

# DTCA175-51C-G

## 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)	0.55
Object Field of View (Φmm)	51.2
Working Distance (mm)	220
Max Sensor Size (Φmm)	29(1.75")
Best Aperture (F/#)	8-32
Telecentricity typical (max) (deg)	0.09
Distortion typical (max) (%)	0.05
MTF30 (lp/mm)	106-30
Depth of Field (mm)	±1.05@F8
Length of I/O (mm)	430

Field of View (mm × mm)	
22.53x16.90 with CMV12000	40.96x30.73
18.43x18.43 with PYTHON16k	33.51x33.51
28.8mm with LineScan-2k/4k/8k	52.36
Mechanical Specifications	
Mount	M58
Length(mm)	197.9
Weight(kg)	1.2
Coaxial Light	Yes
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.

