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**TECHSPEC® 6mm, f/4 Sealed UCw Series Fixed Focal Length Lens**



UCw Series Fixed Focal Length Lenses

Stock **#70-590** **4 In Stock**

⊖ 1 ⊕ C\$394<sup>00</sup>

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**General**

Ucw Series **Product Family:**

Fixed Focal Length Lens **Type:**

High Performance Lens with Compact Form Factor **Imaging Lens Type:**

**Physical & Mechanical Properties**

Fixed **Iris Option:**

|       |                                      |
|-------|--------------------------------------|
| 40.10 | <b>Length (mm):</b>                  |
| 38    | <b>Maximum Diameter (mm):</b>        |
| 38    | <b>Outer Diameter (mm):</b>          |
| 3.82  | <b>Maximum Rear Protrusion (mm):</b> |
| 40.9  | <b>Maximum Length (mm):</b>          |

## Optical Properties

|                     |  |
|---------------------|--|
| 60.0°               | <b>Horizontal Field of View @ Max Sensor Format:</b> |
| 60.0°               | <b>Horizontal Field of View, 1/2" Sensor:</b>        |
| 54.6°               | <b>Horizontal Field of View, 1/2.5" Sensor:</b>      |
| 45.4°               | <b>Horizontal Field of View, 1/3" Sensor:</b>        |
| 34.2°               | <b>Horizontal Field of View, 1/4" Sensor:</b>        |
| 8.00                | <b>Maximum Image Circle (mm):</b>                    |
| 0.01                | <b>Numerical Aperture NA, Object Side:</b>           |
| 9 (8)               | <b>Number of Elements (Groups):</b>                  |
| 6.00                | <b>Focal Length FL (mm):</b>                         |
| 50 - ∞              | <b>Working Distance (mm):</b>                        |
| f/4.0               | <b>Aperture (f/#):</b>                               |
| M4 MgF <sub>2</sub> | <b>Coating:</b>                                      |
| M4 MgF <sub>2</sub> | <b>Coating Specification:</b>                        |
| 12.61               | <b>Entrance Pupil Position (mm):</b>                 |
| 17.55               | <b>Object Space Principal Plane (mm):</b>            |
| 4.85                | <b>Image Space Principal Plane (mm):</b>             |
| -11.19              | <b>Maximum Distortion (%):</b>                       |
| -23.26              | <b>Exit Pupil Position (mm):</b>                     |
| VIS                 | <b>Lens Wavelength Range:</b>                        |

## Sensor

|        |                                 |
|--------|---------------------------------|
| 1/2.5" | <b>Optimized Sensor Format:</b> |
| 1/2"   | <b>Maximum Sensor Format:</b>   |
| 1.85   | <b>Pixel Size (µm):</b>         |

## Threading & Mounting

|                   |                       |
|-------------------|-----------------------|
| M34 x0.5 (Female) | <b>Filter Thread:</b> |
| M34 x0.5 (Female) | <b>Front Thread:</b>  |
| C-Mount           | <b>Mount:</b>         |

## Environmental & Durability Factors

|  |                                  |
|--|----------------------------------|
| IPX7   | <b>Environmental Rating:</b>     |
| -20 to +60 For questions regarding operating temperature please contact our support team | <b>Storage Temperature (°C):</b> |
| Waterproof (IPX7)  | <b>Type of Ruggedization:</b>    |

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## Regulatory Compliance

Certificate of Conformance:

[View](#)

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## Product Details

- Up to 1/2", C-Mount Lens
- Ultra-Compact (UC), High Resolution Lens for Small Sensors
- Waterproof Versions of UC Series Fixed Focal Length Lenses
- Meets IEC Ingress Protection Ratings of IPX7

TECHSPEC® UCw Series Fixed Focal Length Lenses are waterproof versions of our [TECHSPEC® UC Series Fixed Focal Length Lenses](#), and are designed to meet IEC Ingress Protection Codes IPX7 to withstand exposure to water up to 1 meter depth for 30 minutes. Additionally, their compact size provides high performance at an affordable cost without sacrificing quality or feel. These lenses include a hydrophobic coated window to prevent water droplets from settling on the lens' surface and are sealed with multiple O-rings to prevent moisture from entering the housing. TECHSPEC® UCw Series Fixed Focal Length Lenses are ideal for applications in space constrained, harsh environments such as food inspection, security, medical, and factory automation.

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.

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