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# **TECHSPEC** 8.5mm f/1.8, 75mm-∞ Primary WD, HRi Series Fixed Focal Length Lens



8.5mm f/1.8, 2/3" HPi Series Fixed Focal Length Lens, #36-747



Stock **#36-747** 3 In Stock

- 1 + A\$1,059<sup>.00</sup>

## ADD TO CART

Volume Pricing	
Qty 1+	<b>A\$1,059.00</b> each
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### **SPECIFICATIONS**

General

Series:

HRi Series

Type:

### **Physical & Mechanical Properties** Iris Option: Fixed Length (mm): 44.57 Maximum Diameter (mm): 40 Outer Diameter (mm): 40 Weight (g): 84 Maximum Rear Protrusion (mm): 1.31 **Optical Properties** Horizontal Field of View @ Max Sensor Format: 101.4mm - 56.8° Field of View at Max Sensor Format: Horizontal: 101.4mm - 56.8° Vertical: 74.2mm - 43.5° Diagonal: 130.5mm - 68.9° Horizontal Field of View, 2/3" Sensor: 101.4mm - 56.8° Horizontal Field of View, 1/1.8" Sensor: 81.5mm - 47.2° Horizontal Field of View, 1/2" Sensor: 71.9mm - 42.2° Horizontal Field of View, 1/2.5" Sensor: 64.8mm - 38.4° Horizontal Field of View, 1/3" Sensor: 53.2mm - 32.0° Horizontal Field of View, 1/4" Sensor: 39.6mm - 24.1° Maximum Image Circle (mm): 11.00 Numerical Aperture NA, Object Side: 0.0249 Number of Elements (Groups): 9 (8) Focal Length FL (mm): 8.50 Working Distance (mm): 75 - ∞ Aperture (f/#): f/1.8 Coating: 425 - 675nm BBAR Coating Specification: 425 - 675nm BBAR Entrance Pupil Position (mm): 18.85 Object Space Principal Plane (mm): 25.03 Image Space Principal Plane (mm): 4.70 -5.6 Exit Pupil Position (mm): -17.93 Optimized Working Distance (mm): 75 - ∞ Lens Wavelength Range: MS Sensor Maximum Sensor Format: 2/3" Pixel Size (µm): 1.85 **Threading & Mounting** Filter Thread:

Filter Thread Adapter: #87-425 (Required)

Front Thread:

M40 x 0.5 (Male)

Mount:

C-Mount

#### **Environmental & Durability Factors**

Storage Temperature (°C):

-20 to +60

Type of Ruggedization:

Industrial (Fixed Aperture with Simplified Mechanics)

#### **Regulatory Compliance**

**Certificate of Conformance:** 

View

#### PRODUCT DETAILS

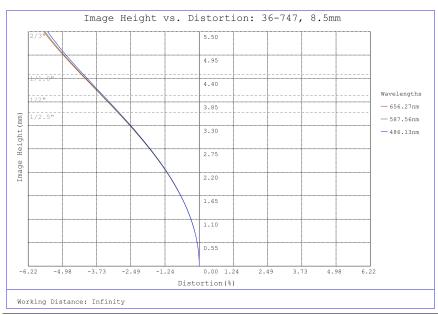
- 2/3", C-Mount Lens
- Up to 10 MegaPixels, 1.85µm Pixel Size Sensors
- Instrumentation (HRi) Versions of our HR Series Lenses with Streamlined Mechanical Designs and Fixed Apertures
- 8.5mm to 12mm Focal Length
- Ruggedized (HRr) Designs Also Available

TECHSPEC® HRi Series Fixed Focal Length Lenses are a streamlined version of our HR Series Lenses. There are multiple options available for each focal length to accommodate a variety of optimized working distance ranges. Designed for high volume imaging applications, HPi series lenses feature simplified focus mechanics and a fixed aperture. TECHSPEC HRi Series Fixed Focal Length Lenses are available in a variety of ff# options, making them ideal for applications that require reduced size, cost, and lockable focus imaging solutions. Call for OEMQuantity Pricing.

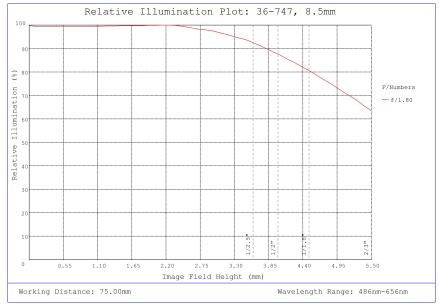
Edmund Optics has created a family of high performance optical designs (the HR Series family) and developed three customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the HR Series Lenses, providing the same optical performance in a variety of optomechanical solutions to meet your application requirements:

- HR Series: Features locking cam focus and iris adjustment. This is the most adjustable version of these optical designs and is the typical high quality machine vision lens.
- HRi Series: Simplified mechanics featuring fixed apertures with compact housing. Industrial Ruggedization for reduced size, cost, and locked focus.
- HR Series: All optics glued in place and a locking C-clamp focus ring. Stabilized Ruggedization for reduced pixel shift and improved focus stability.

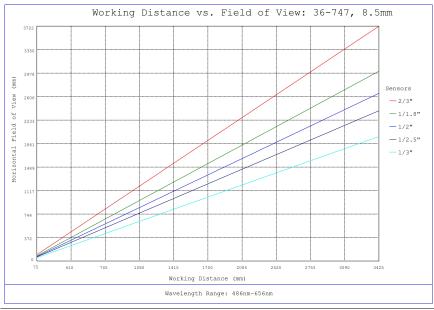
### TECHNICAL INFORMATION



#36-747, 8.5mm f/1.8, 75mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Distortion Plot



#36-747, 8.5mm f/1.8, 75mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Relative Illumination Plot



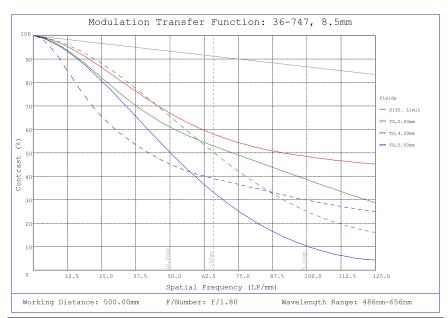
#36-747, 8.5mm f/1.8, 75mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



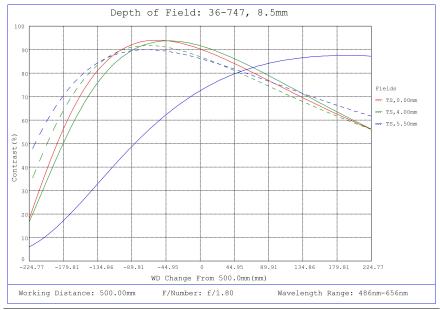
#36-747, 8.5mm f/1.8, 75mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 200mm Working Distance, f1.8



#36-747, 8.5mm f/1.8, 75mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Depth of Field Plot, 200mm Working Distance, f1.8



#36-747, 8.5mm f/1.8, 75mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 500mm Working Distance, f1.8



#36-747, 8.5mm f/1.8, 75mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Depth of Field Plot, 500mm Working Distance, f1.8

## COMPATIBLE CAMERAS