

TECHSPEC<sup>®</sup> 16mm, f/11 UCi Series Fixed Focal Length Lens



16mm UCi Series Fixed Focal Length Lens



Stock **#33-888** 20+ In Stock

-

1

+

€235<sup>.00</sup>

ADD TO CART

| 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:                                                                                                             |
|                                  |                                                                                                                          |
| 26.70                            | Length (mm):                                                                                                             |
|                                  |                                                                                                                          |
| 18                               | Maximum Diameter (mm):                                                                                                   |
|                                  |                                                                                                                          |
| 25                               | Outer Diameter (mm):                                                                                                     |
|                                  |                                                                                                                          |
| 13                               | Weight (g):                                                                                                              |
|                                  |                                                                                                                          |
| 0                                | Maximum Rear Protrusion (mm):                                                                                            |
|                                  |                                                                                                                          |
| 25.5                             | Maximum Length (mm):                                                                                                     |
|                                  |                                                                                                                          |
| Optical Properties               |                                                                                                                          |
|                                  | Horizontal Field of View @ Max Sensor Format:<br>98.5mm - 25.3°                                                          |
|                                  |                                                                                                                          |
|                                  | Field of View at Max Sensor Format:<br>Horizontal: 93.6mm - 25.3°<br>Vertical: 70.2mm - 19.1°<br>Diagonal: 117mm - 31.3° |
|                                  |                                                                                                                          |
|                                  | Horizontal Field of View, 1/1.8" Sensor:<br>93.6mm - 25.3°                                                               |
|                                  |                                                                                                                          |
|                                  | Horizontal Field of View, 1/2" Sensor:<br>83.2mm - 22.5°                                                                 |
|                                  |                                                                                                                          |
|                                  | Horizontal Field of View, 1/2.5" Sensor:<br>75.4mm - 20.5°                                                               |
|                                  |                                                                                                                          |
|                                  | Horizontal Field of View, 1/3" Sensor:<br>62.4mm - 17.0°                                                                 |
|                                  |                                                                                                                          |
|                                  | Horizontal Field of View, 1/4" Sensor:<br>46.8mm - 12.8°                                                                 |
|                                  |                                                                                                                          |
| 9.00                             | Maximum Image Circle (mm):                                                                                               |
|                                  |                                                                                                                          |
| 0.0034                           | Numerical Aperture NA, Object Side:                                                                                      |
|                                  |                                                                                                                          |
| 7 (5)                            | Number of Elements (Groups):                                                                                             |
|                                  |                                                                                                                          |
| 16.00                            | Focal Length FL (mm):                                                                                                    |
|                                  |                                                                                                                          |
| 200 - ∞                          | Working Distance (mm):                                                                                                   |
|                                  |                                                                                                                          |
| f/11                             | Aperture (f/#):                                                                                                          |
|                                  |                                                                                                                          |
| λ/4 MgF <sub>2</sub>             | Coating:                                                                                                                 |
|                                  |                                                                                                                          |
| λ/4 MgF <sub>2</sub>             | Coating Specification:                                                                                                   |
|                                  |                                                                                                                          |
| 10.68                            | Entrance Pupil Position (mm):                                                                                            |
|                                  |                                                                                                                          |
| 20.18                            | Object Space Principal Plane (mm):                                                                                       |
|                                  |                                                                                                                          |
| -6.67                            | Image Space Principal Plane (mm):                                                                                        |
|                                  |                                                                                                                          |
| -0.53                            | Maximum Distortion (%):                                                                                                  |
|                                  |                                                                                                                          |
| -29.94                           | Exit Pupil Position (mm):                                                                                                |
|                                  |                                                                                                                          |
| VIS                              | Lens Wavelength Range:                                                                                                   |
|                                  |                                                                                                                          |
| Sensor                           |                                                                                                                          |
| 1/2.5"                           | Optimized Sensor Format:                                                                                                 |
|                                  |                                                                                                                          |
| 1/1.8"                           | Maximum Sensor Format:                                                                                                   |
|                                  |                                                                                                                          |
| 1.85                             | Pixel Size (μm):                                                                                                         |
|                                  |                                                                                                                          |
| Threading & Mounting             |                                                                                                                          |
| M18 x 0.50 (Male)                | Filter Thread:                                                                                                           |
|                                  |                                                                                                                          |
|                                  | 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:

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:

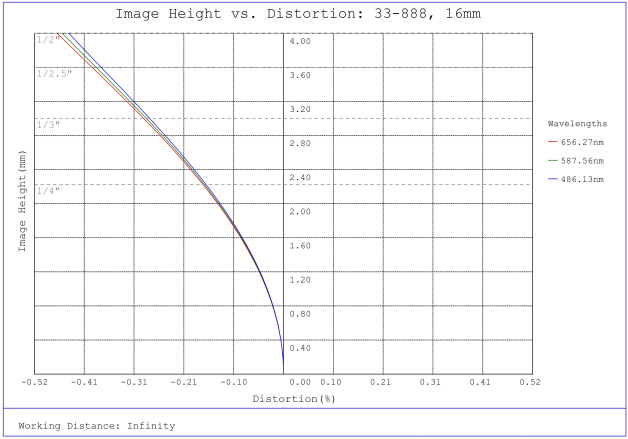
**UC Series:** Features locking cam focus and iris adjustment in an ultra-compact design and is the most adjustable version of these optical designs; they are the typical high-quality machine vision lenses.

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

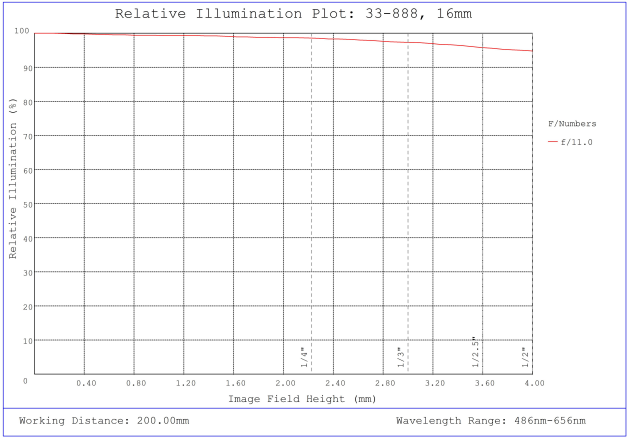
**UCr Series:** All optics glued in place and a locking C-clamp focus ring. [Stabilized Ruggedization](#) for reduced pixel shift and improved focus stability.

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

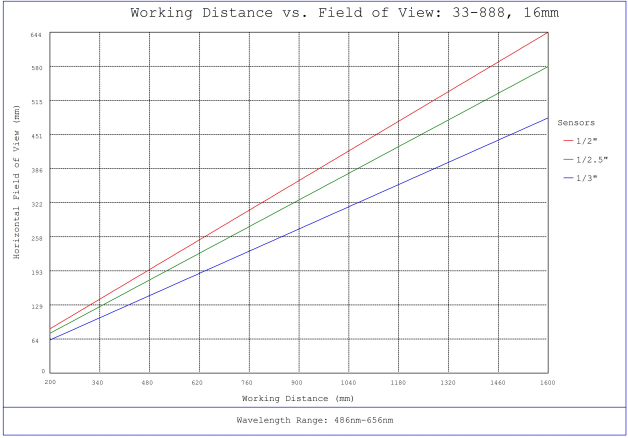
Technical Information



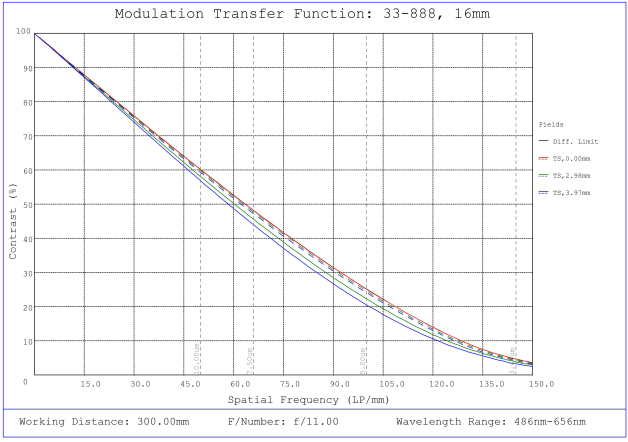
#33-888, 16mm, f/11 UCi Series Fixed Focal Length Lens, Distortion Plot



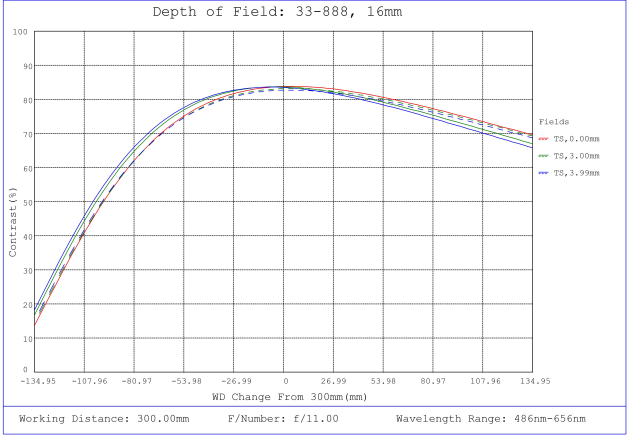
#33-888, 16mm, f/11 UCi Series Fixed Focal Length Lens, Relative Illumination Plot



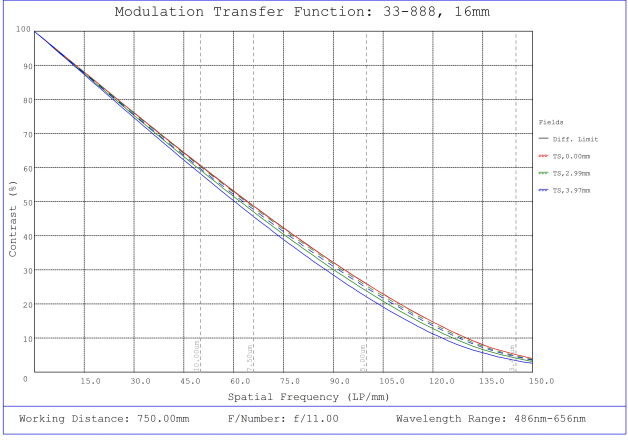
#33-888, 16mm, f/11 UCi Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



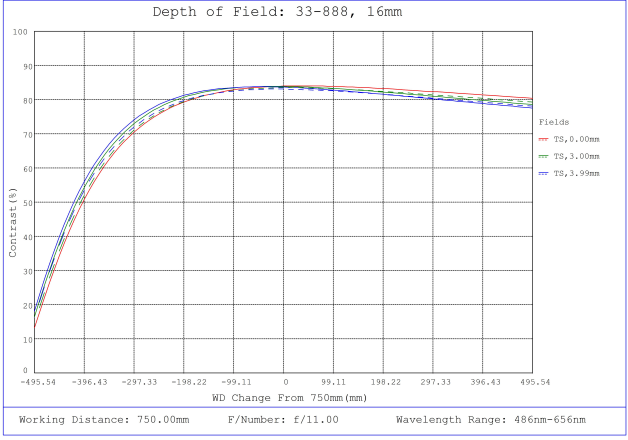
#33-888, 16mm, f/11 UCi Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 300mm Working Distance, f11



#33-888, 16mm, f/11 UCi Series Fixed Focal Length Lens, Depth of Field Plot, 300mm Working Distance, f11



#33-888, 16mm, f/11 UCi Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 750mm Working Distance, f11



#33-888, 16mm, f/11 UCi Series Fixed Focal Length Lens, Depth of Field Plot, 750mm Working Distance, f11

Compatible Cameras