

TECHSPEC[®] 50mm, f/5.6 Cr Series Fixed Focal Length Lens



50mm Cr Series Fixed Focal Length Lens



Stock #35-193 3 In Stock

-

1

+

£330^{.00}

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Volume Pricing	
Qty 1+	£330.00 each
Need More?	Request Quote

 Prices shown are exclusive of VAT/local taxes

Product Downloads

General	
Cr Series	Product Family:
Fixed Focal Length Lens	Type:
Physical & Mechanical Properties	
	Iris Option:

Fixed	
48.42	Length (mm):
33.8	Maximum Diameter (mm):
33.8	Outer Diameter (mm):
83	Weight (g):
2.06	Maximum Rear Protrusion (mm):
33.80	Diameter (mm):

Optical Properties	
Horizontal Field of View @ Max Sensor Format: 42.8mm - 10.0°	
Field of View at Max Sensor Format: Horizontal: 42.7mm - 10° Vertical: 32mm - 7.5° Diagonal: 53.5mm - 12.5°	
Horizontal Field of View, 2/3" Sensor: 42.8mm - 10.0°	
Horizontal Field of View, 1/1.8" Sensor: 35.0mm - 8.2°	
Horizontal Field of View, 1/2" Sensor: 31.1mm - 7.3°	
Horizontal Field of View, 1/2.5" Sensor: 28.2mm - 6.6°	
Horizontal Field of View, 1/3" Sensor: 23.3mm - 5.5°	
Horizontal Field of View, 1/4" Sensor: 17.5mm - 4.1°	
11.00	Maximum Image Circle (mm):
0.0155	Numerical Aperture NA, Object Side:
6 (4)	Number of Elements (Groups):
50.00	Focal Length FL (mm):
250 - ∞	Working Distance (mm):
f/5.6	Aperture (f/#):
425 - 675nm BBAR	Coating:
425 - 675nm BBAR	Coating Specification:
35.62	Entrance Pupil Position (mm):
39.89	Object Space Principal Plane (mm):
-36.26	Image Space Principal Plane (mm):
0.26	Maximum Distortion (%):
-40.93	Exit Pupil Position (mm):
VIS	Lens Wavelength Range:

Sensor	
2/3"	Maximum Sensor Format:
2.74	Pixel Size (µm):

Threading & Mounting	
M30.5 x0.50 (Male)	Filter Thread:
M30.5 x0.5 (Male)	Front Thread:
C-Mount	Mount:

Environmental & Durability Factors

	-20 to +60 Storage Temperature (°C):
	Type of Ruggedization: Stabilized (Robust Mechanics for Shock and Vibration)

Vibration)

Regulatory Compliance	
GDPR Compliance	2023-10-26
ISO 27001 Audit	2023-11-05
Financial Reporting	2023-11-15
Environmental Impact	2023-11-20
Health & Safety	2023-11-25
Anti-Money Laundering	2023-12-01
Consumer Protection	2023-12-05
Product Liability	2023-12-10
Intellectual Property	2023-12-15
Export Controls	2023-12-20
Sanctions Screening	2023-12-25
Anti-Corruption	2024-01-01
Whistleblower Policy	2024-01-05
Record Retention	2024-01-10
Disaster Recovery	2024-01-15
Business Continuity	2024-01-20
Insurance Coverage	2024-01-25
Legal Counsel	2024-02-01
Regulatory Updates	2024-02-05
Compliance Training	2024-02-10
Internal Controls	2024-02-15
External Audits	2024-02-20
Regulatory Filings	2024-02-25
Public Disclosure	2024-03-01
Stakeholder Engagement	2024-03-05
Investor Relations	2024-03-10
Media Relations	2024-03-15
Community Outreach	2024-03-20
Government Relations	2024-03-25
Industry Associations	2024-04-01
Trade Shows	2024-04-05
Networking Events	2024-04-10
Charitable Contributions	2024-04-15
Philanthropy	2024-04-20
Corporate Social Responsibility	2024-04-25
Environmental Sustainability	2024-05-01
Social Responsibility	2024-05-05
Employee Welfare	2024-05-10
Work-Life Balance	2024-05-15
Employee Training	2024-05-20
Professional Development	2024-05-25
Leadership Development	2024-06-01
Succession Planning	2024-06-05
Board of Directors	2024-06-10
Executive Management	2024-06-15
Senior Management	2024-06-20
Department Heads	2024-06-25
Team Leaders	2024-07-01
Project Managers	2024-07-05
Quality Assurance	2024-07-10
Customer Support	2024-07-15
Sales & Marketing	2024-07-20
Product Development	2024-07-25
Research & Development	2024-08-01
Engineering	2024-08-05
Manufacturing	2024-08-10
Logistics	2024-08-15
Supply Chain	2024-08-20
Procurement	2024-08-25
Finance	2024-09-01
Accounting	2024-09-05
Human Resources	2024-09-10
Information Technology	2024-09-15
Operations	2024-09-20
Legal	2024-09-25
Compliance	2024-10-01
Regulatory	2024-10-05
Environmental	2024-10-10
Social	2024-10-15
Employee	2024-10-20
Leadership	2024-10-25
Succession	2024-11-01
Board	2024-11-05
Executive	2024-11-10
Senior	2024-11-15
Department	2024-11-20
Team	2024-11-25
Project	2024-12-01
Quality	2024-12-05
Customer	2024-12-10
Sales	2024-12-15
Product	2024-12-20
Research	2024-12-25
Engineering	2025-01-01
Manufacturing	2025-01-05
Logistics	2025-01-10
Supply	2025-01-15
Procurement	2025-01-20
Finance	2025-01-25
Accounting	2025-02-01
Human	2025-02-05
Information	2025-02-10
Operations	2025-02-15
Legal	2025-02-20
Compliance	2025-02-25
Regulatory	2025-03-01
Environmental	2025-03-05
Social	2025-03-10
Employee	2025-03-15
Leadership	2025-03-20
Succession	2025-03-25
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Logistics	2025-06-05
Supply	2025-06-10
Procurement	2025-06-15
Finance	2025-06-20
Accounting	2025-06-25
Human	2025-07-01
Information	2025-07-05
Operations	2025-07-10
Legal	2025-07-15
Compliance	2025-07-20
Regulatory	2025-07-25
Environmental	2025-08-01
Social	2025-08-05
Employee	2025-08-10
Leadership	2025-08-15
Succession	2025-08-20
Board	2025-08-25

[View](#) **Certificate of Conformance:**

- Up to 2/3", C-Mount Lens
- Up to 7.5 MegaPixels, 2.8µm Pixel Size Sensors
- Ruggedized (Cr) Designs (50g Shock) of our C Series Lens
- 3.5mm to 50mm Focal Length
- **Instrumentation (Ci) Versions** Also Available

TECHSPEC® Compact Ruggedized (Cr) Series Fixed Focal Length Lenses provide Stabilized Ruggedization, protecting the lens from damage while maintaining optical pointing and positioning after shock and vibration. All individual lens elements are glued in place to reduce object shift on the image. In addition, these lenses feature robust mechanics with a simplified focus and stainless steel locking C-Mount clamp. TECHSPEC® Cr Series Fixed Focal Length Lenses are ideal for calibrated imaging systems such as measurement and gauging, 3D stereo vision, robotics and sensing, autonomous vehicles, and object tracking. The object to image mapping is maintained even after heavy shock and vibration; if the center of the object maps onto the center pixel, it will always map to that same center pixel.

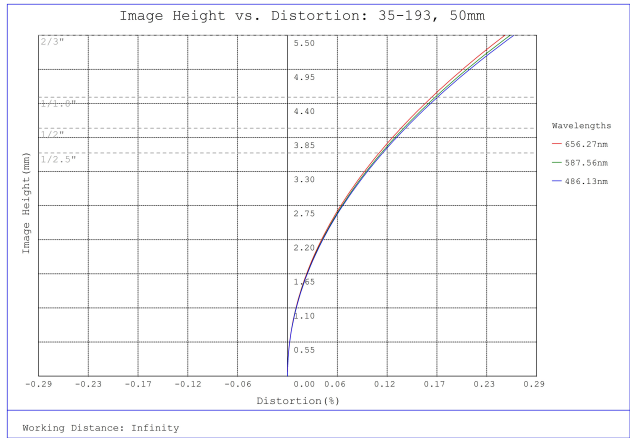
These lenses won the [1st place 2018 Inspect Award](#) and the [Silver Level 2018 Innovators Award](#).

Note: To learn more about ruggedization, visit our [Ruggedization Resource Webpage](#).

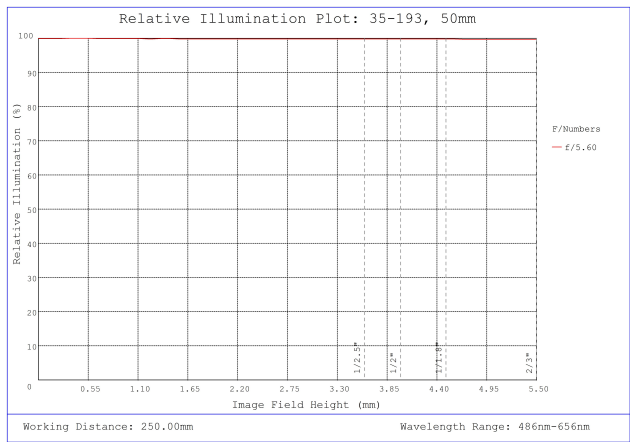
Edmund Optics has created a family of high performance optical designs (the C Series family) and developed 6 customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the C Series lenses providing the same optical performance in a variety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

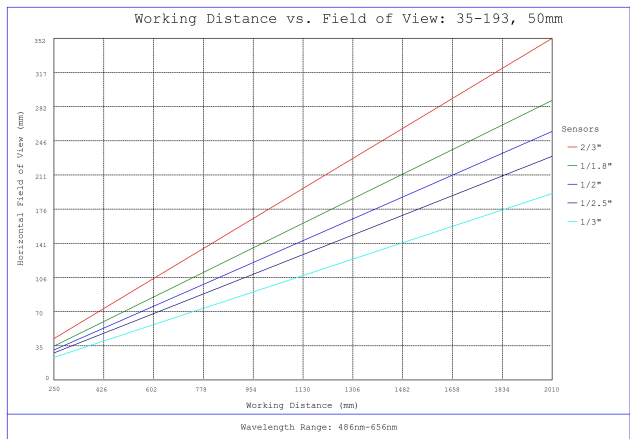
Technical Information



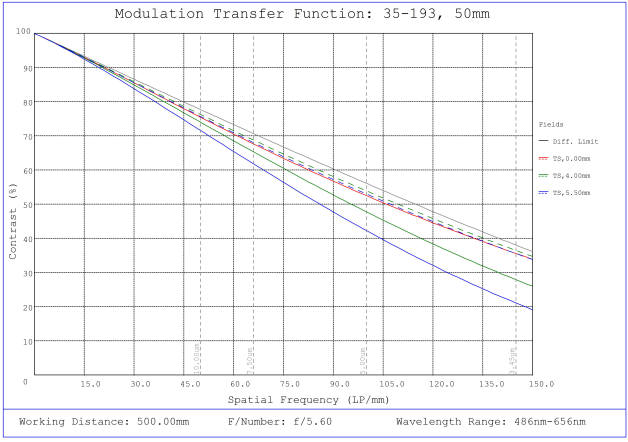
#35-193, 50mm, f/5.6 Cr Series Fixed Focal Length Lens, Distortion Plot



#35-193, 50mm, f/5.6 Cr Series Fixed Focal Length Lens, Relative Illumination Plot



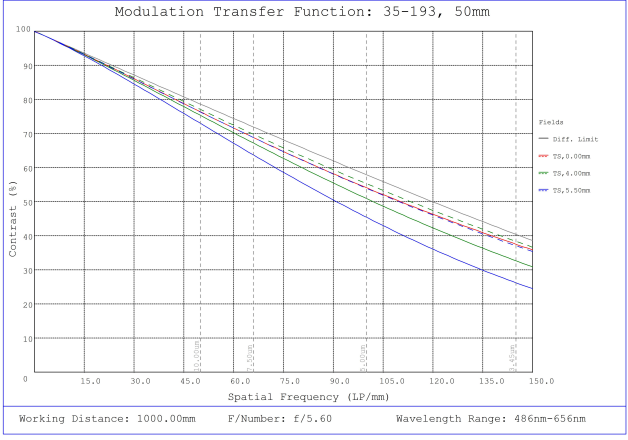
#35-193, 50mm, f/5.6 Cr Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



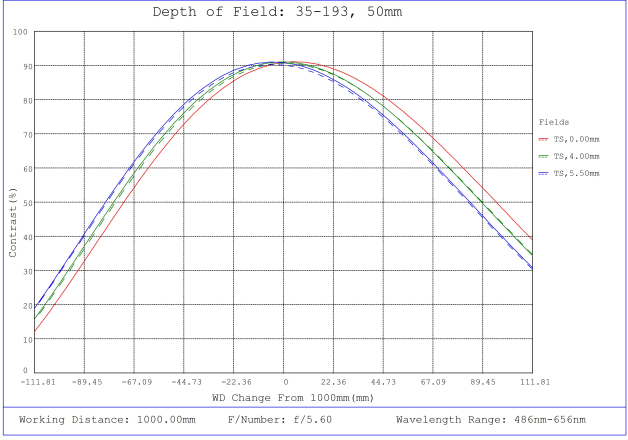
#35-193, 50mm, f/5.6 Cr Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 500mm Working Distance, f5.6



#35-193, 50mm, f/5.6 Cr Series Fixed Focal Length Lens, Depth of Field Plot, 500mm Working Distance, f5.6



#35-193, 50mm, f/5.6 Cr Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 1000mm Working Distance, f5.6



#35-193, 50mm, f/5.6 Cr Series Fixed Focal Length Lens, Depth of Field Plot, 1000mm Working Distance, f5.6

Compatible Cameras