

# DTCM110-48

## C-mount Bi-telecentric Lens

- Optimized for 1/2.5"~1.1" C-Mount cameras;
- Largest FOV from 26mm upto 300mm;
- Excellent resolution for high pixel cameras;
- Low distortion, good telecentricity, big aperture and big depth of field for high end application.



| Optical Specifications             |          |
|------------------------------------|----------|
| Magnification (x)                  | 0.346    |
| Object Field of View (Φmm)         | 48       |
| Working Distance (mm)              | 128±3    |
| Max Sensor Size (Φmm)              | 16.6(1") |
| Best Aperture (F/#)                | 6.5      |
| Telecentricity typical (max) (deg) | <0.1     |
| Distortion typical (max) (%)       | <0.1     |
| MTF30 (lp/mm)                      | >130     |
| Depth of Field (mm)                | ±5.3@F16 |
| Length of I/O (mm)                 | 301±3    |

| Field of View (mm × mm)    |           |
|----------------------------|-----------|
| 1" PYTHON 5000(12.43x9.83) | 35.9x28.4 |
| 1" IMX255(14.19x7.51)      | 41.0x21.7 |
| 1" IMX183(13.13x8.76)      | 37.9x25.3 |
| Mechanical Specifications  |           |
| Mount                      | C         |
| Length (mm)                | 155.4     |
| Weight (kg)                | 0.5       |

| Compatible Lighting      |                    |
|--------------------------|--------------------|
| Telecentric LED Lighting | DTCL-48-xW-y       |
|                          | Beam Diameter 48mm |

### 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.

