

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



16mm Focal Length



Stock #15-645 16 In Stock

-

1

+

£255<sup>.00</sup>

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Qty 1+	£255.00 each
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Prices shown are exclusive of VAT/local taxes

Product Downloads

SPECIFICATIONS

General

Cw Series

Series:

C-Mount compatible with O-ring 25mm ID x2mm

Note:

Fixed Focal Length Lens		Type:
Physical & Mechanical Properties		
Fixed	Iris Option:	
48.60	Length (mm):	
37.77	Maximum Diameter (mm):	
34.1	Outer Diameter (mm):	
1.9	Maximum Rear Protrusion (mm):	
38.00	Diameter (mm):	
Optical Properties		
Horizontal Field of View @ Max Sensor Format: 65.5mm - 27.8°		
Field of View at Max Sensor Format: Horizontal: 31° Vertical: 23.4° Diagonal: 38.2°		
27.8°	Horizontal Field of View, 2/3" Sensor:	
22.9°	Horizontal Field of View, 1/1.8" Sensor:	
20.4°	Horizontal Field of View, 1/2" Sensor:	
18.5°	Horizontal Field of View, 1/2.5" Sensor:	
15.3°	Horizontal Field of View, 1/3" Sensor:	
11.5°	Horizontal Field of View, 1/4" Sensor:	
11.00	Maximum Image Circle (mm):	
0.0038	Numerical Aperture NA, Object Side:	
7 (6)	Number of Elements (Groups):	
16.00	Focal Length FL (mm):	
100 - ∞	Working Distance (mm):	
f/16	Aperture (f/#):	
425 - 675nm BBAR	Coating:	
425 - 675nm BBAR	Coating Specification:	
23.03	Entrance Pupil Position (mm):	
25.15	Object Space Principal Plane (mm):	
-3.00	Image Space Principal Plane (mm):	
-0.77	Maximum Distortion (%):	
-5.43	Exit Pupil Position (mm):	
VS	Lens Wavelength Range:	
Sensor		
2/3"	Maximum Sensor Format:	
2.74	Pixel Size (µm):	
Threading & Mounting		
M30.5 x0.50 (Female)	Filter Thread:	
	Mount:	

Environmental & Durability Factors

Environmental Rating:	
IPX7 and IPX9K	
Storage Temperature (°C):	
-20 to +60	
Type of Ruggedization:	
Waterproof (IPX7 and IPX9K)	

Regulatory Compliance

Certificate of Conformance:	
<a href="#">View</a>	

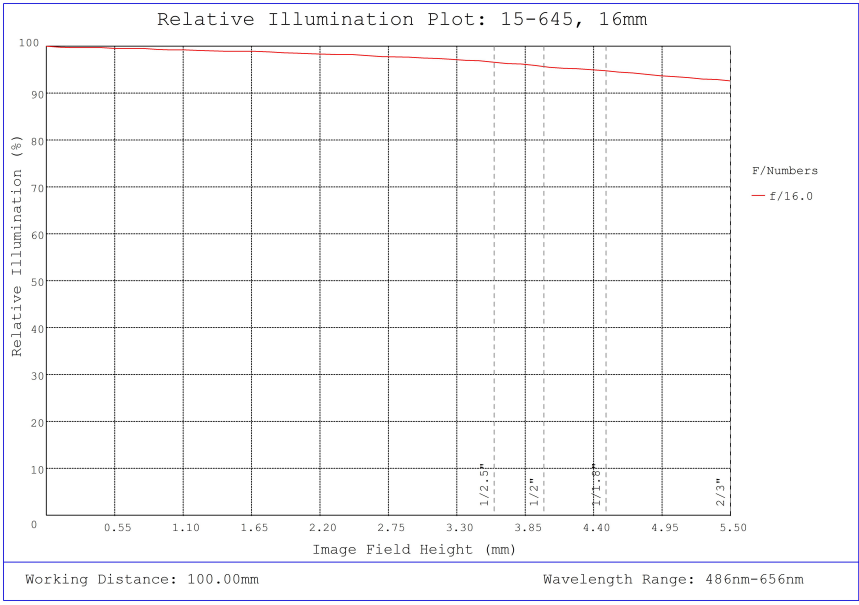
PRODUCT DETAILS

- Up to 2/3", C-Mount Lens
  - Waterproof (Cw) Versions of C Series Fixed Focal Length Lenses
  - Meets IEC Ingress Protection Ratings of IPX7 and IPX9K
  - Designed to Eliminate the Need for a Protective Lens Cover
- TECHSPEC® Cw Series Fixed Focal Length Lenses are waterproof versions of our [TECHSPEC® C Series Fixed Focal Length Lenses](#). Designed to meet IEC Ingress Protection Codes IPX7 and IPX9K, these lenses withstand exposure to water up to 1 meter depth for 30 minutes and operate in close-range high pressure, high temperature water spray downs with the exception of all 3.5 and 4.5mm options which are IPX7. These lenses include a hydrophobic coated window to prevent water droplets from settling on the lens' surface. To prevent moisture from entering the housing, the lenses are sealed with multiple O-rings. TECHSPEC® Cw Series Fixed Focal Length Lenses are designed for up to 7.5 MegaPixel, 2/3" sensors and are ideal for applications including food, pharma, automotive, and security. These lenses won the Bronze-Level 2021 Vision Systems Design Innovators Award.
- Edmund Optics has created a family of high performance optical designs (the C Series family) and developed 6 customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the C Series lenses providing the same optical performance in a variety of optomechanical solutions to meet your application requirements:
- C Series:** Features locking cam focus and iris adjustment and is the most adjustable version of these optical designs; they are the typical high quality machine vision lenses. Also available with a [VIS-NIR Broadband Anti-Reflection \(BBAR\) Coating](#).
  - CI Series:** Simplified mechanics featuring fixed apertures with compact housing. [Industrial Ruggedization](#) for reduced size, cost, and locked focus.
  - Cr Series:** All optics glued in place and a locking C-clamp focus ring. [Stabilized Ruggedization](#) for reduced pixel shift and improved focus stability.
  - Cx Series:** Modular, flexible mechanics allows lenses to be taken apart for easy integration of accessories such as liquid lenses, apertures, and more.
  - Liquid Lens Cx Series:** Designed with an integrated liquid lens for quick autofocus.
  - Cw Series: Waterproof, designed to meet IEC [Ingress Protection](#) Code IPX7 and IPX9K.

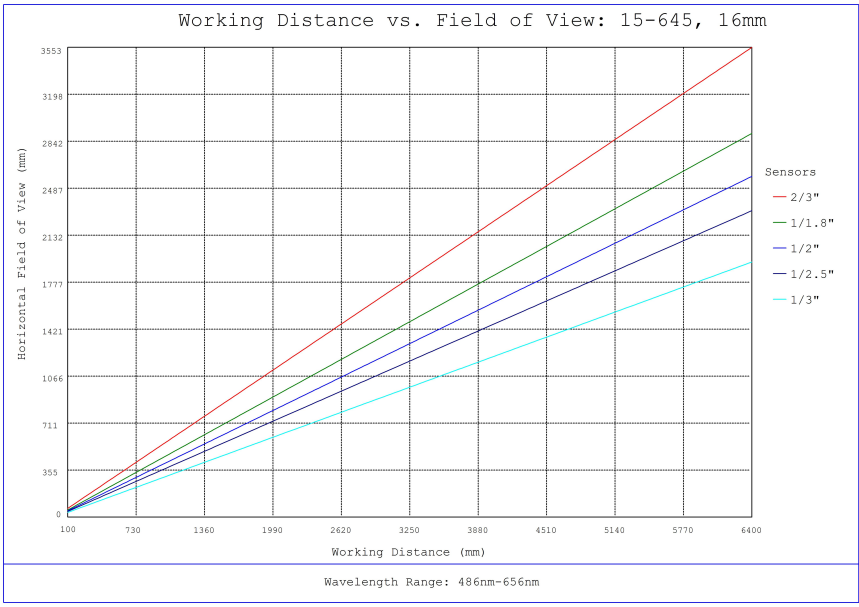
TECHNICAL INFORMATION



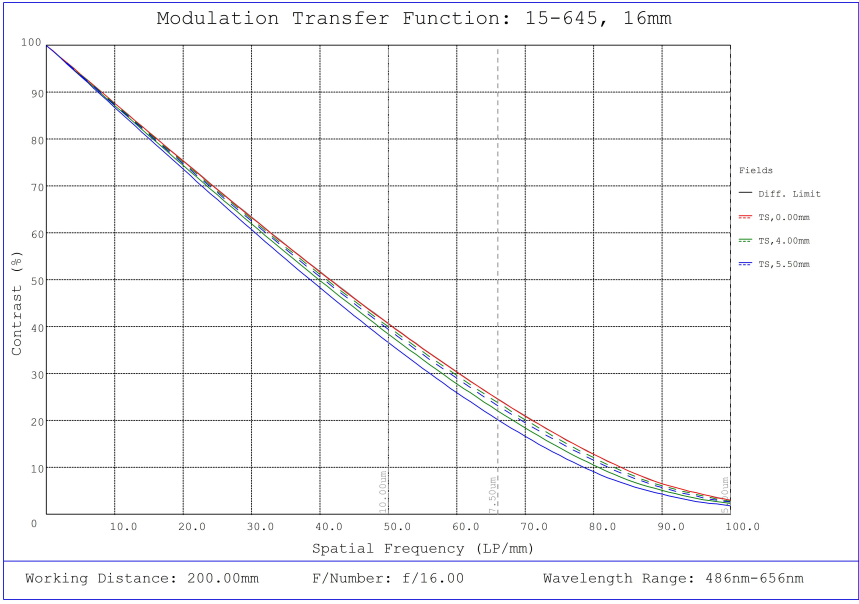
#15-645, 16mm, f/16 Cw Series Fixed Focal Length Lens, Distortion Plot



#15-645, 16mm, f/16 Cw Series Fixed Focal Length Lens, Relative Illumination Plot



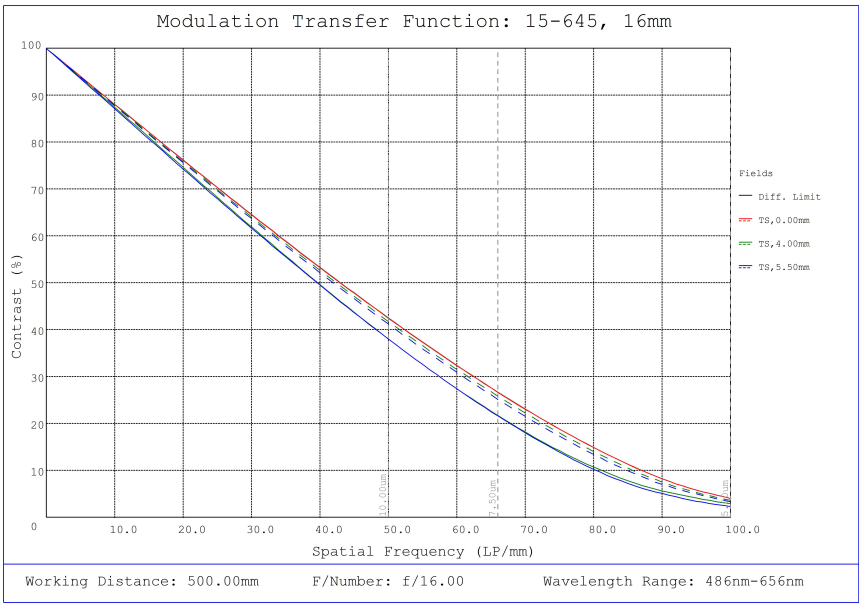
#15-645, 16mm, f/16 Cw Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



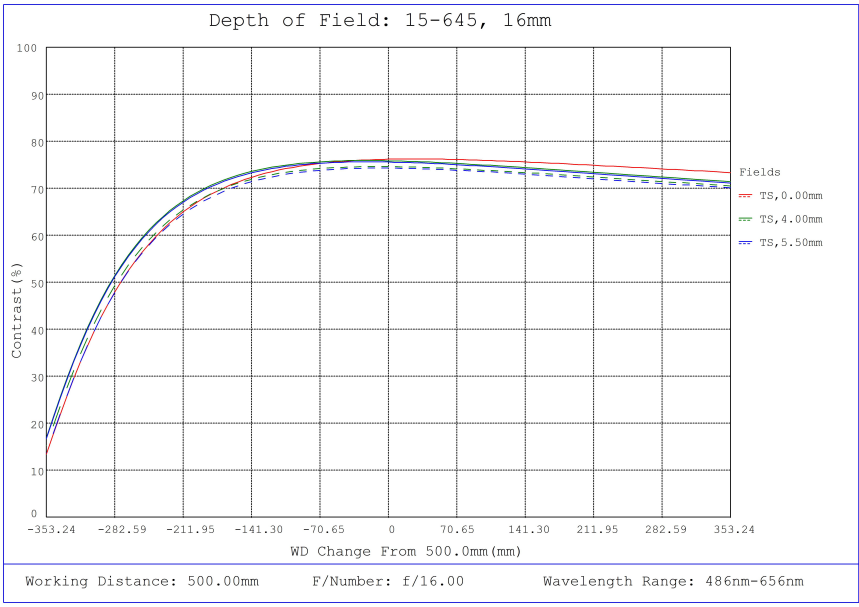
#15-645, 16mm, f/16 Cw Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 200mm Working Distance, f16



#15-645, 16mm, f/16 Cw Series Fixed Focal Length Lens, Depth of Field Plot, 200mm Working Distance, f16



#15-645, 16mm, f/16 Cw Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 500mm Working Distance, f16



#15-645, 16mm, f/16 Cw Series Fixed Focal Length Lens, Depth of Field Plot, 500mm Working Distance, f16