

TECHSPEC® 8.5mm, f/4 Cw Series Fixed Focal Length Lens



8.5mm Cw Series Fixed Focal Length Lens



Stock **#15-628** [CONTACT US](#)

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+

S\$314<sup>.00</sup>

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| Qty 1+         | S\$314.00 each                |
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SPECIFICATIONS

General

Cw Series

Series:

Note:

|                                                                                                 |                                          |
|-------------------------------------------------------------------------------------------------|------------------------------------------|
| C-Mount compatible with O-ring 25mm ID x2mm                                                     |                                          |
| Fixed Focal Length Lens                                                                         | Type:                                    |
| Physical & Mechanical Properties                                                                |                                          |
| Fixed                                                                                           | Iris Option:                             |
| 38.98                                                                                           | Length (mm):                             |
| 37.77                                                                                           | Maximum Diameter (mm):                   |
| 37.77                                                                                           | Outer Diameter (mm):                     |
| 0.6                                                                                             | Maximum Rear Protrusion (mm):            |
| Optical Properties                                                                              |                                          |
| Field of View at Max Sensor Format:<br>Horizontal: 60.65°<br>Vertical: 45.0°<br>Diagonal: 77.0° |                                          |
| 60.6°                                                                                           | Horizontal Field of View, 2/3" Sensor:   |
| 49.2°                                                                                           | Horizontal Field of View, 1/1.8" Sensor: |
| 43.6°                                                                                           | Horizontal Field of View, 1/2" Sensor:   |
| 39.4°                                                                                           | Horizontal Field of View, 1/2.5" Sensor: |
| 32.6°                                                                                           | Horizontal Field of View, 1/3" Sensor:   |
| 24.4°                                                                                           | Horizontal Field of View, 1/4" Sensor:   |
| 11.00                                                                                           | Maximum Image Circle (mm):               |
| 0.0090                                                                                          | Numerical Aperture NA, Object Side:      |
| 6 (5)                                                                                           | Number of Elements (Groups):             |
| 8.50                                                                                            | Focal Length FL (mm):                    |
| 100 - ∞                                                                                         | Working Distance (mm):                   |
| f/4                                                                                             | Aperture (f/#):                          |
| 425 - 675nm BBAR                                                                                | Coating Specification:                   |
| 12.86                                                                                           | Entrance Pupil Position (mm):            |
| 18.72                                                                                           | Object Space Principal Plane (mm):       |
| 6.67                                                                                            | Image Space Principal Plane (mm):        |
| -18.51                                                                                          | Maximum Distortion (%):                  |
| -12.12                                                                                          | 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:                           |
| C-Mount                                                                                         | Mount:                                   |
| Environmental & Durability Factors                                                              |                                          |
| IPX7 and IPX9K                                                                                  | Environmental Rating:                    |

|                             |  |
|-----------------------------|--|
| Storage Temperature (°C):   |  |
| -20 to +60                  |  |
| Type of Ruggedization:      |  |
| Waterproof (IPX7 and IPX9K) |  |
| Regulatory Compliance       |  |
| Certificate of Conformance: |  |
| View                        |  |

## PRODUCT DETAILS

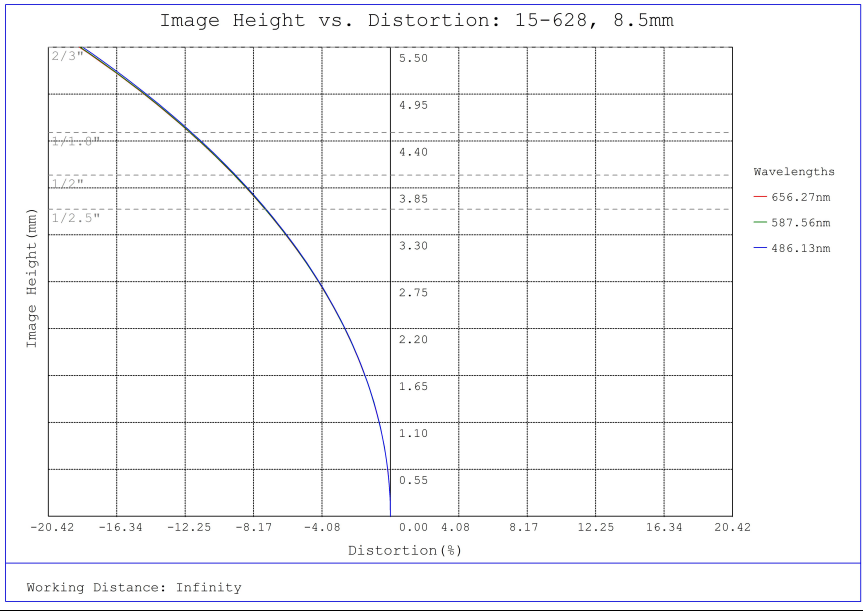
- Up to 2/3", C-Mount Lens
- Waterproof (Cw) Versions of C Series Fixed Focal Length Lenses
- Meets IEC Ingress Protection Ratings of IPX7 and IPX9K
- Designed to Eliminate the Need for a Protective Lens Cover

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.

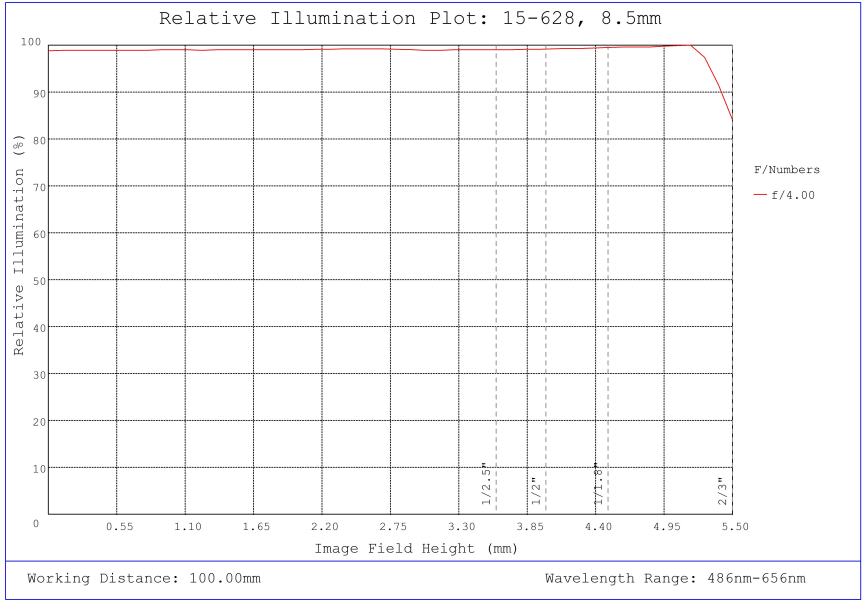
Edmund Optics has created a family of high performance optical designs (the C Series family) and developed 6 customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the C Series lenses providing the same optical performance in a variety 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-NR 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.

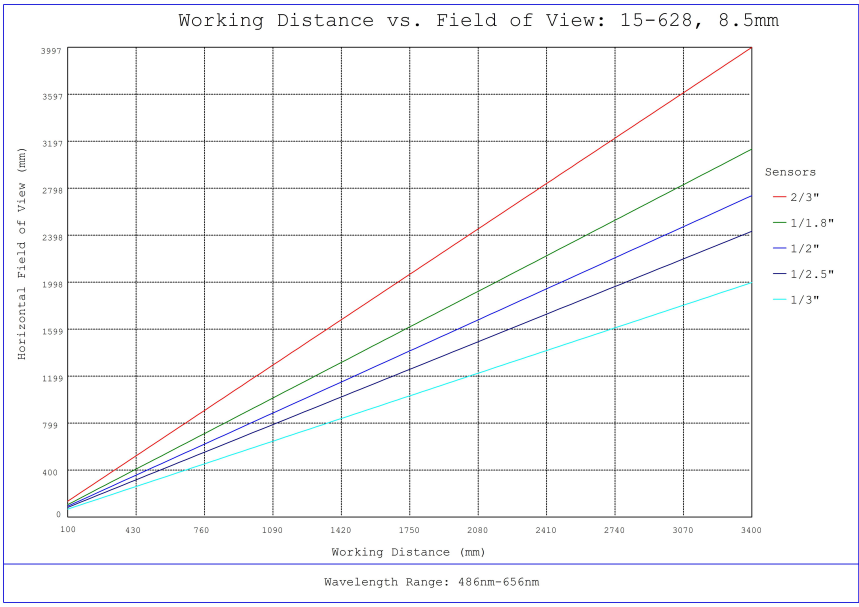
## TECHNICAL INFORMATION



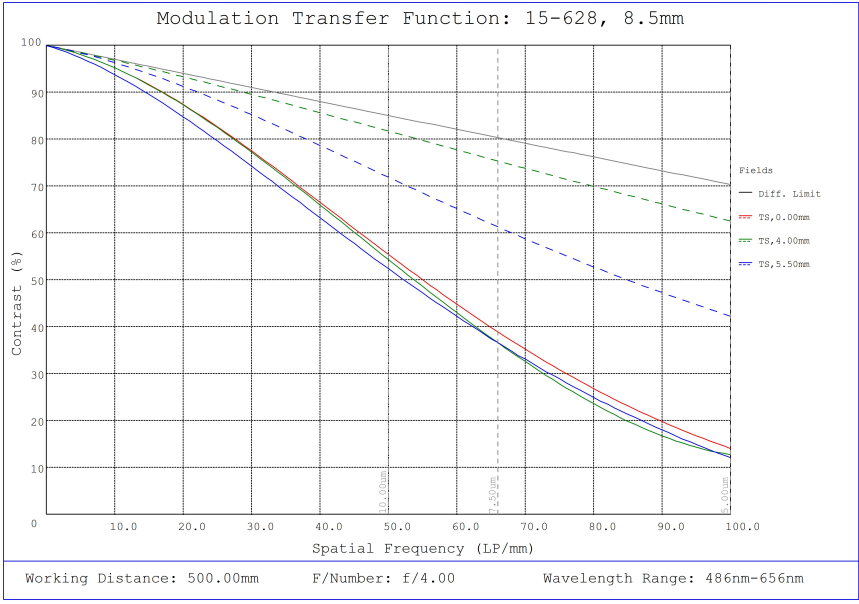
#15-628, 8.5mm, f/4 Cw Series Fixed Focal Length Lens, Distortion Plot



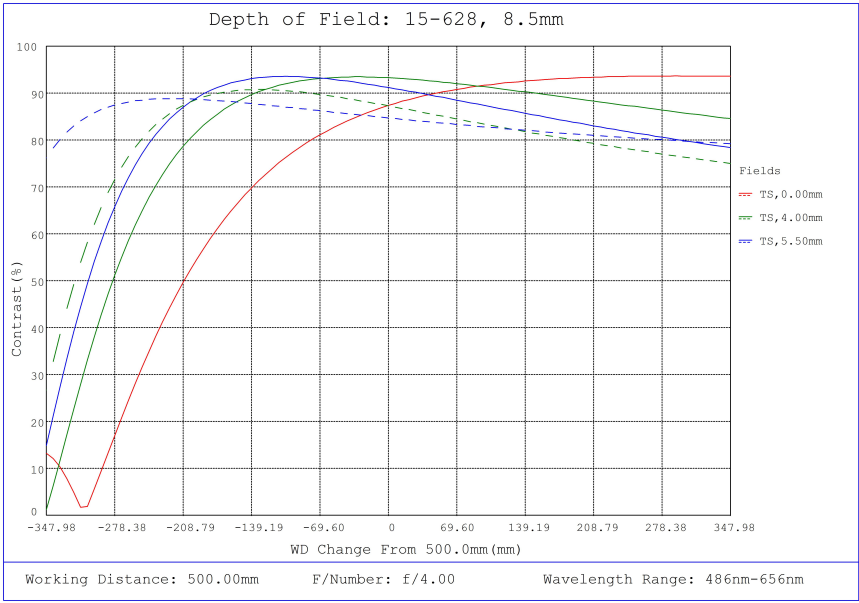
#15-628, 8.5mm, f/4 Cw Series Fixed Focal Length Lens, Relative Illumination Plot



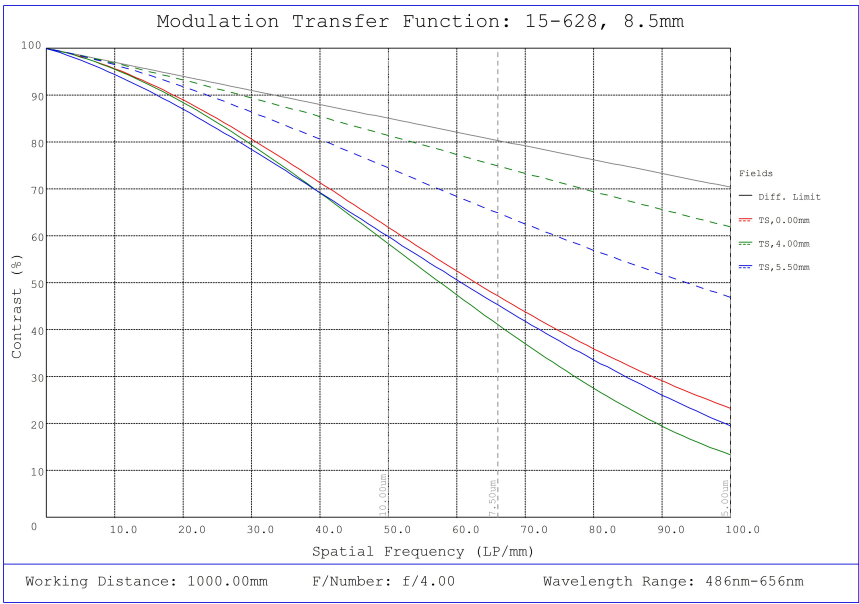
#15-628, 8.5mm, f/4 Cw Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



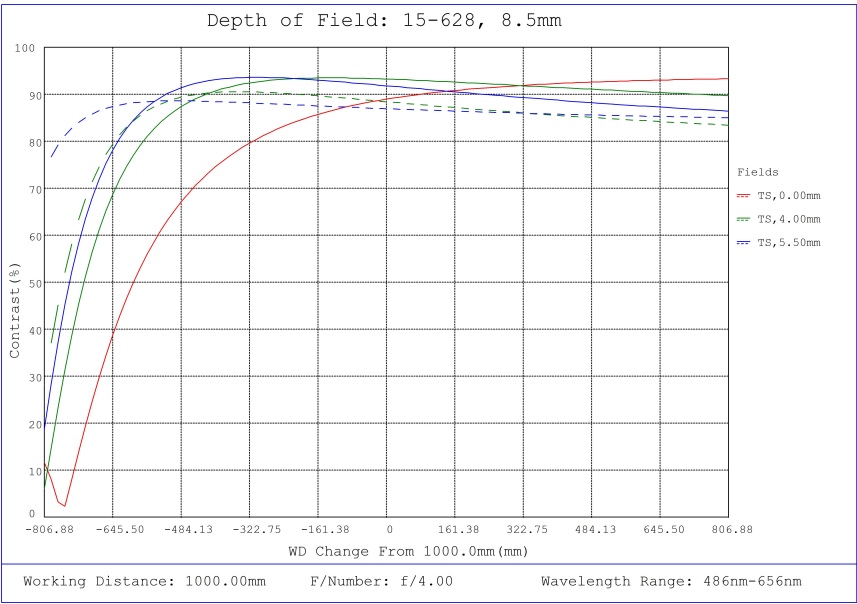
#15-628, 8.5mm, f/4 Cw Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 500mm Working Distance, f4



#15-628, 8.5mm, f/4 Cw Series Fixed Focal Length Lens, Depth of Field Plot, 500mm Working Distance, f4



#15-628, 8.5mm, f/4 Cw Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 1000mm Working Distance, f4



#15-628, 8.5mm, f/4 Cw Series Fixed Focal Length Lens, Depth of Field Plot, 1000mm Working Distance, f4