

TECHSPEC® 6mm, f/11 UCi Series Fixed Focal Length Lens



6mm UCi Series Fixed Focal Length Lens



Stock **#33-867** 1 In Stock

-

1

+

€235<sup>.00</sup>

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| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1+         | €235,00 each                  |
| Need More?     | <a href="#">Request Quote</a> |

Prices shown are exclusive of VAT/local taxes

Product Downloads

| General                 |                |
|-------------------------|----------------|
| UCi Series              | Series:        |
| 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                 |                                                                                                                         |
|                                    | Horizontal Field of View @ Max Sensor Format:<br>72.8mm - 60.0°                                                         |
|                                    | Field of View at Max Sensor Format:<br>Horizontal: 72.8mm - 60°<br>Vertical: 52.7mm - 45.4°<br>Diagonal: 95.5mm - 73.8° |
|                                    | Horizontal Field of View, 1/2" Sensor:<br>72.8mm - 60.0°                                                                |
|                                    | Horizontal Field of View, 1/2.5" Sensor:<br>65.0mm - 54.6°                                                              |
|                                    | Horizontal Field of View, 1/3" Sensor:<br>52.7mm - 45.4°                                                                |
|                                    | Horizontal Field of View, 1/4" Sensor:<br>38.7mm - 34.2°                                                                |
| 8.00                               | Maximum Image Circle (mm):                                                                                              |
|                                    |                                                                                                                         |
| 0.0043                             | Numerical Aperture NA, Object Side:                                                                                     |
|                                    |                                                                                                                         |
| 9 (8)                              | Number of Elements (Groups):                                                                                            |
|                                    |                                                                                                                         |
| 6.00                               | Focal Length FL (mm):                                                                                                   |
|                                    |                                                                                                                         |
| 50 - ∞                             | Working Distance (mm):                                                                                                  |
|                                    |                                                                                                                         |
| f/11.0                             | Aperture (f/#):                                                                                                         |
|                                    |                                                                                                                         |
| λ/4 MgF <sub>2</sub>               | Coating:                                                                                                                |
|                                    |                                                                                                                         |
| λ/4 MgF <sub>2</sub>               | 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 |                                                                                                                         |
|                                    | Storage Temperature (°C):                                                                                               |
|                                    |                                                                                                                         |

-20 to +60

Type of Ruggedization:  
Industrial (Fixed Aperture with Simplified Mechanics)

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 ≤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:

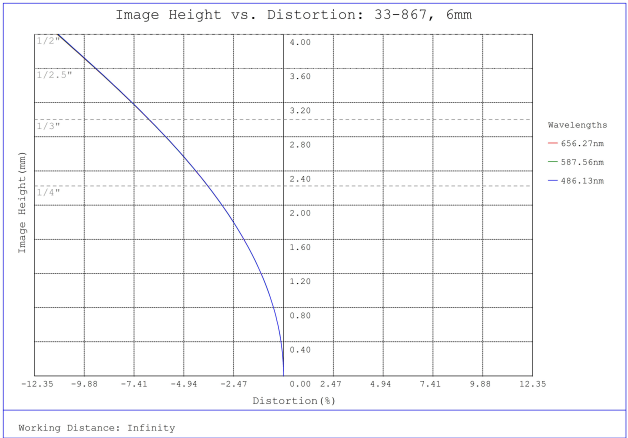
**UC Series:** Features locking cam focus and iris adjustment in an ultra-compact design and is the most adjustable version of these optical designs; they are the typical high-quality machine vision lenses.

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

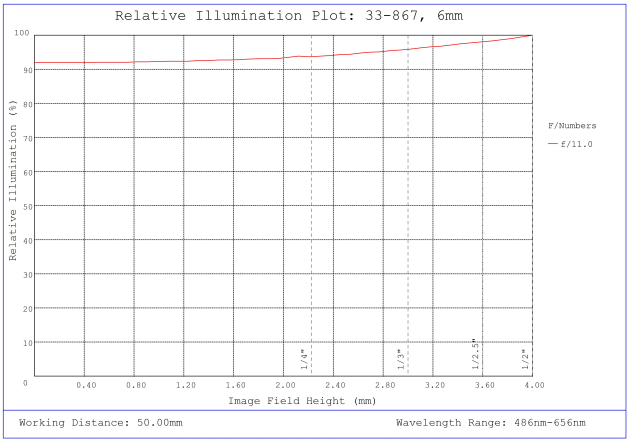
**UCr Series:** All optics glued in place and a locking C-clamp focus ring. [Stabilized Ruggedization](#) for reduced pixel shift and improved focus stability.

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

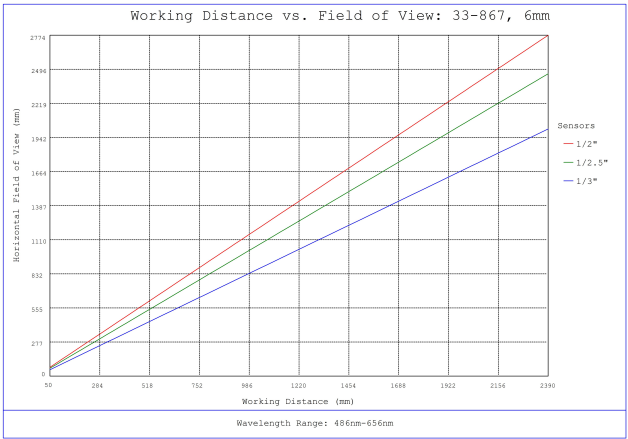
Technical Information



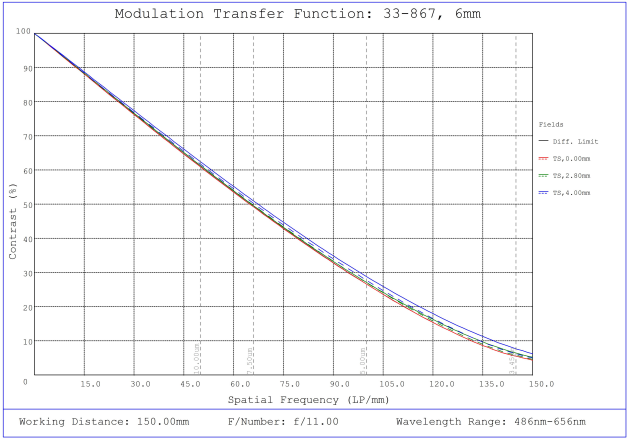
#33-867, 6mm, f/11 UCi Series Fixed Focal Length Lens, Distortion Plot



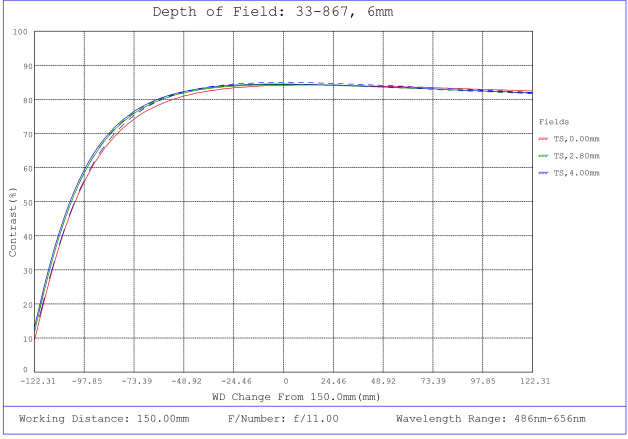
#33-867, 6mm, f/11 UCi Series Fixed Focal Length Lens, Relative Illumination Plot



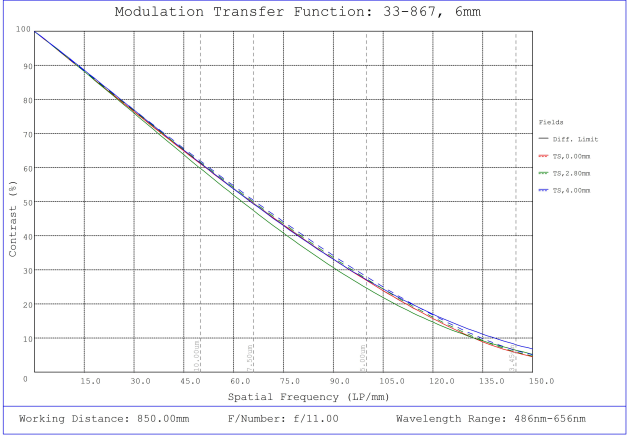
#33-867, 6mm, f/11 UCi Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



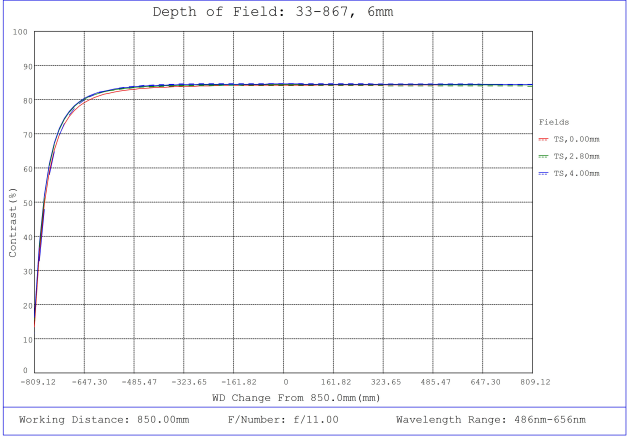
#33-867, 6mm, f/11 UCi Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 150mm Working Distance, f11



#33-867, 6mm, f/11 UCi Series Fixed Focal Length Lens, Depth of Field Plot, 150mm Working Distance, f11



#33-867, 6mm, f/11 UCi Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 850mm Working Distance, f11



#33-867, 6mm, f/11 UCi Series Fixed Focal Length Lens, Depth of Field Plot, 850mm Working Distance, f11

Compatible Cameras