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TECHSPEC® 6mm, f/16 UCi Series Fixed Focal Length Lens



6mm UCi Series Fixed Focal Length Lens



Stock #33-868 **1 In Stock**

⊖ 1 ⊕ **\$309⁰⁰**

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Volume Pricing	
Qty 1+	\$309.00 each
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General

UCi Series	Product Family:
Fixed Focal Length Lens	Type:
No	IR Cut Filter:

Physical & Mechanical Properties

Fixed	Iris Option:
47.30	Length (mm):
30.5	Maximum Diameter (mm):
30.5	Outer Diameter (mm):
52	Weight (g):
0	Maximum Rear Protrusion (mm):

Optical Properties

72.8mm - 60.0°	Horizontal Field of View @ Max Sensor Format:
Horizontal: 72.8mm - 60° Vertical: 52.7mm - 45.4° Diagonal: 95.5mm - 73.8°	Field of View at Max Sensor Format:
72.8mm - 60.0°	Horizontal Field of View, 1/2" Sensor:
65.0mm - 54.6°	Horizontal Field of View, 1/2.5" Sensor:
52.7mm - 45.4°	Horizontal Field of View, 1/3" Sensor:
38.7mm - 34.2°	Horizontal Field of View, 1/4" Sensor:
8.00	Maximum Image Circle (mm):
0.0029	Numerical Aperture NA, Object Side:
9 (8)	Number of Elements (Groups):
6.00	Focal Length FL (mm):
50 - ∞	Working Distance (mm):
f/16.0	Aperture (f/#):
λ/4 MgF ₂	Coating:
λ/4 MgF ₂	Coating Specification:
12.61	Entrance Pupil Position (mm):
17.55	Object Space Principal Plane (mm):
4.85	Image Space Principal Plane (mm):
-11.2	Maximum Distortion (%):
-23.26	Exit Pupil Position (mm):
VIS	Lens Wavelength Range:

Sensor

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

Threading & Mounting

M30.5 x 0.50 (Male)	Filter Thread:
S-Mount (M12 x 0.5)	Mount:

Environmental & Durability Factors

-20 to +60	Storage Temperature (°C):
	Type of Ruggedization:

Regulatory Compliance

Certificate of Conformance:

[View](#)

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 $\leq 2.2\mu\text{m}$ 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:

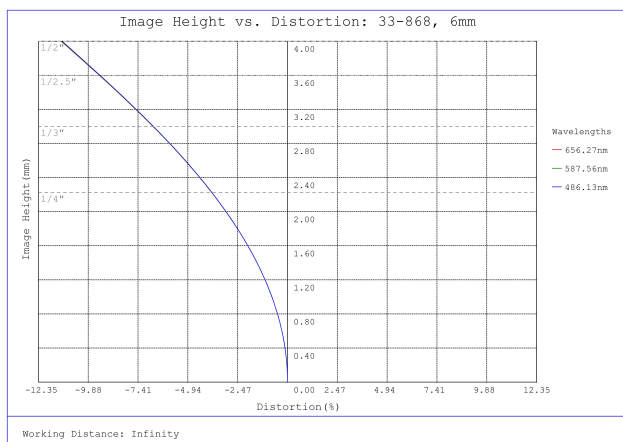
UC Series: Features locking cam focus and iris adjustment in an ultra-compact design and is the most adjustable version of these optical designs; they are the typical high-quality machine vision lenses.

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

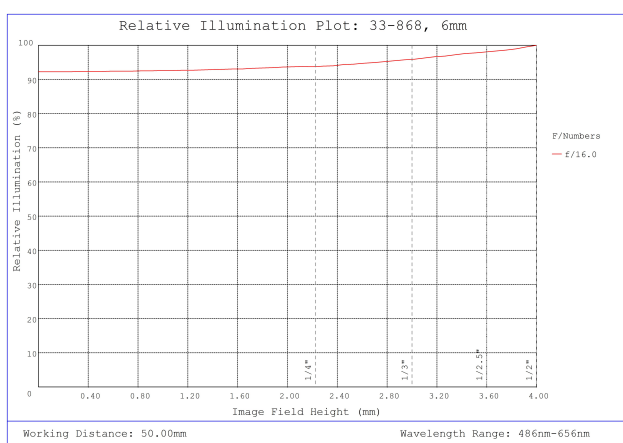
UCr Series: All optics glued in place and a locking C-clamp focus ring. [Stabilized Ruggedization](#) for reduced pixel shift and improved focus stability.

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

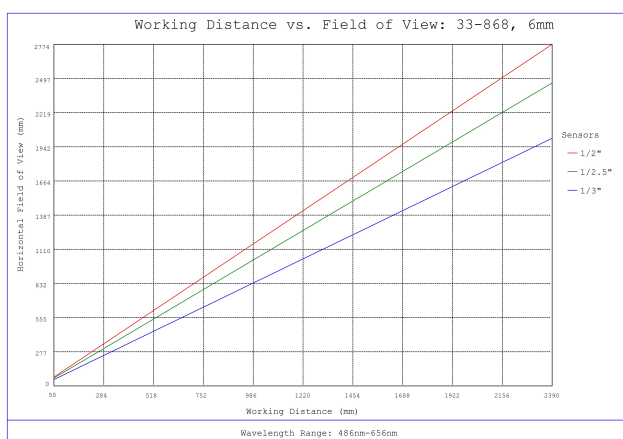
Technical Information



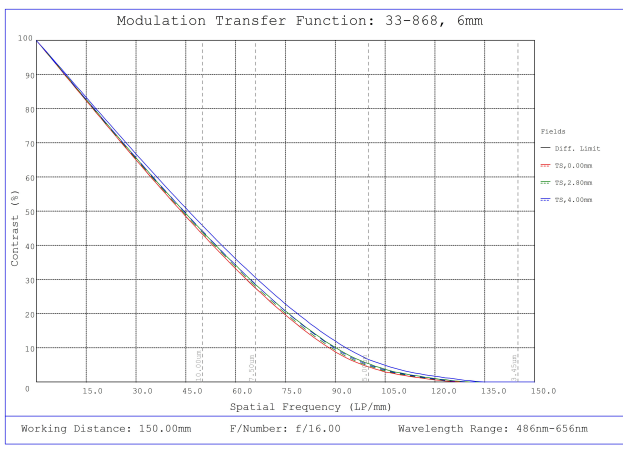
#33-868, 6mm, f/16 UCi Series Fixed Focal Length Lens, Distortion Plot



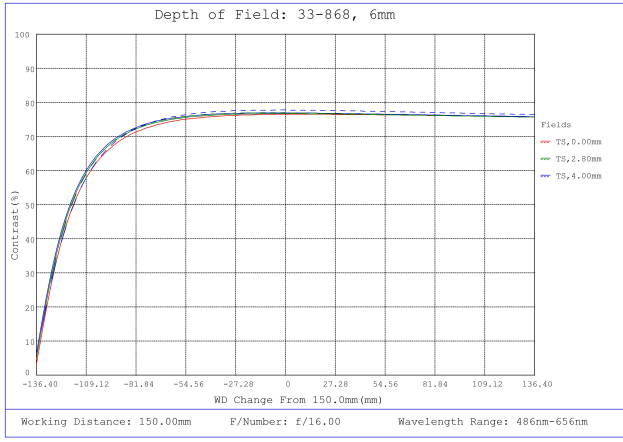
#33-868, 6mm, f/16 UCi Series Fixed Focal Length Lens, Relative Illumination Plot



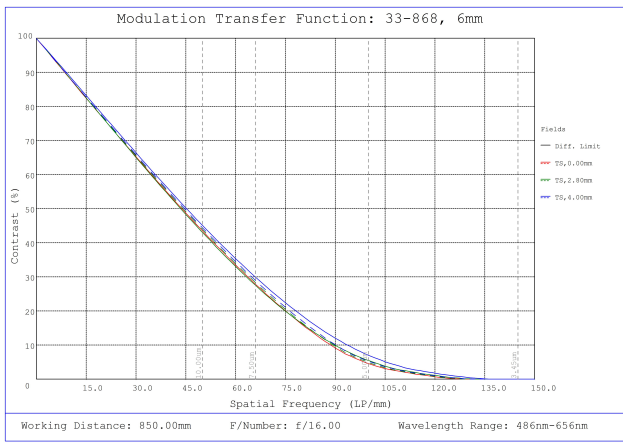
#33-868, 6mm, f/16 UCi Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



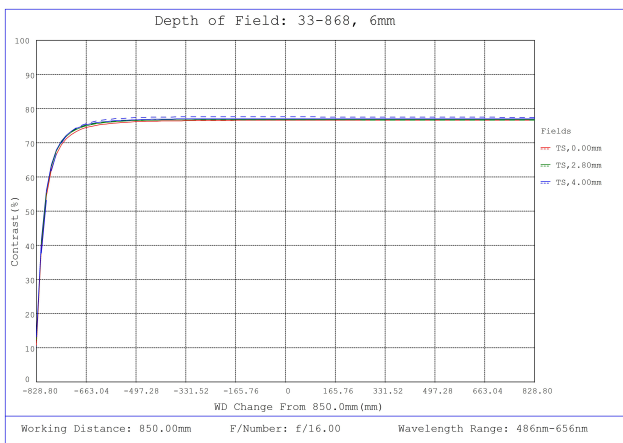
#33-868, 6mm, f/16 UCI Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 150mm Working Distance, f16



#33-868, 6mm, f/16 UCI Series Fixed Focal Length Lens, Depth of Field Plot, 150mm Working Distance, f16



#33-868, 6mm, f/16 UCI Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 850mm Working Distance, f16



#33-868, 6mm, f/16 UCI Series Fixed Focal Length Lens, Depth of Field Plot, 850mm Working Distance, f16

Compatible Cameras