

# LW03514 | DATASHEET

## Long wave lens, 35 mm, F1.4





#### **SPECIFICATIONS**

## **Optical specifications**

Focal length	(mm)	35
Image circle	(mm)	21.0
Viewing Angle	(°)	33.4
WD range <sup>1</sup>	(mm)	350 - inf
f/N		1.4
Wavelength range	(nm)	8000 - 14000
Distortion <sup>2</sup>	(%)	0.20
Back focal length	(mm)	11.9

## **Mechanical specifications**

Focusing		Manual
Mount		M46x1 FD 21.9
Length <sup>3</sup>	(mm)	47.6
Outer Diameter	(mm)	71.0
Mass <sup>4</sup>	(g)	300

- Working distance: distance between the front end of the mechanics and the object
- <sup>2</sup> Percent deviation of the real image compared to an ideal, undistorted image
- <sup>3</sup> Measured from the front end of the machanics to the camera flange at infinite focusing
- <sup>4</sup> Given with no mount attached. See layout drawings

#### **KEY ADVANTAGES**

#### **High resolution**

Designed for high resolution detectors up to 15  $\mu m$  pixel pitch and 21 mm diameter.

#### **Custom mount interface**

Can be provided upon request.

## Large field of view and low distortion

Superior optical performances.

#### **HCAR** coating

For applications exposing optical elements to harsh environments.

**LWIR series** is a range of long-wave infrared lenses specifically designed to operate in the 8-14  $\mu$ m wavelenght region with uncooled detectors (a-Si, VOx, ...).

## **COMPATIBLE PRODUCTS**

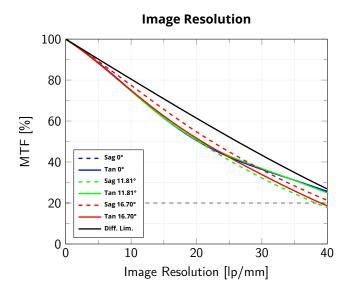
# Full list of compatible products available here.



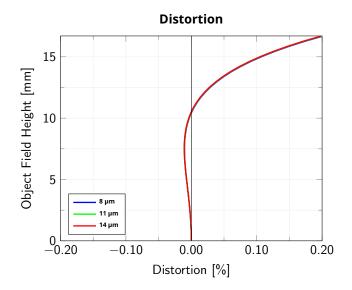
A wide selection of innovative machine vision components.



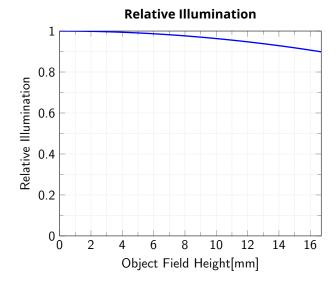
## **DATA AT INFINITY**



Modulation Transfer Function (MTF) vs. Image Resolution, wavelength range 8  $\mu m$  - 14  $\mu m$ , at infinity working distance and maximum aperture



Viewing angle vs. Distortion, from the optical axis to the maximum angle of view



Relative illumination vs. Image Field Height, from the optical axis to the maximum image height at maximum aperture