

**TECHSPEC® 0.5X, 28.7mm M42 x 1.0 (19.53mm) PlatinumTL™ Telecentric Lens**



0.5X Magnification

Stock **#62-914** [CONTACT US](#)

⊖ 1 ⊕ **A\$4,517<sup>00</sup>**

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| Qty 1+         | <b>A\$4,517.00</b> each       |
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**General**

PlatinumTL™ Series **Product Family:**

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

Telecentric Lens **Type:**

**Physical & Mechanical Properties**

Variable **Iris Option:**

|        |                               |
|--------|-------------------------------|
| 171.10 | <b>Length (mm):</b>           |
| 90.0   | <b>Maximum Diameter (mm):</b> |
| 986    | <b>Weight (g):</b>            |
| 19.53  | <b>Flange Distance (mm):</b>  |

## Optical Properties

|                                |  |
|--------------------------------|--|
| 44.8mm                         | <b>Horizontal Field of View, APS-C Sensor:</b> |
| 57.4mm                         | <b>Field of View, 28.7mm Sensor:</b>           |
| 34.6mm                         | <b>Horizontal Field of View, 4/3" Sensor:</b>  |
| 28.4mm                         | <b>Horizontal Field of View, 1.1" Sensor:</b>  |
| 25.6mm                         | <b>Horizontal Field of View, 1" Sensor:</b>    |
| 17.70mm                        | <b>Horizontal Field of View, 2/3" Sensor:</b>  |
| 12.8mm                         | <b>Horizontal Field of View, 1/2" Sensor:</b>  |
| 28.70                          | <b>Maximum Image Circle (mm):</b>              |
| 0.041                          | <b>Numerical Aperture NA, Object Side:</b>     |
| 10 (7)                         | <b>Number of Elements (Groups):</b>            |
| <0.055                         | <b>Typical Telecentricity @ 588nm (°):</b>     |
| <0.020                         | <b>Typical Distortion @ 588nm (%):</b>         |
| 0.5X                           | <b>Primary Magnification PMAG:</b>             |
| 0.50                           | <b>Telecentric Lens Magnification:</b>         |
| 175.00                         | <b>Working Distance (mm):</b>                  |
| 44.8 x 33.6                    | <b>FOV @ Max Sensor Format, H x V (mm):</b>    |
| f/6 - f/22                     | <b>Aperture (f/#):</b>                         |
| 425 - 675nm BBAR               | <b>Coating:</b>                                |
| ±2.05 at f/10 (20% @ 20 lp/mm) | <b>Depth of Field (mm):</b>                    |
| 0.5X                           | <b>Magnification:</b>                          |
| VIS                            | <b>Lens Wavelength Range:</b>                  |

## Sensor

|       |                               |
|-------|-------------------------------|
| APS-C | <b>Maximum Sensor Format:</b> |
| 2.74  | <b>Pixel Size (µm):</b>       |

## Threading & Mounting

|                     |                       |
|---------------------|-----------------------|
| M86 x 1.00 (Female) | <b>Filter Thread:</b> |
| M42 x 1.0           | <b>Mount:</b>         |

## Regulatory Compliance

|                      |                                    |
|----------------------|------------------------------------|
| <a href="#">View</a> | <b>Certificate of Conformance:</b> |
|----------------------|------------------------------------|

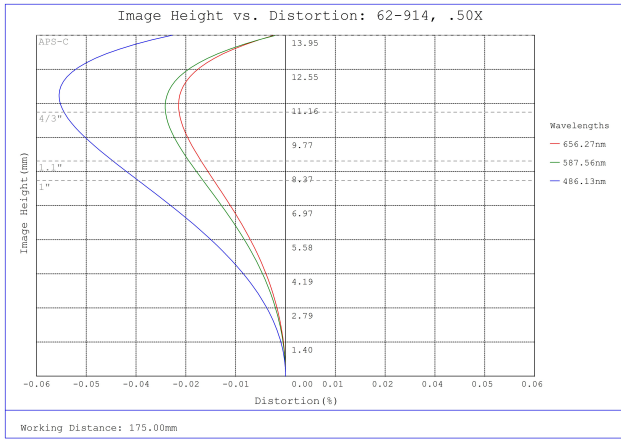
## Product Details

- High Resolution f/6 Bi-Telecentric Lens for Measurement

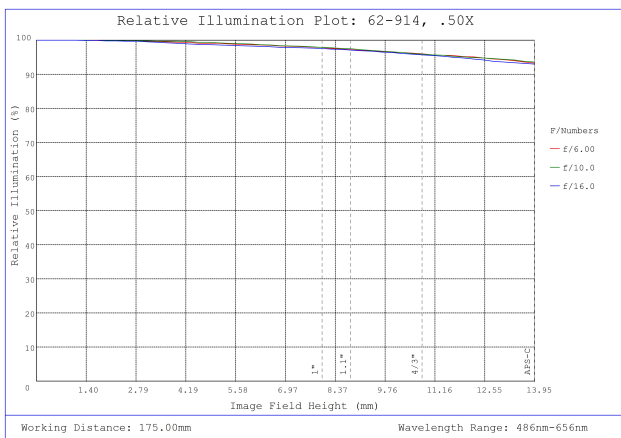
- Up to 35 MegaPixels, 2.8µm Pixel Size Sensors
- APS-C, C-Mount, T-Mount, F-Mount Telecentric Lens
- Magnification from 0.28X to 1.7X

TECHSPEC® PlatinumTL™ Telecentric Lenses are designed for semiconductor and electronics inspection, measurement, and gauging applications. The precision designs feature high telecentricity (<math><0.1^\circ</math>), low distortion (<math><0.1\%</math>), and high light throughput with an adjustable aperture that achieves  $f/6$  when fully open. Capable of supporting large format 28.7mm diagonal sensors, these lenses are compatible with the Sony IMX342 APS-C sensor and other similar format sensors such as the Sony IMX530. TECHSPEC® PlatinumTL™ Telecentric Lenses produce unparalleled levels of contrast yielding maximum image quality with the highest degree of measurement accuracy. These lenses are suitable for high vibration environments and feature a removable recessed set screw for securing the iris in place.

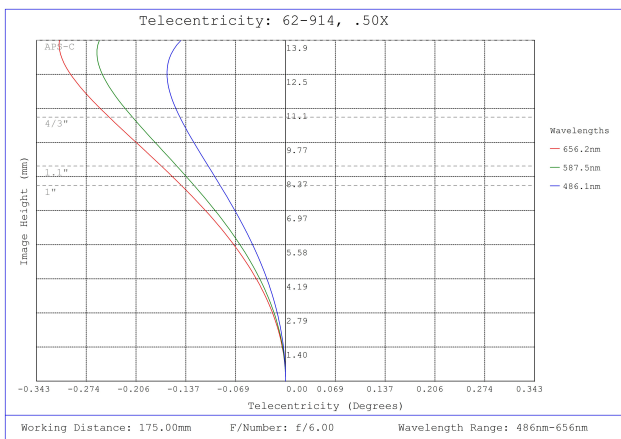
## Technical Information



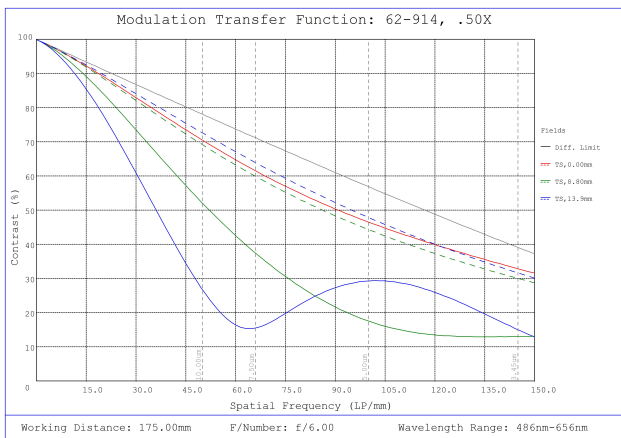
#62-914, 0.5X, 28.7mm M42 x 1.0 (19.53mm) PlatinumTL™ Telecentric Lens, Distortion Plot



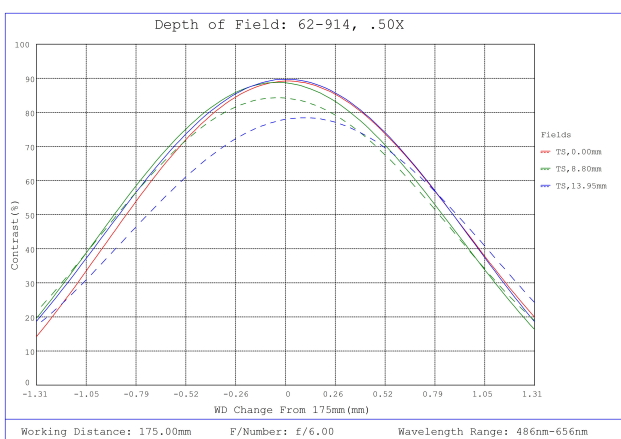
#62-914, 0.5X, 28.7mm M42 x 1.0 (19.53mm) PlatinumTL™ Telecentric Lens, Relative Illumination Plot



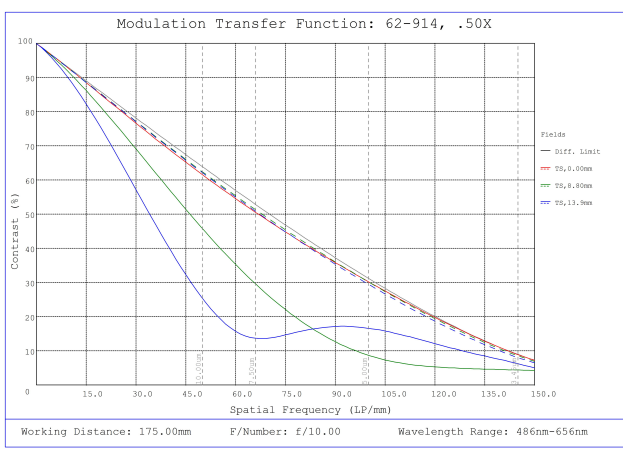
#62-914, 0.5X, 28.7mm M42 x 1.0 (19.53mm) PlatinumTL™ Telecentric Lens, Telecentricity Plot



#62-914, 0.5X, 28.7mm M42 x 1.0 (19.53mm) PlatinumTL™ Telecentric Lens, Modulated Transfer Function (MTF) Plot, 175mm Working Distance,  $f_6$



#62-914, 0.5X, 28.7mm M42 x 1.0 (19.53mm) PlatinumTL™ Telecentric Lens, Depth of Field Plot, 175mm Working Distance,  $f_6$



#62-914, 0.5X, 28.7mm M42 x 1.0 (19.53mm) PlatinumTL™ Telecentric Lens, Modulated Transfer Function (MTF) Plot, 175mm Working Distance, f10



#62-914, 0.5X, 28.7mm M42 x 1.0 (19.53mm) PlatinumTL™ Telecentric Lens, Depth of Field Plot, 175mm Working Distance, f10

| Description |           | Stock No. | Flange  | Length (A) | Front Diameter (B) | Back Diameter (C) |
|-------------|-----------|-----------|---------|------------|--------------------|-------------------|
| 0.28X       | C-Mount   | #62-933   | 17.5mm  | 230.8mm    | 60.5mm             | 33.5mm            |
| 0.5X        | C-Mount   | #62-932   | 17.5mm  | 174.9mm    | 50mm               | 33.5mm            |
| 1.7X        | C-Mount   | #63-232   | 17.5mm  | 189.5mm    | 60mm               | 46mm              |
| 0.28X       | F-Mount   | #62-922   | 46.5mm  | 167.6mm    | 138.6mm            | 55mm              |
|             | M42 x 1.0 | #62-923   | 6.56mm  | 208.5mm    | 138.6mm            | 50mm              |
|             | M42 x 1.0 | #62-924   | 19.53mm | 195.5mm    | 138.6mm            | 50mm              |
| 0.5X        | F-Mount   | #62-912   | 46.5mm  | 143mm      | 90mm               | 55mm              |
|             | M42 x 1.0 | #62-913   | 6.56mm  | 184mm      | 90mm               | 50mm              |
|             | M42 x 1.0 | #62-914   | 19.53mm | 171.1mm    | 90mm               | 50mm              |
| 0.9X        | F-Mount   | #62-902   | 46.5mm  | 170.8mm    | 65mm               | 55mm              |
|             | M42 x 1.0 | #62-903   | 6.56mm  | 210.7mm    | 65mm               | 53mm              |
|             | M42 x 1.0 | #62-904   | 19.53mm | 197.8mm    | 65mm               | 53mm              |

