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TECHSPEC® 8mm, f/1.8 Sealed UCw Series Fixed Focal Length Lens



UCw Series Fixed Focal Length Lenses

Stock #70-595 **9 In Stock**

⊖ 1 ⊕ **\$394⁰⁰**

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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):
0.03	Numerical Aperture NA, Object Side:
9 (8)	Number of Elements (Groups):
8.00	Focal Length FL (mm):
50 - ∞	Working Distance (mm):
f/1.8	Aperture (f/#):
M4 MgF ₂	Coating:
M4 MgF ₂	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):

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

Regulatory Compliance

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

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.
