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



8.5mm Cw Series Fixed Focal Length Lens



Stock #15-628 **20+ In Stock**

⊖ 1 ⊕ €316<sup>00</sup>

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| Volume Pricing |                               |
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| Qty 1+         | €316,00 each                  |
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ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

**General**

Cw Series **Product Family:**

C-Mount compatible with O-ring 25mm ID x 2mm **Note:**

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

|  |  |
|--|--|
| Horizontal: 60.65°<br>Vertical: 45.0°<br>Diagonal: 77.0° | Field of View at Max Sensor Format:      |
| 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):                |
| VIS  | Lens Wavelength Range:                   |

## Sensor

|      |                        |
|------|------------------------|
| 2/3" | Maximum Sensor Format: |
| 2.74 | Pixel Size (µm):       |

## Threading & Mounting

|                       |                |
|-----------------------|----------------|
| M30.5 x 0.50 (Female) | Filter Thread: |
| C-Mount               | Mount:         |

## Environmental & Durability Factors

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

## Regulatory Compliance

Certificate of Conformance:

[View](#)

## Product Details

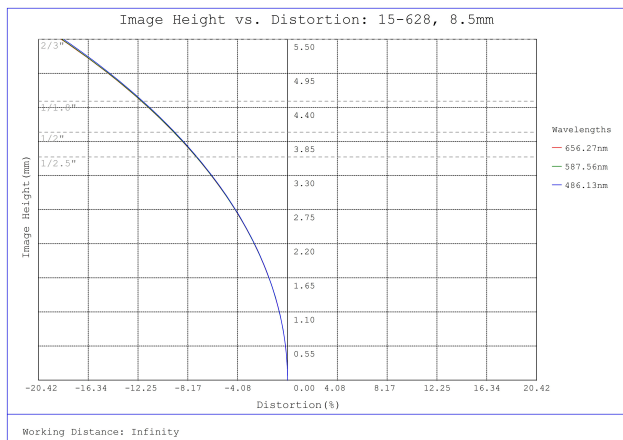
- Up to 2/3", C-Mount Lens
- Waterproof (Cw) Versions of C Series Fixed Focal Length Lenses
- Meets IEC Ingress Protection Ratings of IPX7 and IPX9K
- Designed to Eliminate the Need for a Protective Lens Cover

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.

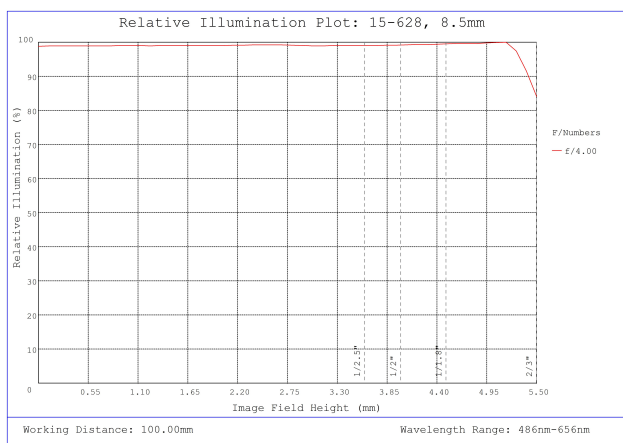
Edmund Optics has created a family of high performance optical designs (the C Series family) and developed 6 customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the C Series lenses providing the same optical performance in a variety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

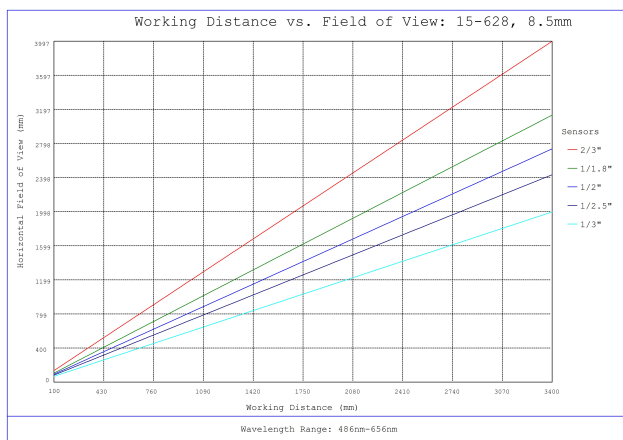
## Technical Information



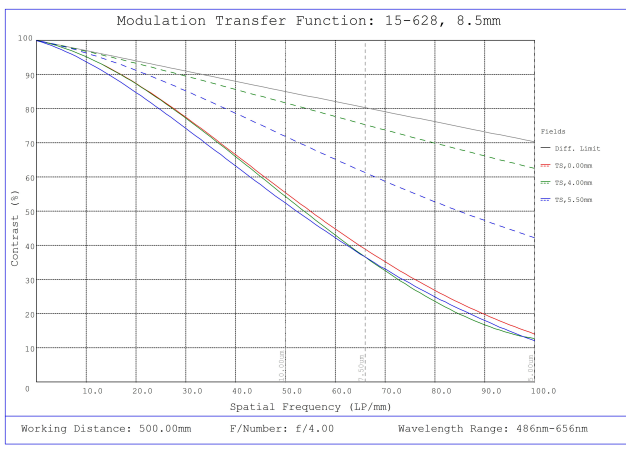
#15-628, 8.5mm, f/4 Cw Series Fixed Focal Length Lens, Distortion Plot



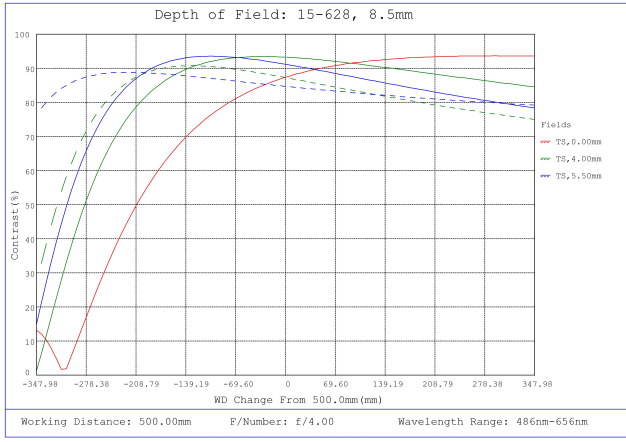
#15-628, 8.5mm, f/4 Cw Series Fixed Focal Length Lens, Relative Illumination Plot



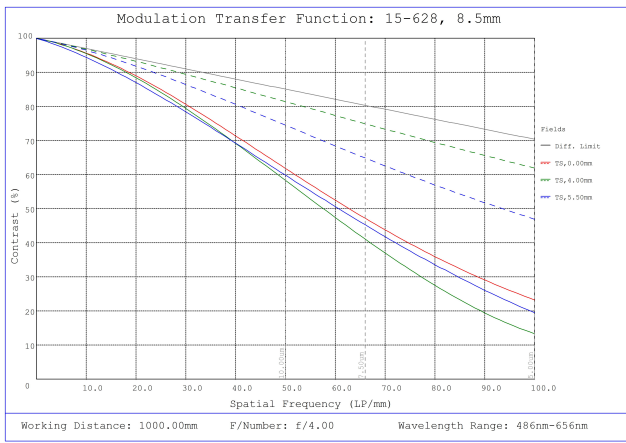
#15-628, 8.5mm, f/4 Cw Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



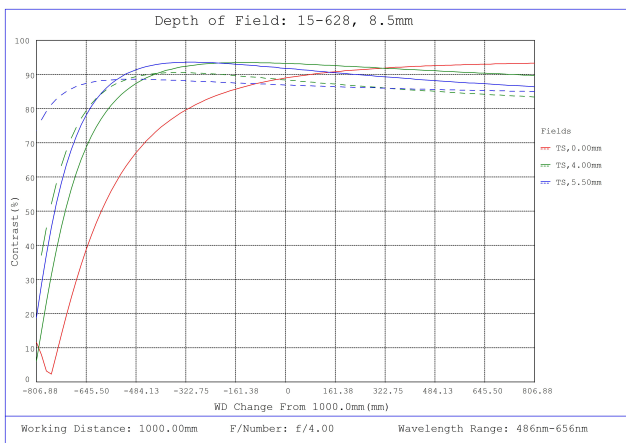
#15-628, 8.5mm, f/4 Cw Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 500mm Working Distance, f4



#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