



# TCDP4X192

Double magnification bi-telecentric lens, for detectors up to 2/3"

## SPECIFICATIONS

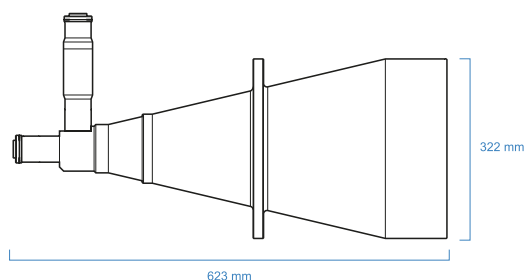
Magnification	(x)	0.046	<b>0.183</b>
<b>Object field of view</b>		(mm x mm)	
with 1/3" detector (4.8 x 3.6 mm)		104.9 x 78.6	<b>26.2 x 19.7</b>
with 1/2.5" detector (5.70 x 4.28 mm)		124.6 x 93.4	<b>31.1 x 23.4</b>
with 1/2" detector (6.4 x 4.8 mm)		139.8 x 104.9	<b>35.0 x 26.2</b>
with 1/1.8" detector (7.13 x 5.37 mm)		155.7 x 117.3	<b>38.9 x 29.3</b>
with 2/3" - 5 MP detector (8.45 x 7.07 mm)		184.5 x 154.4	<b>46.1 x 38.6</b>

## Optical specifications

Working distance	(mm)	526.9	...
wF/# (1)		8	<b>12</b>
Telecentricity (2)	(deg)	< 0.06 (0.08)	< <b>0.08 (0.10)</b>
Distortion , typical (max)	(%)	< 0.05 (0.08)	< <b>0.05 (0.08)</b>
Field depth (3)	(mm)	320	<b>30</b>
CTF @ 70 lp/mm	(%)	> 30	> <b>35</b>

## Mechanical specifications

Length	(mm)	623.0	...
Diameter (Width )	(mm)	260	...
Mass	(g)	10736	...
Mount		C	...



## NOTES

1. Working F-number (wF/#): the real F/# of a lens when used as a macro.
2. Maximum slope of principal rays inside the lens: when converted to milliradians, it gives the maximum measurement error for any millimeter of object displacement
3. At the borders of the field depth the image can be still used for measurement but, to get a very sharp image, only half of the nominal field depth should be considered. Pixel size used for calculation is 5.5 µm.

## COMPATIBLE PRODUCTS



<b>LTCLHP192-R</b>	Telecentric HP illuminator, beam diameter 250 mm, red
<b>LTCLHP192-G</b>	Telecentric HP illuminator, beam diameter 250 mm, green
<b>LTCLHP192-W</b>	Telecentric HP illuminator, beam diameter 250 mm, white

