.2" Sensor:
60.9°	Horizontal Field of View, 1.1" Sensor:
55.6°	Horizontal Field of View, 1" Sensor:
39.3°	Horizontal Field of View, 2/3" Sensor:
32.5°	Horizontal Field of View, 1/1.8" Sensor:
19.30	Maximum Image Circle (mm):
0.004302	Numerical Aperture NA, Object Side:
11 (9)	Number of Elements (Groups):
425 - 675	Wavelength Range (nm):
12.00	Focal Length FL (mm):
500 - ∞	Working Distance (mm):
2.8 - 16	Aperture (f/#):
425 - 675 BBAR	Coating:
425 - 675 BBAR	Coating Specification:
14.233	Entrance Pupil Position (mm):
-4.52	Object Space Principal Plane (mm):
1.80	Image Space Principal Plane (mm):
5.30	Maximum Distortion (%):
-44.290	Exit Pupil Position (mm):
VIS	Lens Wavelength Range:
VIS	Wavelength:

Sensor

1.2"	Maximum Sensor Format:
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Threading & Mounting

M42.0 X 0.50 (Male)	Filter Thread:
M42.0 X 0.50	Front Thread:
C-Mount	Mount:

Environmental & Durability Factors

Storage Temperature (°C):

-20 to +60 For questions regarding operating temperature please contact our support team

Regulatory Compliance

Certificate of Conformance:

[View](#)

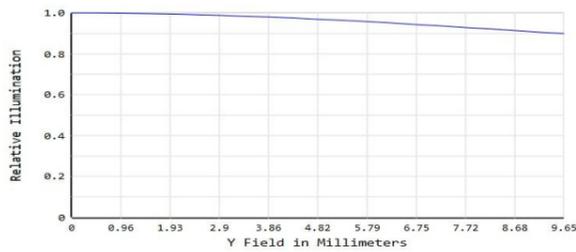
Product Details

- Compact, Infinite Conjugate Lens Ideal for Photogrammetry
- 8mm, 12mm, 16mm, 25mm, and 35mm Focal Lengths
- 1.2", C-Mount Lens
- Up to 24.4 MegaPixels, 2.7µm Pixel Size Sensors

TECHSPEC® UAV Series Fixed Focal Length Lenses are compact, lightweight infinite conjugate lenses designed for the 4th Generation Sony Pregius 1.2" IMX530 and IMX540 sensors for mounting on autonomous vehicles and drones. These lenses are designed with a low Ground Separation Distance (GSD) to enable accurate survey results, and are available in 8mm, 12mm, 16mm, 25mm, and 35mm focal length options. The f/2.8 aperture provide increased light throughput and high-resolution performance. TECHSPEC® UAV Series Fixed Focal Length Lenses are C-Mount and feature a locking focus and iris rings to prevent unwanted adjustments, as well as a front filter thread for integrating standard [optical filters](#). These lenses are ideal for Drone Mapping and Surveying, Aerial Imaging, and Photogrammetry applications.

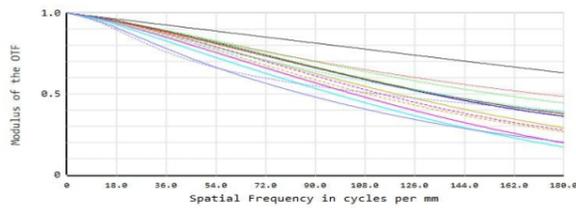
Note: Call for OEM Quantity and Pricing

Technical Information



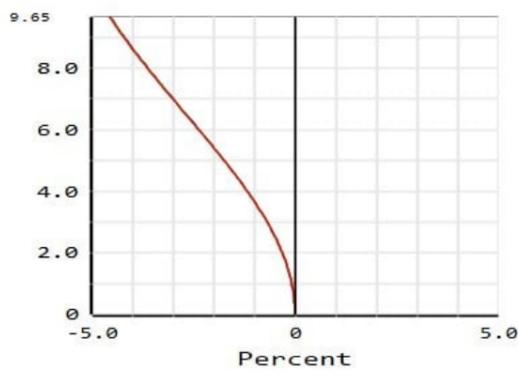
Relative Illumination	
2/11/2025	Zemax
Wavelength: 0.587562 µm	Zemax OpticStudio 23.1
	22835_12mm UAV Peer Review.zmx
	Configuration 1 of 1

#22-835 - 12mm Focal Length, UAV Series Fixed Focal Length Lens, Relative Illumination Plot



Polychromatic Diffraction MTF	
2/11/2025	Zemax
Data For 0.4861 to 0.6563 µm.	Zemax OpticStudio 23.1
Surface: Image	22835_12mm UAV Peer Review.zmx
Legend items refer to field positions	Configuration 1 of 1

#22-835 - 12mm Focal Length, UAV Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, Infinity Working Distance, f2.8



F-Tan(Theta) Distortion	
2/11/2025	Zemax
Maximum Field is 9.650 Millimeters.	Zemax OpticStudio 23.1
Maximum distortion = 4.5492%	22835_12mm UAV Peer Review.zmx
	Configuration 1 of 1

#22-835 - 12mm Focal Length, UAV Series Fixed Focal Length Lens, Distortion Plot