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**TECHSPEC® 12mm, f/8 Sealed UCw Series Fixed Focal Length Lens**



UCw Series Fixed Focal Length Lenses

Stock **#70-606** **2 In Stock**

⊖ 1 ⊕ **\$394<sup>00</sup>**

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| Qty 1+         | <b>\$394.80</b> each          |
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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:**

|       |                               |
|-------|-------------------------------|
| 34.16 | Length (mm):                  |
| 30    | Maximum Diameter (mm):        |
| 30    | Outer Diameter (mm):          |
| 4.52  | Maximum Rear Protrusion (mm): |
| 35.2  | Maximum Length (mm):          |

## Optical Properties

|                     |   |
|---------------------|---|
| 34.0°               | Horizontal Field of View @ Max Sensor Format: |
| 34.0°               | Horizontal Field of View, 1/1.8" Sensor:      |
| 30.3°               | Horizontal Field of View, 1/2" Sensor:        |
| 27.5°               | Horizontal Field of View, 1/2.5" Sensor:      |
| 22.8°               | Horizontal Field of View, 1/3" Sensor:        |
| 17.1°               | Horizontal Field of View, 1/4" Sensor:        |
| 9.00                | Maximum Image Circle (mm):                    |
| 0.01                | Numerical Aperture NA, Object Side:           |
| 7 (6)               | Number of Elements (Groups):                  |
| 12.00               | Focal Length FL (mm):                         |
| 100 - ∞             | Working Distance (mm):                        |
| f/8.0               | Aperture (f/#):                               |
| M4 MgF <sub>2</sub> | Coating:                                      |
| M4 MgF <sub>2</sub> | Coating Specification:                        |
| 15.92               | Entrance Pupil Position (mm):                 |
| 23.04               | Object Space Principal Plane (mm):            |
| -1.82               | Image Space Principal Plane (mm):             |
| -3.03               | Maximum Distortion (%):                       |
| -19.24              | Exit Pupil Position (mm):                     |
| VIS                 | Lens Wavelength Range:                        |

## Sensor

|        |                          |
|--------|--------------------------|
| 1/2.5" | Optimized Sensor Format: |
| 1/1.8" | Maximum Sensor Format:   |
| 1.85   | Pixel Size (µm):         |

## Threading & Mounting

|                       |                |
|-----------------------|----------------|
| M25.5 x 0.50 (Female) | Filter 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:    |

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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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