

TECHSPEC[®] 3.5mm, f/2 Ci Series Fixed Focal Length Lens



3.5mm Focal Length

Stock **#87-545** **4 In Stock**

-

1

+

A\$366⁰⁰

ADD TO CART

| Volume Pricing | |
|----------------|-------------------------------|
| Qty 1-24 | A\$366.00 each |
| Qty 25+ | A\$330.00 each |
| Need More? | Request Quote |

Product Downloads

SPECIFICATIONS

General

| | |
|-------------------------|---------|
| Ci Series | Series: |
| Fixed Focal Length Lens | Type: |

| | |
|---|-------------------------------------|
| Imaging Lens Type: Compact Lens with Fixed Aperture | |
| Physical & Mechanical Properties | |
| Fixed | Iris Option: |
| | |
| 39.38 | Length (mm): |
| | |
| 50 | Maximum Diameter (mm): |
| | |
| 50 | Outer Diameter (mm): |
| | |
| 97 | Weight (g): |
| | |
| 2.64 | Maximum Rear Protrusion (mm): |
| | |
| 26.50 | Diameter (mm): |
| | |
| Optical Properties | |
| Horizontal Field of View @ Max Sensor Format: 41.2mm - 102.8° | |
| Field of View at Max Sensor Format: Horizontal: 41.2mm - 102.4° Vertical: 26.8mm - 82.3° Diagonal: 63.5mm - 117.1° | |
| Horizontal Field of View, 1/1.8" Sensor: 41.2mm - 102.8° | |
| Horizontal Field of View, 1/2" Sensor: 29.5mm - 87.2° | |
| Horizontal Field of View, 1/3" Sensor: 23.0mm - 74.4° | |
| Horizontal Field of View, 1/4" Sensor: 16.3mm - 57.4° | |
| 9.00 | Maximum Image Circle (mm): |
| | |
| 0.0572 | Numerical Aperture NA, Object Side: |
| | |
| 8 (7) | Number of Elements (Groups): |
| | |
| 3.50 | Focal Length FL (mm): |
| | |
| 0 - ∞ | Working Distance (mm): |
| | |
| f/2 | Aperture (f/#): |
| | |
| 425 - 675nm BBAR | Coating: |
| | |
| 425 - 675nm BBAR | Coating Specification: |
| | |
| 15.27 | Entrance Pupil Position (mm): |
| | |
| 18.31 | Object Space Principal Plane (mm): |
| | |
| 7.49 | Image Space Principal Plane (mm): |
| | |
| -20.95 | Maximum Distortion (%): |
| | |
| -15.28 | Exit Pupil Position (mm): |
| | |
| VS | Lens Wavelength Range: |
| | |
| Sensor | |
| 1/1.8" | Maximum Sensor Format: |
| | |
| 2.74 | Pixel Size (µm): |
| | |
| Threading & Mounting | |
| M105 x 1.00 (Male) | Filter Thread: |
| | |
| #89-848 (Required) | Filter Thread Adapter: |
| | |
| | Front Thread: |
| | |

| | |
|---|-----------------------------|
| M50.0 x0.5 (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

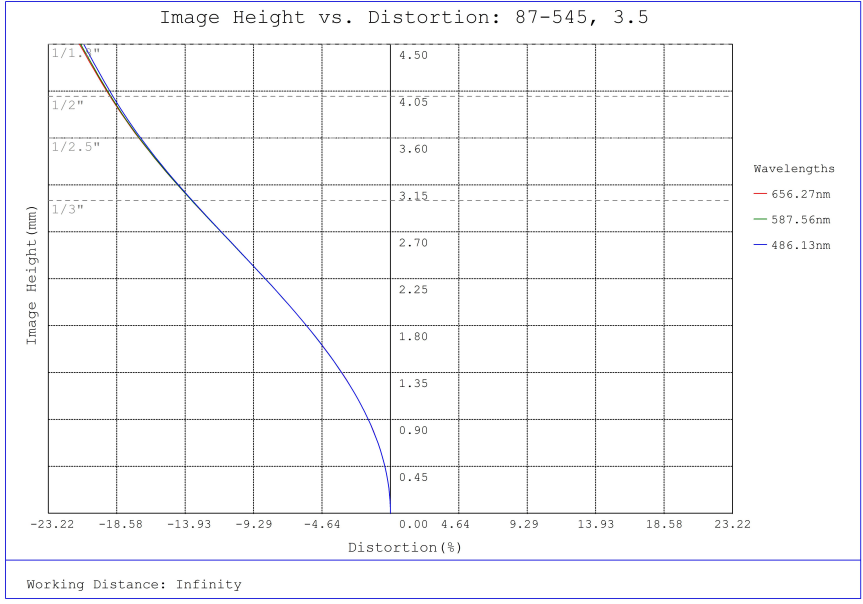
- Up to 2/3", C-Mount Lens
- Up to 7.5 MegaPixels, 2.8µm Pixel Size Sensors
- Instrumentation (Ci) Versions of our C Series Lenses with Streamlined Mechanical Designs and Fixed Apertures
- 3.5mm to 50mm Focal Length
- [Ruggedized \(Cr\) Designs](#) Also Available

TECHSPEC® Ci Series Fixed Focal Length Lenses are a streamlined version of our C Series Fixed Focal Length Lenses. They feature the same low lens-to-lens variation and broadband anti-reflection (BBAR) coating for maximum light transmission, while offering reduced weight and size. An adjustable, lockable focus allows for setting and locking the best focus position for instrumentation integration. TECHSPEC® Ci Series Fixed Focal Length Lenses are designed specifically for volume integration into applications such as factory inspection and automation to benchtop biomedical devices. The Ci Series offers a wide range of aperture options, ensuring maximum flexibility of resolution, throughput, and depth of field.

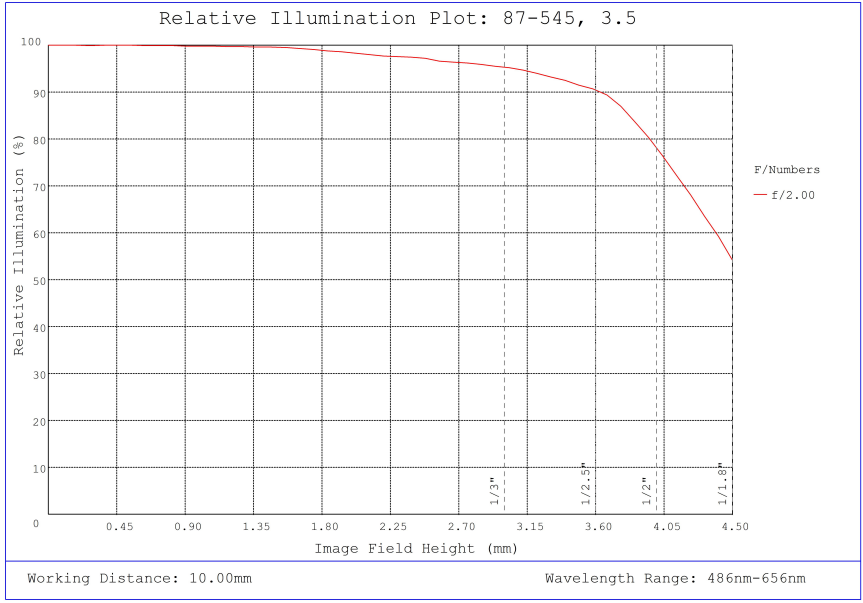
Edmund Optics has created a family of high performance optical designs (the C Series family) and developed 6 customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the C Series lenses providing the same optical performance in a variety of optomechanical solutions to meet your application requirements:

- C Series:** Features locking cam focus and iris adjustment and is the most adjustable version of these optical designs; they are the typical high quality machine vision lenses. Also available with a [VIS-NIR Broadband Anti-Reflection \(BBAR\) Coating](#).
- Ci Series: Simplified mechanics featuring fixed apertures with compact housing. [Industrial Ruggedization](#) for reduced size, cost, and locked focus.
- Cr Series:** All optics glued in place and a locking C-clamp focus ring. [Stabilized Ruggedization](#) for reduced pixel shift and improved focus stability.
- Cx Series:** Modular, flexible mechanics allows lenses to be taken apart for easy integration of accessories such as liquid lenses, apertures, and more.
- Liquid Lens Cx Series:** Designed with an integrated liquid lens for quick autofocus.
- Cw Series:** Waterproof, designed to meet IEC [Ingress Protection](#) Code IPX7 and IPX9K.

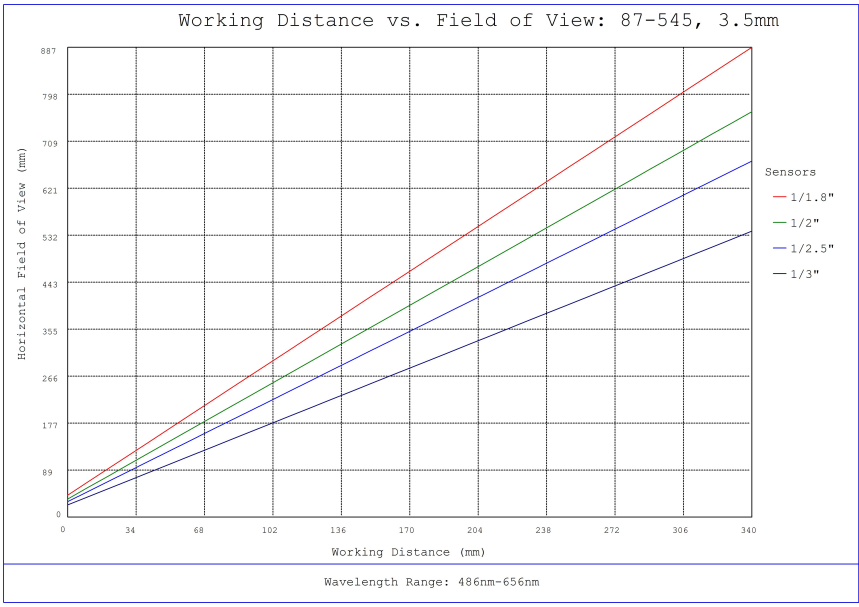
TECHNICAL INFORMATION



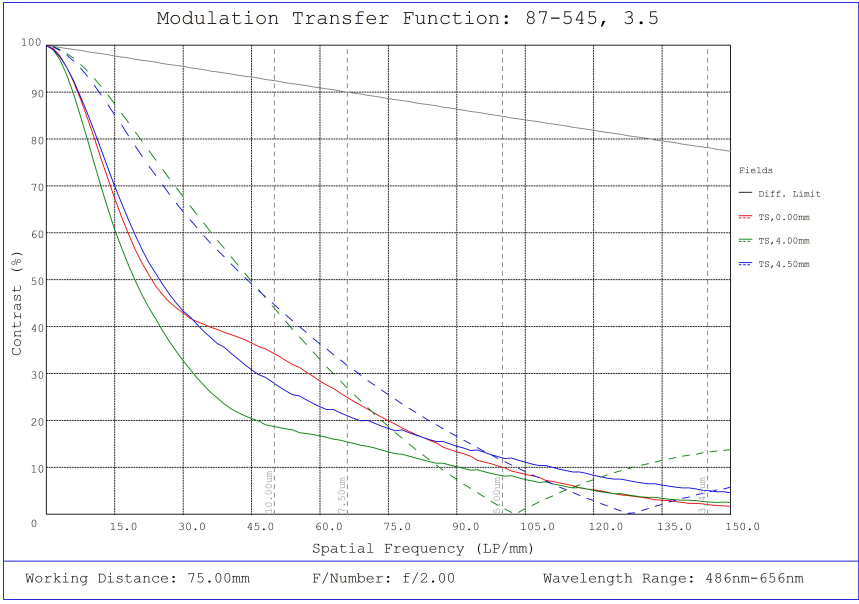
#87-545, 3.5mm, f/2 Ci Series Fixed Focal Length Lens, Distortion Plot



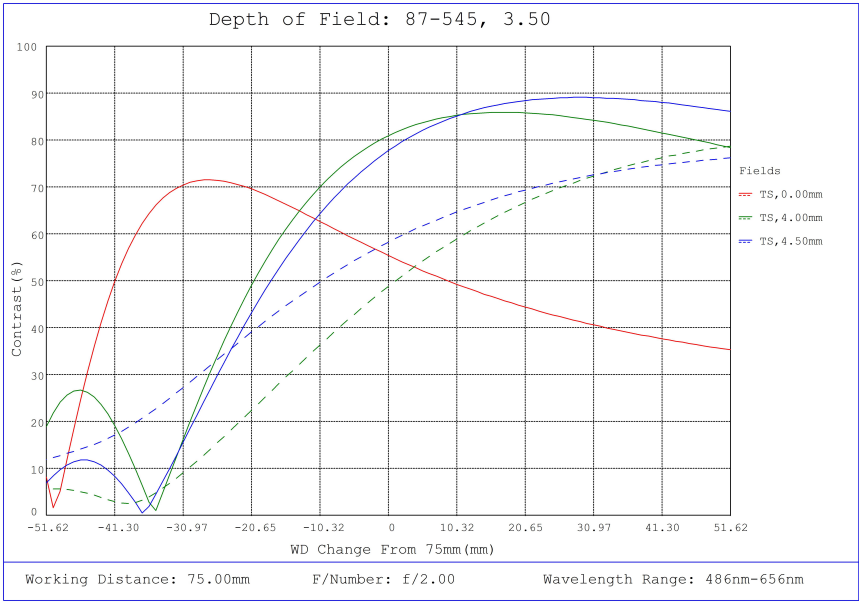
#87-545, 3.5mm, f/2 Ci Series Fixed Focal Length Lens, Relative Illumination Plot



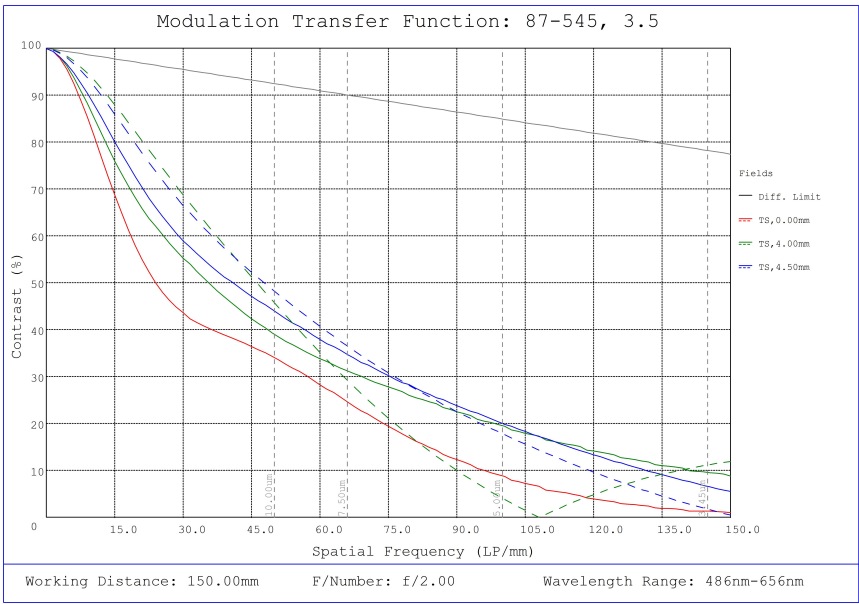
#87-545, 3.5mm, f/2 Ci Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



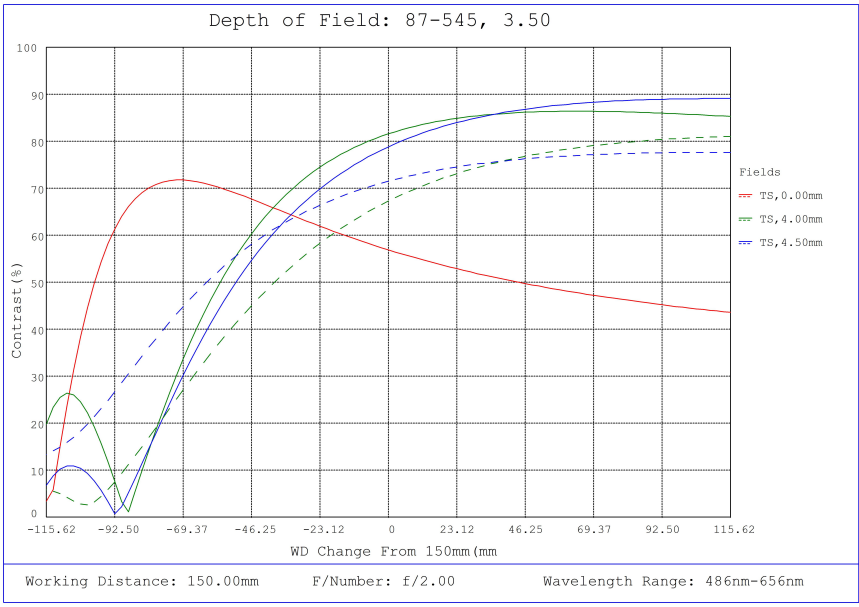
#87-545, 3.5mm, f/2 Ci Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 75mm Working Distance, f2



#87-545, 3.5mm, f/2 Ci Series Fixed Focal Length Lens, Depth of Field Plot, 75mm Working Distance, f2



#87-545, 3.5mm, f/2 Ci Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 150mm Working Distance, f2



#87-545, 3.5mm, f/2 Ci Series Fixed Focal Length Lens, Depth of Field Plot, 150mm Working Distance, f2

| Focal Length | A | B | C | D |
|--------------|-------------|--------|--------|--------|
| 6mm | M34.0 x0.5 | 47.8mm | 34mm | 1.17mm |
| 12mm | M22.0 x0.75 | 29.0mm | 22mm | 0.96mm |
| 16mm | M22.0 x0.75 | 40.8mm | 22mm | 1.09mm |
| 25mm | M22.0 x0.75 | 29.9mm | 22mm | 1.33mm |
| 35mm | M25.5 x0.5 | 41mm | 22.5mm | 3.82mm |
| 50mm | M30.5 x0.5 | 49.5mm | 30.5mm | 2.06mm |

Focus Locking Screw
Max. Overall Length (B)
4.5mm
Max. Front Diameter (C)
26mm
Front Threading (A)
C-Mount M22.0 x 0.75
Max. Rear Protrusion (D)

COMPATIBLE CAMERAS