

TECHSPEC[®] 16mm, f/1.8 UCi Series Fixed Focal Length Lens



16mm UCi Series Fixed Focal Length Lens



Stock **#33-883** [CONTACT US](#)

-

1

+

€235^{.00}

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Volume Pricing	
Qty 1+	€235,00 each
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i Prices shown are exclusive of VAT/local taxes

Product Downloads

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

Imaging Lens Type:
High Performance Lens with Compact Form Factor
and Fixed Aperture

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: 98.5mm - 25.3°	
Field of View at Max Sensor Format: Horizontal: 93.6mm - 25.3° Vertical: 70.2mm - 19.1° Diagonal: 117mm - 31.3°	
Horizontal Field of View, 1/1.8" Sensor: 93.6mm - 25.3°	
Horizontal Field of View, 1/2" Sensor: 83.2mm - 22.5°	
Horizontal Field of View, 1/2.5" Sensor: 75.4mm - 20.5°	
Horizontal Field of View, 1/3" Sensor: 62.4mm - 17.0°	
Horizontal Field of View, 1/4" Sensor: 46.8mm - 12.8°	
9.00	Maximum Image Circle (mm):
Numerical Aperture NA, Object Side: 0.0207	
7 (5)	Number of Elements (Groups):
Focal Length FL (mm): 16.00	
200 - ∞	Working Distance (mm):
Aperture (f/#): f/1.8	
λ/4 MgF ₂	Coating:
Coating Specification: λ/4 MgF ₂	
10.68	Entrance Pupil Position (mm):
Object Space Principal Plane (mm): 20.18	
Image Space Principal Plane (mm): -6.67	
Maximum Distortion (%): -0.53	
Exit Pupil Position (mm): -29.94	
Lens Wavelength Range: VIS	

Sensor

1/2.5"	Optimized Sensor Format:
1/1.8"	Maximum Sensor Format:
Pixel Size (μm): 1.85	

Threading & Mounting

	Filter Thread:
M18 x0.50 (Male)	
	Mount:
S-Mount (M12 x0.5)	
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:

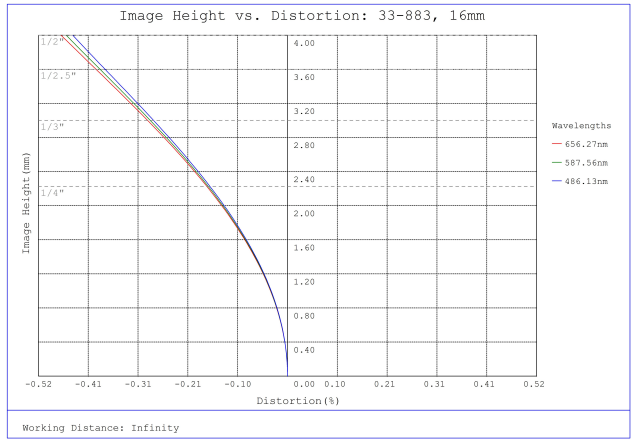
UC Series: Features locking cam focus and iris adjustment in an ultra-compact design and is the most adjustable version of these optical designs; they are the typical high-quality machine vision lenses.

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

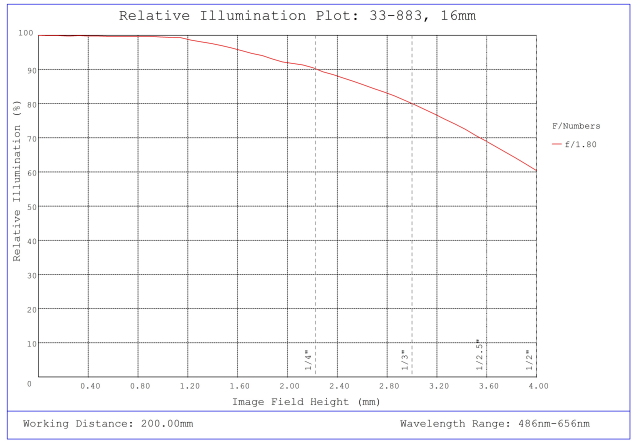
UCr Series: All optics glued in place and a locking C-clamp focus ring. [Stabilized Ruggedization](#) for reduced pixel shift and improved focus stability.

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

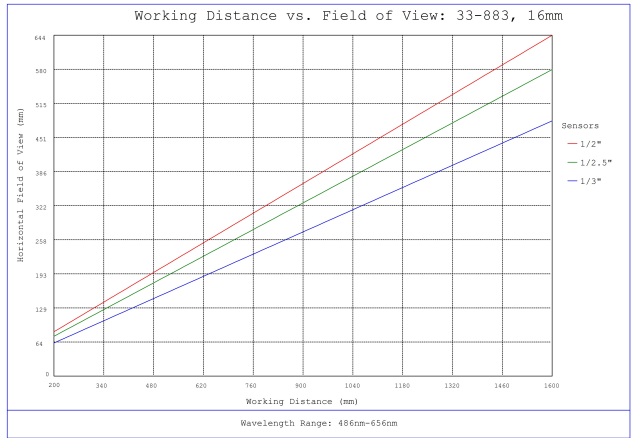
Technical Information



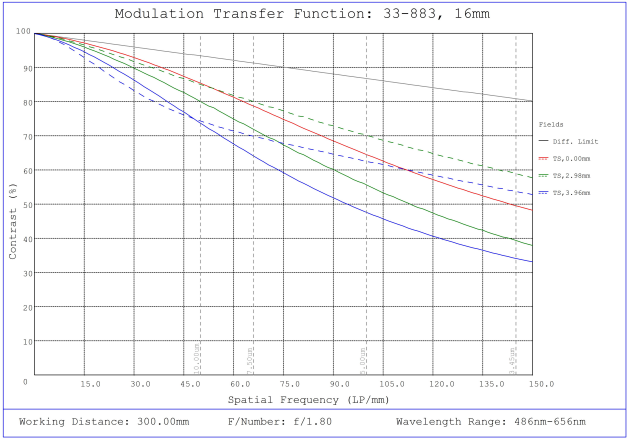
#33-883, 16mm, f/1.8 UCi Series Fixed Focal Length Lens, Distortion Plot



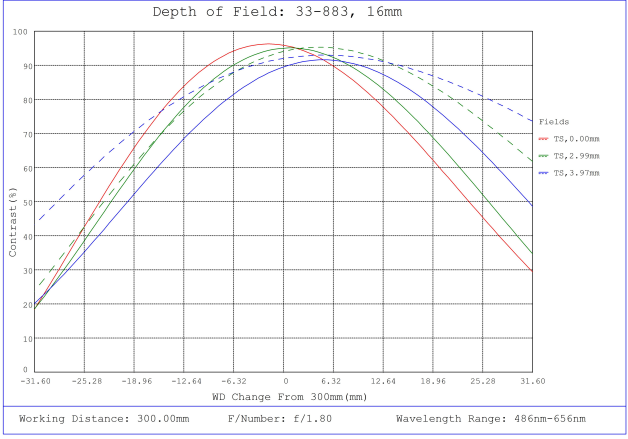
#33-883, 16mm, f/1.8 UCi Series Fixed Focal Length Lens, Relative Illumination Plot



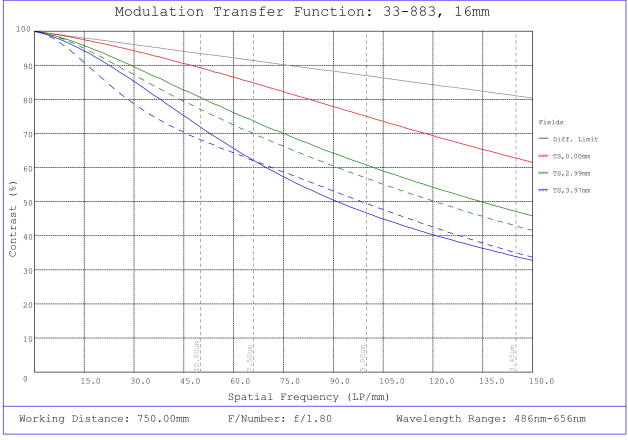
#33-883, 16mm, f/1.8 UCi Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



#33-883, 16mm, f/1.8 UCI Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 300mm Working Distance, f1.8



#33-883, 16mm, f/1.8 UCI Series Fixed Focal Length Lens, Depth of Field Plot, 300mm Working Distance, f1.8



#33-883, 16mm, f/1.8 UCI Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 750mm Working Distance, f1.8



#33-883, 16mm, f/1.8 UCI Series Fixed Focal Length Lens, Depth of Field Plot, 750mm Working Distance, f1.8

Compatible Cameras