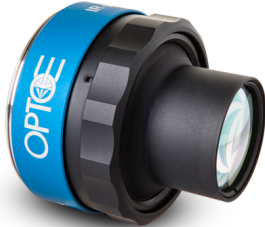




# SW05020 | DATASHEET

## Short wave lens, 50 mm, F2



### KEY ADVANTAGES

#### High resolution

Designed for high resolution detectors up to 15 μm pixel pitch and 21 mm diameter.

#### Custom mount interface

Can be provided upon request.

#### Large field of view and low distortion

Superior optical performances.

**SWIR series** is a range of short-wave infrared lenses specifically designed to operate in the 0.9-1.7 μm wavelength region. This serie has been specifically designed to match the new 15 μm format InGaAs FPA Focal Plane Arrays.

### SPECIFICATIONS

#### Optical specifications

Focal length	(mm)	50
Image circle	(mm)	21.0
Viewing Angle	(°)	23.7
WD range <sup>1</sup>	(mm)	500 - inf
f/N		2
Wavelength range	(nm)	900-1700
Distortion <sup>2</sup>	(%)	0.41
Back focal length	(mm)	9.5

#### Mechanical specifications

Focusing		Manual
Mount		C
Length <sup>3</sup>	(mm)	67.5
Outer Diameter	(mm)	71.0
Mass <sup>4</sup>	(g)	400

<sup>1</sup> 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 mechanics to the camera flange at infinite focusing

<sup>4</sup> Given with no mount attached. See layout drawings

### COMPATIBLE PRODUCTS

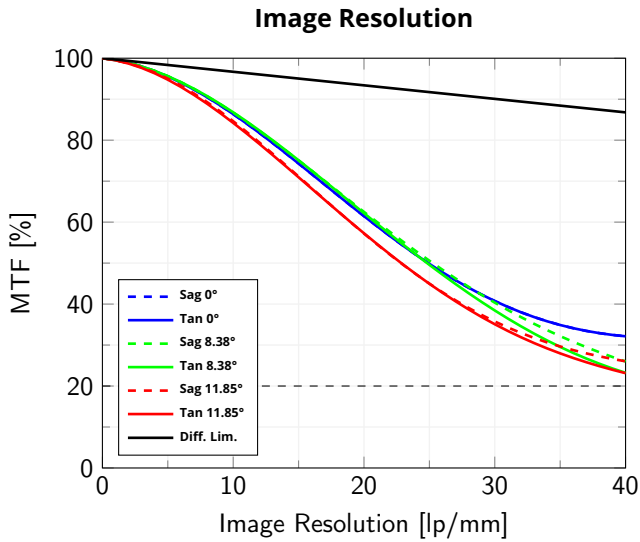
Full list of compatible products available [here](#).



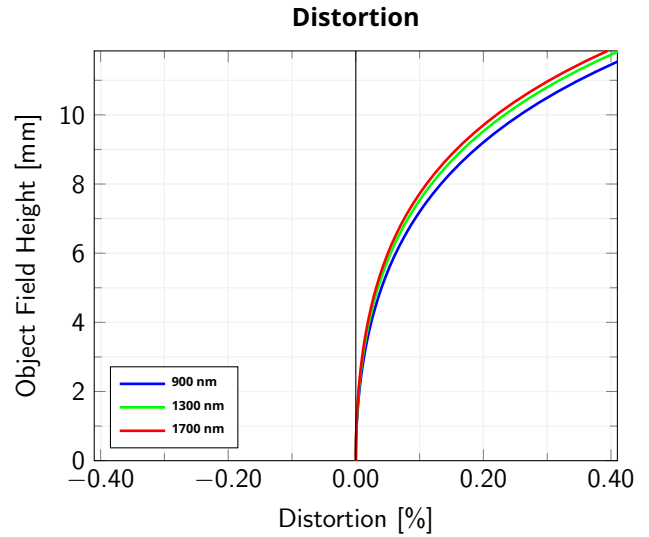
A wide selection of innovative machine vision components.

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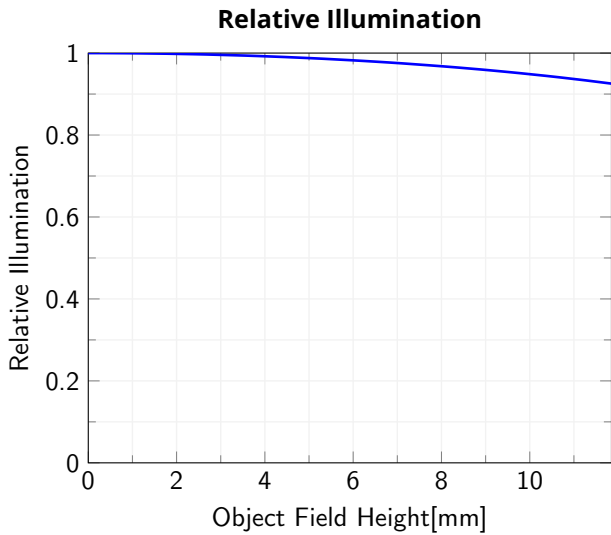
DATA AT INFINITY



Modulation Transfer Function (MTF) vs. Image Resolution, wavelength range 900 nm - 1700 nm, 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

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