

**TECHSPEC® 12mm, f/5.6 Sealed UCw Series Fixed Focal Length Lens**



UCw Series Fixed Focal Length Lenses

Stock #70-605 **2 In Stock**

⊖ 1 ⊕ £225<sup>00</sup>

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Qty 1+	£225.60 each
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ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

**General**

UCw Series **Product Family:**

Fixed Focal Length Lens **Type:**

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

**Physical & Mechanical Properties**

**Iris Option:**

Fixed

Length (mm):  
34.16

Maximum Diameter (mm):  
30

Outer Diameter (mm):  
30

Maximum Rear Protrusion (mm):  
4.52

Maximum Length (mm):  
35.2

## Optical Properties

Horizontal Field of View @ Max Sensor Format:  
34.0°

Horizontal Field of View, 1/1.8" Sensor:  
34.0°

Horizontal Field of View, 1/2" Sensor:  
30.3°

Horizontal Field of View, 1/2.5" Sensor:  
27.5°

Horizontal Field of View, 1/3" Sensor:  
22.8°

Horizontal Field of View, 1/4" Sensor:  
17.1°

Maximum Image Circle (mm):  
9.00

Numerical Aperture NA, Object Side:  
0.01

Number of Elements (Groups):  
7 (6)

Focal Length FL (mm):  
12.00

Working Distance (mm):  
100 - ∞

Aperture (f#):  
f/5.6

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

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

Entrance Pupil Position (mm):  
15.92

Object Space Principal Plane (mm):  
23.04

Image Space Principal Plane (mm):  
-1.82

Maximum Distortion (%):  
-3.03

Exit Pupil Position (mm):  
-19.24

Lens Wavelength Range:  
VIS

## Sensor

Optimized Sensor Format:  
1/2.5"

Maximum Sensor Format:  
1/1.8"

Pixel Size (μm):  
1.85

## Threading & Mounting

Filter Thread:  
M25.5 x 0.50 (Female)

Mount:  
C-Mount

## Environmental & Durability Factors

Environmental Rating:  
IPX7

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

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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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