

**TECHSPEC® 16mm, f/2.8 Cw Series Fixed Focal Length Lens**

16mm Focal Length

Stock #15-640 **15 In Stock**   **A\$346<sup>00</sup>****ADD TO CART**

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Qty 1+	<b>A\$346.00</b> each
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**SPECIFICATIONS****General****Series:**

Cw Series

**Note:**

Type:  
Fixed Focal Length Lens

## Physical & Mechanical Properties

Iris Option:  
Fixed

Length (mm):  
48.60

Maximum Diameter (mm):  
37.77

Outer Diameter (mm):  
34.1

Maximum Rear Protrusion (mm):  
1.9

Diameter (mm):  
38.00

## 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°

Horizontal Field of View, 2/3" Sensor:  
27.8°

Horizontal Field of View, 1/1.8" Sensor:  
22.9°

Horizontal Field of View, 1/2" Sensor:  
20.4°

Horizontal Field of View, 1/2.5" Sensor:  
18.5°

Horizontal Field of View, 1/3" Sensor:  
15.3°

Horizontal Field of View, 1/4" Sensor:  
11.5°

Maximum Image Circle (mm):  
11.00

Numerical Aperture NA, Object Side:  
0.0217

Number of Elements (Groups):  
7 (6)

Focal Length FL (mm):  
16.00

Working Distance (mm):  
100 - ∞

Aperture (f/#):  
f/2.8

Coating:  
425 - 675nm BBAR

Coating Specification:  
425 - 675nm BBAR

Entrance Pupil Position (mm):  
23.03

Object Space Principal Plane (mm):  
25.15

Image Space Principal Plane (mm):  
-3.00

Maximum Distortion (%):  
-0.77

Exit Pupil Position (mm):  
-5.43

Lens Wavelength Range:  
VIS

## Sensor

Maximum Sensor Format:  
2/3"

Pixel Size (μm):  
2.74

## Threading & Mounting

Filter Thread:  
M30.5 x 0.50 (Female)

C-Mount

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:

[View](#)

## PRODUCT DETAILS

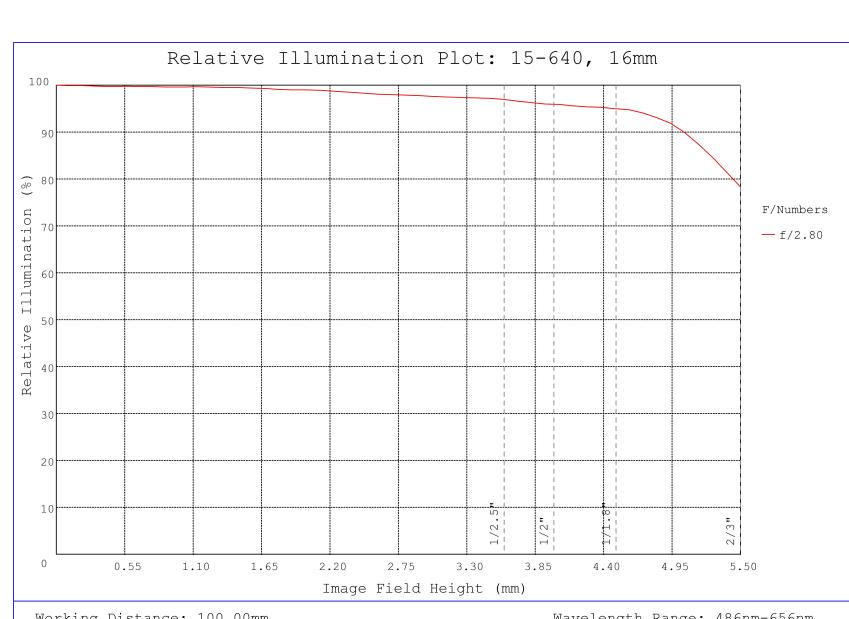
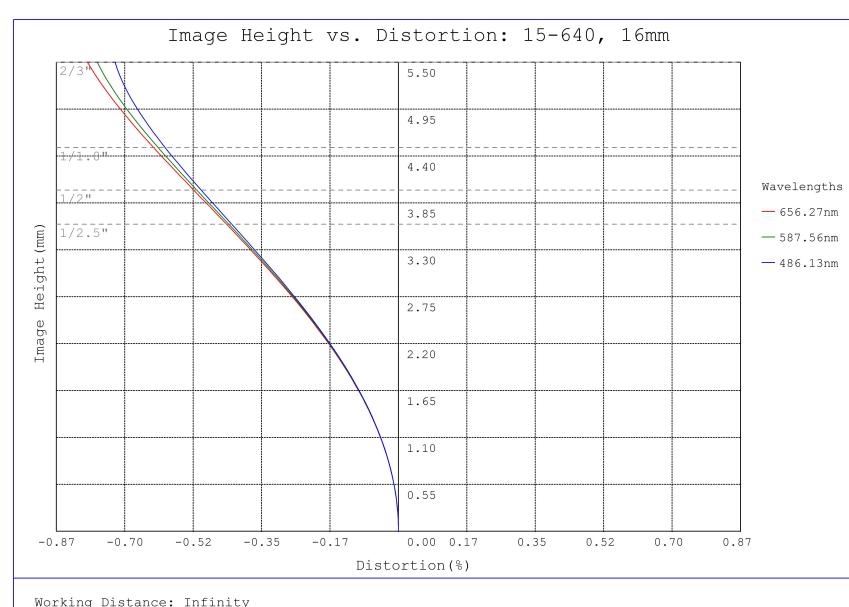
- Up to 2/3", C-Mount Lens
- Waterproof (Cw) Versions of C Series Fixed Focal Length Lenses
- Meets IEC Ingress Protection Ratings of IPX7 and IPX9K
- Designed to Eliminate the Need for a Protective Lens Cover

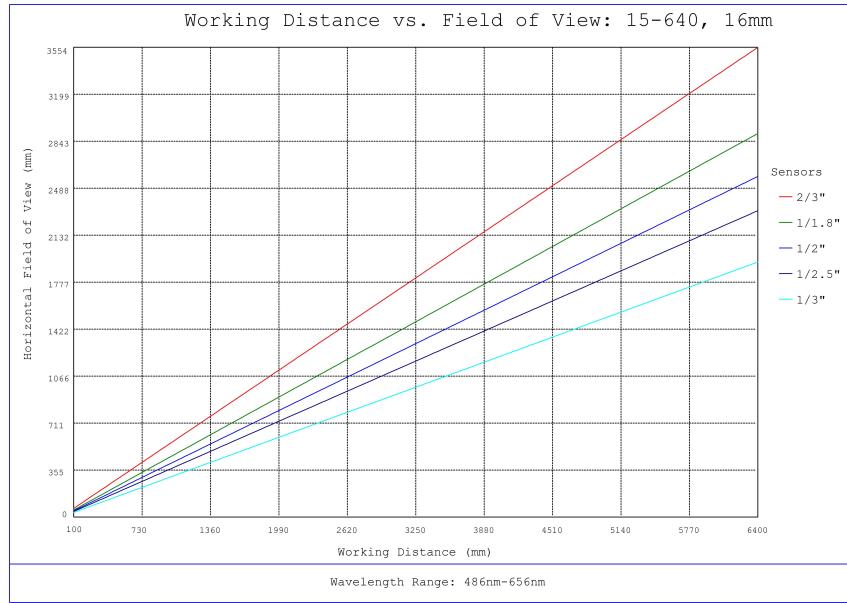
TECHSPEC® Cw Series Fixed Focal Length Lenses are waterproof versions of our [TECHSPEC® C Series Fixed Focal Length Lenses](#). Designed to meet IEC Ingress Protection Codes IPX7 and IPX9K, these lenses withstand exposure to water up to 1 meter depth for 30 minutes and operate in close-range high pressure, 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:

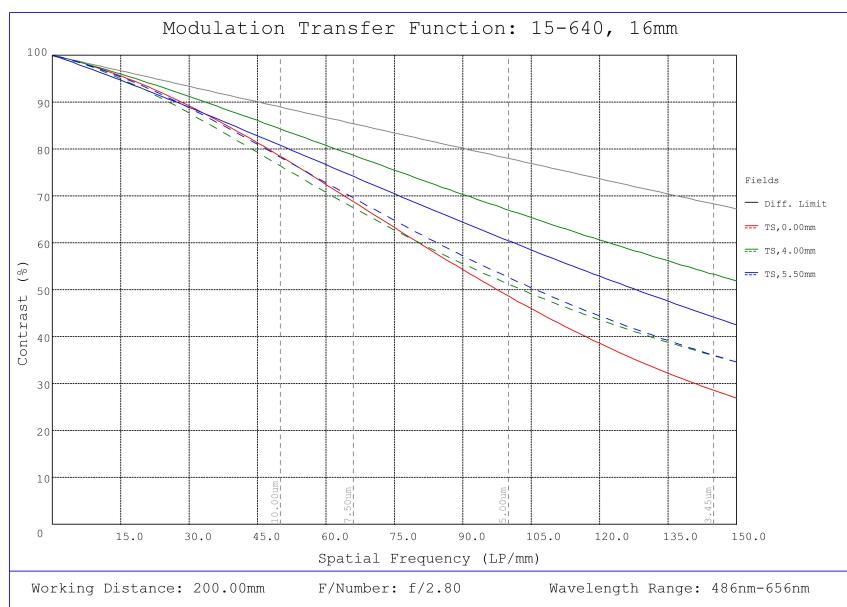
- C Series:** Features locking cam focus and iris adjustment and is the most adjustable version of these optical designs; they are the typical high quality machine vision lenses. Also available with a [VIS-NIR Broadband Anti-Reflection \(BBAR\) Coating](#).
- CI Series:** Simplified mechanics featuring 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





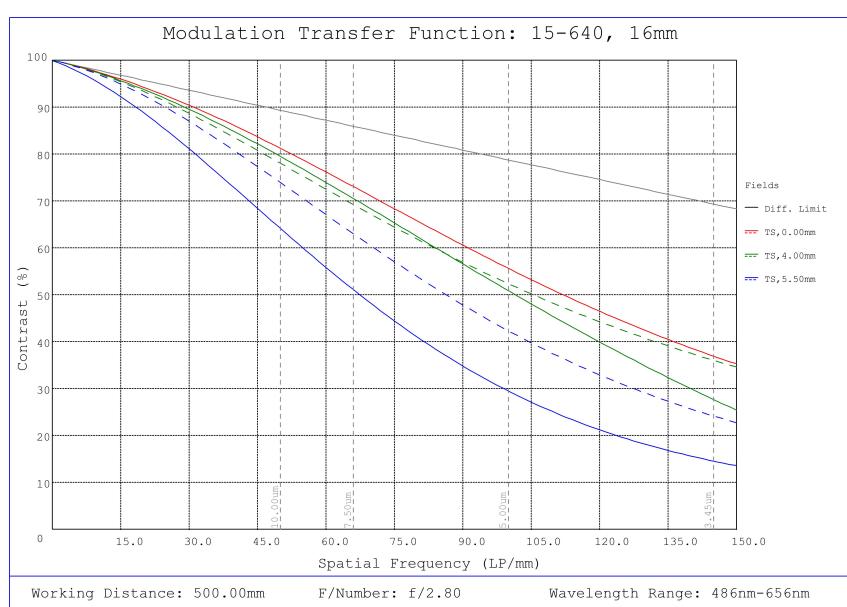
#15-640, 16mm, f/2.8 Cw Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



#15-640, 16mm, f/2.8 Cw Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 200mm Working Distance, f2.8



#15-640, 16mm, f/2.8 Cw Series Fixed Focal Length Lens, Depth of Field Plot, 200mm Working Distance, f2.8



#15-640, 16mm, f/2.8 Cw Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 500mm Working Distance, f2.8



#15-640, 16mm, f/2.8 Cw Series Fixed Focal Length Lens, Depth of Field Plot, 500mm Working Distance, f2.8