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**TECHSPEC® 8mm, f/16 Sealed UCw Series Fixed Focal Length Lens**



UCw Series Fixed Focal Length Lenses

Stock **#70-601** **2 In Stock**

⊖ 1 ⊕ **\$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:**

42.00 Length (mm):

34 Maximum Diameter (mm):

30 Outer Diameter (mm):

5.15 Maximum Rear Protrusion (mm):

40.61 Maximum Length (mm):

## Optical Properties

44.7° Horizontal Field of View @ Max Sensor Format:

44.7° Horizontal Field of View, 1/2" Sensor:

40.7° Horizontal Field of View, 1/2.5" Sensor:

33.9° Horizontal Field of View, 1/3" Sensor:

25.6° Horizontal Field of View, 1/4" Sensor:

8.00 Maximum Image Circle (mm):

0.003 Numerical Aperture NA, Object Side:

9 (8) Number of Elements (Groups):

8.00 Focal Length FL (mm):

50 - ∞ Working Distance (mm):

f/16.0 Aperture (f/#):

M4 MgF<sub>2</sub> Coating:

M4 MgF<sub>2</sub> Coating Specification:

22.07 Entrance Pupil Position (mm):

27.98 Object Space Principal Plane (mm):

1.77 Image Space Principal Plane (mm):

-3.92 Maximum Distortion (%):

-20.88 Exit Pupil Position (mm):

VIS Lens Wavelength Range:

## Sensor

1/2.5" Optimized Sensor Format:

1/2" Maximum Sensor Format:

1.85 Pixel Size (µm):

## Threading & Mounting

M43 x0.75 (Male) Filter Thread:

[#89-940 \(Required\)](#) Filter Thread Adapter:

M34.0 x0.5 (Male) Front Thread:

C-Mount Mount:

## Environmental & Durability Factors

IPX7 Environmental Rating:

-20 to +60 For questions regarding operating temperature please contact our support team Storage Temperature (°C):

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Waterproof (IPX7) **Type of Ruggedization:**

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## Regulatory Compliance

[View](#) **Certificate of Conformance:**

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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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