

TECHSPEC® 12mm, f/1.8 Sealed UCw Series Fixed Focal Length Lens



UCw Series Fixed Focal Length Lenses

Stock **#70-602** **8 In Stock**

⊖ 1 ⊕ £225⁰⁰

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Qty 1+	£225.60 each
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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

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):

0.03 Numerical Aperture NA, Object Side:

7 (6) Number of Elements (Groups):

12.00 Focal Length FL (mm):

100 - ∞ Working Distance (mm):

f/1.8 Aperture (f/#):

λ/4 MgF₂ Coating:

λ/4 MgF₂ 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:

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.