

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



UCw Series Fixed Focal Length Lenses

Stock **#70-602** **15 In Stock**

-

1

+

C\$394<sup>45</sup>

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| Volume Pricing |                               |
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| Qty 1+         | C\$394.45 each                |
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| Product Downloads |
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SPECIFICATIONS

| General                 |         |
|-------------------------|---------|
| UCw Series              | Series: |
| Fixed Focal Length Lens | Type:   |

Imaging Lens Type:

High Performance Lens with Compact Form Factor

| 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):                    |
|                                    |                                               |
| 0.03                               | 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/#):                               |
|                                    |                                               |
| N/4 MgF <sub>2</sub>               | Coating:                                      |
|                                    |                                               |
| N/4 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 x0.50 (Female)               | Filter Thread:                                |
|                                    |                                               |
| C-Mbunt                            | Mount:                                        |
|                                    |                                               |
| Environmental & Durability Factors |                                               |
| IPX7                               | Environmental Rating:                         |
|                                    |                                               |

|                                                                                                                              |  |
|------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Storage Temperature (°C):</b><br>-20 to +60 For questions regarding operating temperature please contact our support team |  |
| <b>Type of Ruggedization:</b><br>Waterproof (IPX7)                                                                           |  |

| Regulatory Compliance |                             |
|-----------------------|-----------------------------|
| <a href="#">View</a>  | 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.