

Optical Specification	
Model	OPT-CH10-65C-F16
Optical Configuration	Telecentric
Working Distance (mm)	65±2
Magnification	1.0X
Sensor Ø(mm)	11.0(2/3")
Aperture	F16
Telecentricity	0.10°
NA	0.03117
Distortion	<0.1%
Depth of Field (mm)	1.32
Object Resolution (μm)	10.76
Resolution (μm)	8.30
Image MTF30(lp/mm)	60
Field of View Ø(mm)	11.00
O/I Distance (mm)	177.5
Mount	C-Mount
Weight (kg)	0.12
Size (mm)	Ø29.0×94.93
Filter Thread (mm)	M27×0.5-6H
Working temperature	-20℃～+60℃

$$\text{DOF(mm)} = \frac{F\# \times P \times k}{\beta \times \beta}$$

F#: The real F-number of a lens when used
P: Sensor pixel size (5.5 μm used here)
β: Lens magnification
k: The parameter based on application (measurement, k=0.015; defect detection, k=0.008; 0.015 used here)

At the borders of DOF, the image can still be used for measurement. But only half of the nominal DOF should be used to get a sharp image.

