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**TECHSPEC® 0.5X CobaltTL Telecentric Lens**



0.5X Magnification



Stock **#62-911** **5 In Stock**

⊖ 1 ⊕ €2.215<sup>00</sup>

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Volume Pricing

Qty 1+	€2.215,00 each
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ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

General

CobaltTL Series **Series:**

#63-441 Sold Separately **Stock No. of Mounting Clamp:**

Telecentric Lens **Type:**

## Physical & Mechanical Properties

Variable	Iris Option:
172.90	Length (mm):
90.0	Maximum Diameter (mm):
1061	Weight (g):
17.5	Flange Distance (mm):

## Optical Properties

28.32mm	Horizontal Field of View, 1.1" Sensor:
25.75mm	Horizontal Field of View, 1" Sensor:
17.7mm	Horizontal Field of View, 2/3" Sensor:
14.48mm	Horizontal Field of View, 1/1.8" Sensor:
12.874mm	Horizontal Field of View, 1/2" Sensor:
17.60	Maximum Image Circle (mm):
0.041	Numerical Aperture NA, Object Side:
10 (7)	Number of Elements (Groups):
<0.252	Typical Telecentricity @ 588nm (°):
<0.041	Typical Distortion @ 588nm (%):
0.5X	Primary Magnification PMAG:
0.50	Telecentric Lens Magnification:
175	Working Distance (mm):
28.4 x 20.8	FOV @ Max Sensor Format, H x V (mm):
f/6 - f/22	Aperture (f/#):
425 - 675nm BBAR	Coating:
±2.08mm at f/10 (20% @ 20 lp/mm)	Depth of Field (mm):
0.5X	Magnification:
VIS	Lens Wavelength Range:

## Sensor

1.1"	Maximum Sensor Format:
2.20	Pixel Size (µm):

## Threading & Mounting

M86 x 1.00 (Female)	Filter Thread:
C-Mount	Mount:

## Regulatory Compliance

<a href="#">View</a>	Certificate of Conformance:
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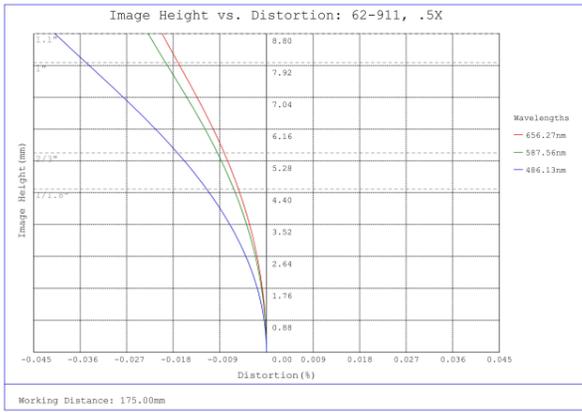
## Product Details

- High Resolution Bi-Telecentric Lens with In-Line Illumination Options
- Up to 20 MegaPixels, 2.2µm Pixel Size

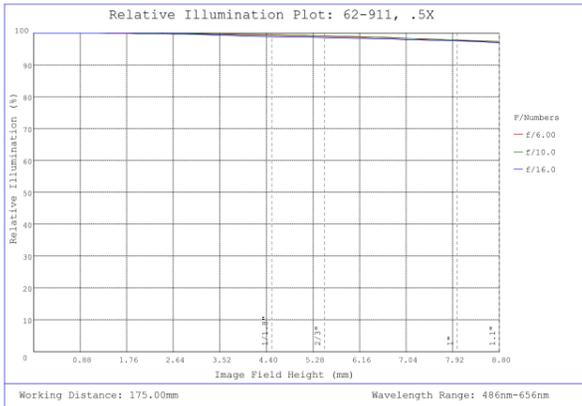
- 1.1", C-Mount Telecentric Lens with  $f/\#$ s as Low as  $f/4$

TECHSPEC® CobaltTL Telecentric Lenses are designed for semiconductor and electronics inspection, measurement, and gauging applications. These telecentric lenses achieve high light throughput with industry leading low  $f/\#$ s. Featuring less than  $0.015^\circ$  telecentricity and low 0.013% distortion, these lenses are ideal for image stitching applications. These 17.6mm diagonal sensor format lenses are compatible with the Sony IMX304 1.1" sensors and other similar format sensors such as the Sony IMX183. TECHSPEC® CobaltTL Telecentric Lenses produce unparalleled levels of contrast yielding maximum image quality with the highest degree of measurement accuracy. In-line versions provide the ability to rotate/reposition the inline illumination port to allow for maximum flexibility when machine building. TECHSPEC® CobaltTL Telecentric Lenses are compatible with high vibration environments and feature a removable recessed set screw for securely locking the iris in place.

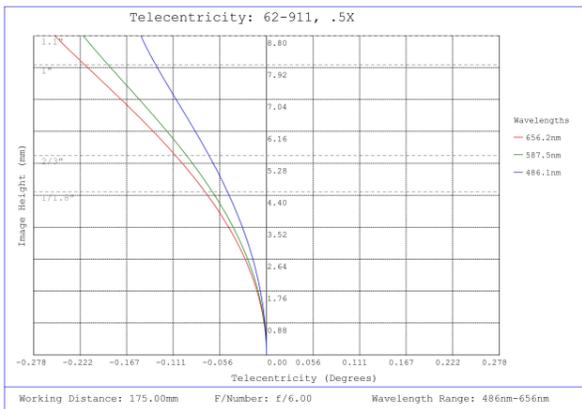
## Technical Information



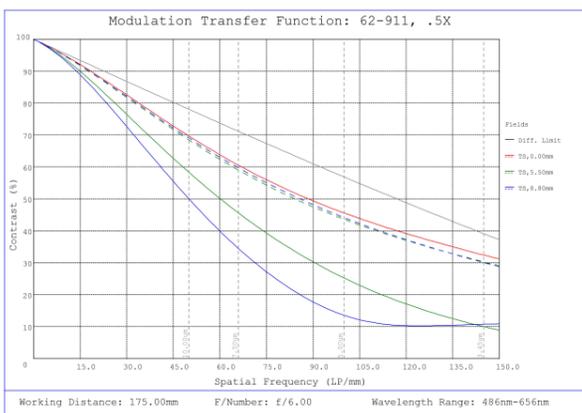
#62-911, 0.5X CobaltTL Telecentric Lens, Distortion Plot



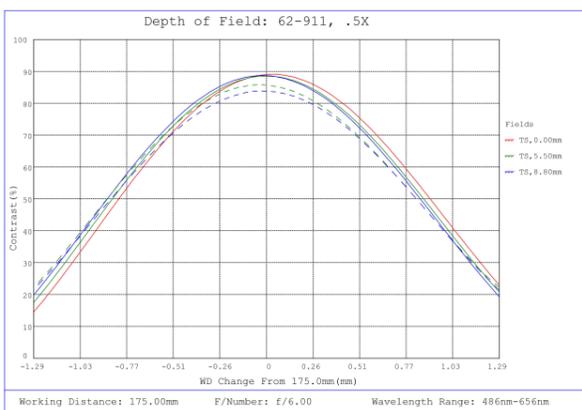
#62-911, 0.5X CobaltTL Telecentric Lens, Relative Illumination Plot



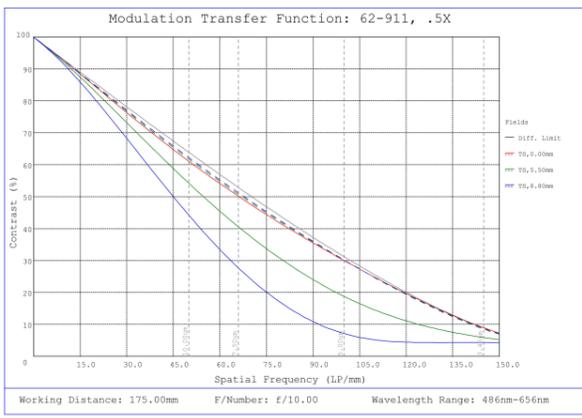
#62-911, 0.5X CobaltTL Telecentric Lens, Telecentricity Plot



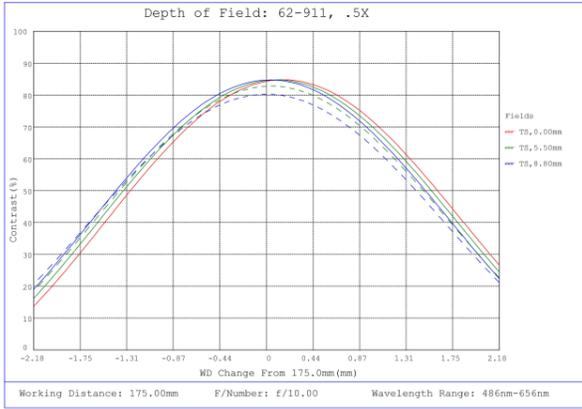
#62-911, 0.5X CobaltTL Telecentric Lens, Modulated Transfer Function (MTF) Plot, 175mm Working Distance,  $f/6$



#62-911, 0.5X CobaltTL Telecentric Lens, Depth of Field Plot, 175mm Working Distance,  $f/6$



#62-911, 0.5X Cobalt TL Telecentric Lens, Modulated Transfer Function (MTF) Plot, 175mm Working Distance, f10



#62-911, 0.5X Cobalt TL Telecentric Lens, Depth of Field Plot, 175mm Working Distance, f10

Description		Stock No.	Length (A)	Front Diameter (B)	Back Diameter (C)
0.28X	C-Mount	#62-921	197.59mm	138.6mm	50mm
0.36X	C-Mount	#88-602	163.5mm	70mm	43.5mm
0.5X	C-Mount	#62-911	172.9mm	90mm	50mm
0.55X	C-Mount	#88-603	182.5mm	62mm	43.5mm
0.69X	C-Mount	#15-872 / #15-873 (In-Line)	174.96mm	55mm	46mm
0.9X	C-Mount	#62-901	199.8mm	65mm	53mm