

# DTCA175-61.4G-M42-AL

## High Performance Industrial Lens

- DTCA series lenses are designed specially for compatibility with large sensor.
- Support newest developments in machine vision field: 24K line scan camera and 150Mp area scan camera.
- Extreme imaging aperture, extraordinary aberration correction, diffraction limited imaging resolution.
- Big aperture, good telecentricity, near zero distortion, big depth for high quality imaging.



Optical Specifications	
Magnification (x)	0.46
Object Field of View (Φmm)	61.4
Working Distance (mm)	250
Max Sensor Size (Φmm)	28.2(1.75")
Best Aperture (F/#)	8.0
Telecentricity typical (max) (deg)	0.21
Distortion typical (max) (%)	0.03
MTF30 (lp/mm)	120-30
Depth of Field (mm)	±1.5@F8
Length of I/O (mm)	447±3

Field of View (mm × mm)	
22.53x16.90 with CMV12000	48.98x36.74
18.43x18.43 with PYTHON16k	40.07x40.07
28.8mm with LineScan-2k/4k/8k	62.61
Mechanical Specifications	
Mount	M42
Length(mm)	184.9
Weight(kg)	
Coaxial Light	No
Iris	Yes

### Notes:

1. Depth of Field is calculated value, this value could be used for imaging test, but to get sharp image in application, half of calculated value is suggested.

2. Length of I/O = WD + Length + Back Focal Length.

