

[See all 52 Products in Family](#)

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 ⊕ €282.⁰⁰

ADD TO CART

| Volume Pricing | |
|----------------|-------------------------------|
| Qty 1+ | €282,00 each |
| Need More? | Request Quote |

ⓘ 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 | |
| 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 MgF ₂ | Coating: |
| λ/4 MgF ₂ | 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 | Storage Temperature (°C): |
| For questions regarding operating temperature please contact our support team | |

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.