

TECHSPEC® 4mm, f/1.8 UCi Series Fixed Focal Length Lens



4mm UCi Series Fixed Focal Length Lens



Stock #33-855 20+ In Stock

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1

+

C\$378⁰⁰

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Volume Pricing	
Qty 1+	C\$378.00 each
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Product Downloads

General	
UCi Series	Series:
Fixed Focal Length Lens	Type:
No	IR Cut Filter:
High Performance Lens with Compact Form Factor	Imaging Lens Type:

and Fixed Aperture

Physical & Mechanical Properties

Fixed	Iris Option:
48.30	Length (mm):
40	Maximum Diameter (mm):
40	Outer Diameter (mm):
44	Weight (g):
0	Maximum Rear Protrusion (mm):

Optical Properties

Horizontal Field of View @ Max Sensor Format: 23.0mm - 84.8°	
Field of View at Max Sensor Format: Horizontal: 22.8mm - 84.8° Vertical: 15.6mm - 65.4° Diagonal: 33.2mm - 101.7°	
Horizontal Field of View, 1/2" Sensor: 23.0mm - 84.8°	
Horizontal Field of View, 1/2.5" Sensor: 20.0mm - 77.8°	
Horizontal Field of View, 1/3" Sensor: 15.6mm - 65.4°	
Horizontal Field of View, 1/4" Sensor: 11.2mm - 49.7°	
8.00	Maximum Image Circle (mm):
0.0894	Numerical Aperture NA, Object Side:
Number of Elements (Groups): 8 (7)	
4.00	Focal Length FL (mm):
Working Distance (mm): 0 - ∞	
f/1.8	Aperture (f/#):
Coating: λ/4 MgF ₂	
Coating Specification: λ/4 MgF ₂	
Entrance Pupil Position (mm): 12.69	
Object Space Principal Plane (mm): 16.04	
Image Space Principal Plane (mm): 5.84	
Maximum Distortion (%): -20.44	
Exit Pupil Position (mm): -12.68	
Lens Wavelength Range: VIS	

Sensor

1/2.5"	Optimized Sensor Format:
1/2"	Maximum Sensor Format:
Pixel Size (μm): 1.85	

Threading & Mounting

M62 x0.75 (Male)	Filter Thread:
#33-308 (Required)	Filter Thread Adapter:
Mount: S-Mount (M12 x0.5)	

Environmental & Durability Factors

-20 to +60	Storage Temperature (°C):
	Type of Ruggedization: Industrial (Fixed Aperture with Simplified Mechanics)

Regulatory Compliance

View	Certificate of Conformance:
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Product Details

- Up to 1/1.8", C-Mount, S-Mount Lens
- Up to 12 MegaPixels, 1.85µm Pixel Size Sensors
- Instrumentation (UCi) versions of our UC Series Lenses with Streamlined Mechanical Designs and Fixed Apertures
- 4mm to 35mm Focal Length

TECHSPEC® UCi Series Fixed Focal Length Lenses utilize the same optics as the TECHSPEC UC Series Lenses and feature 4K resolution. These lenses are designed for small pixels ≤2.2µm and offer a wide range of fixed apertures for a variety of applications. While optimized for 1/2.5" sensors, many focal length options can be used on sensors up to 1/1.8". TECHSPEC® UCi Series Fixed Focal Length Lenses are ideal for OEM applications that require small, robust, and lightweight imaging solutions.

Note: For adjustable aperture options, see our [TECHSPEC® UC Series Fixed Focal Length Lenses](#).

Edmund Optics has created a family of high-performance ultra-compact optical designs (the UC Series family) and developed 3 customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the UC Series lenses providing the same optical performance in a variety of optomechanical solutions to meet your application requirements:

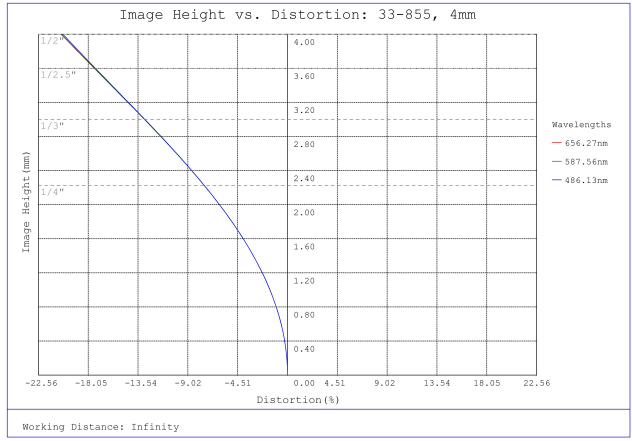
UC Series: Features locking cam focus and iris adjustment in an ultra-compact design and is the most adjustable version of these optical designs; they are the typical high-quality machine vision lenses.

UCi Series: Simplified mechanics featuring fixed apertures with compact housing. [Industrial Ruggedization](#) for reduced size, cost, and locked focus.

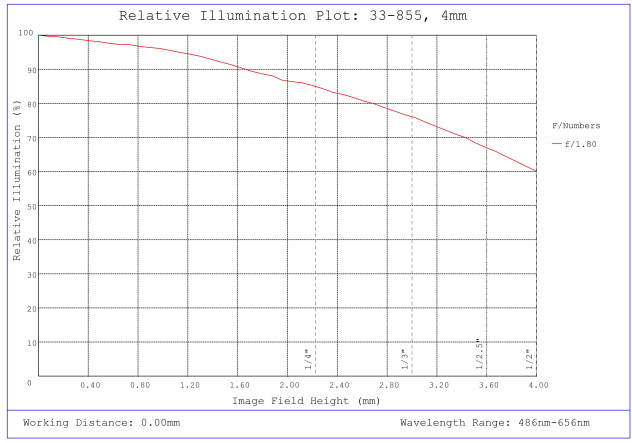
UCr Series: All optics glued in place and a locking C-clamp focus ring. [Stabilized Ruggedization](#) for reduced pixel shift and improved focus stability.

UCw Series: Waterproof, designed to meet IEC [Ingress Protection](#) Code IPX7 to withstand exposure to water up to 1 meter depth for 30 minutes.

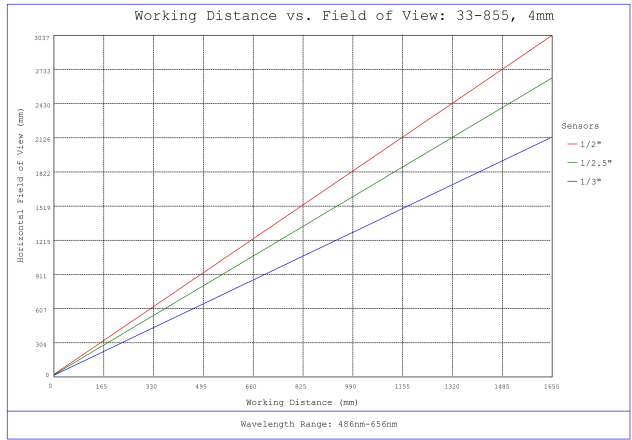
Technical Information



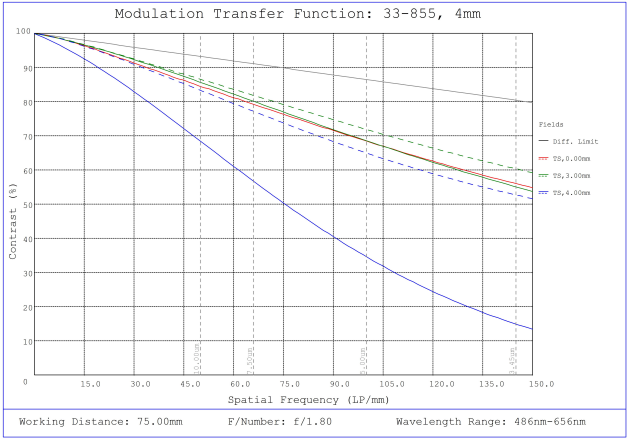
#33-855, 4mm, f/1.8 UCi Series Fixed Focal Length Lens, Distortion Plot



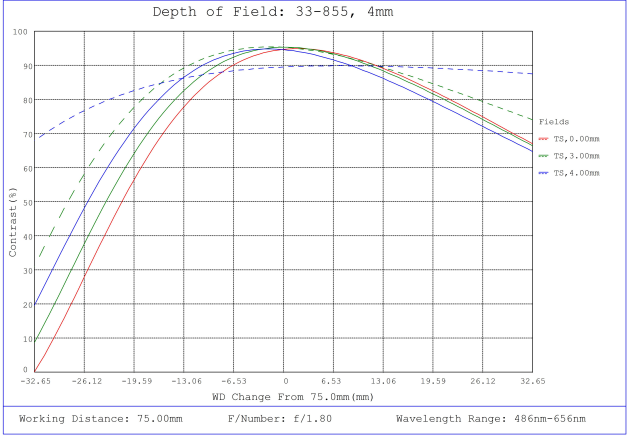
#33-855, 4mm, f/1.8 UCi Series Fixed Focal Length Lens, Relative Illumination Plot



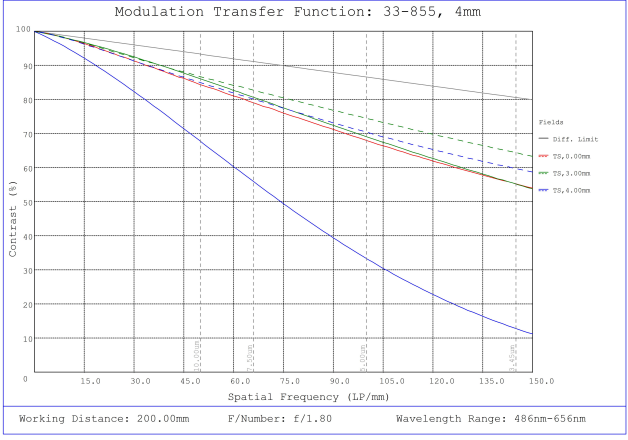
#33-855, 4mm, f/1.8 UCi Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



#33-855, 4mm, f/1.8 UCi Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 75mm Working Distance, f1.8



#33-855, 4mm, f/1.8 UCi Series Fixed Focal Length Lens, Depth of Field Plot, 75mm Working Distance, f1.8



#33-855, 4mm, f/1.8 UCi Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 200mm Working Distance, f1.8



#33-855, 4mm, f/1.8 UCi Series Fixed Focal Length Lens, Depth of Field Plot, 200mm Working Distance, f1.8

Compatible Cameras