

# IRC-320CL/GE

Infrared Camera with 320 x 240 pixels for LWIR  
with built-in shutter

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## Features

- 320 (H) x 240 (V) pixels
- Uncooled microbolometer sensor
- 35  $\mu\text{m}$  x 35  $\mu\text{m}$  pitch
- NETD  $\leq$  80 mK
- Spectral response: 8 - 14  $\mu\text{m}$  (LWIR)
- Temperature range: -20°C to +80°C (optional: 0°C to +200°C) @ F/1.0
- Frame rate 40 Hz
- Built-in mechanical shutter
- Preprocessing functions included
- 12 bit Camera Link or Gigabit Ethernet output

In case of the IRC-320CL/GE a robust and very **compact** LWIR infrared camera is concerned, which is especially suitable for surveillance applications, automation, quality- and process control as well as for scientific research and development.

The IRC-320CL/GE camera has a maintenance-free, uncooled microbolometer sensor, enabling to detect temperature distinctions of < 80 mK.

At a frame rate of 40 Hz the camera delivers excellent, noise-free and high-resolution images with 320 x 240 pixels. The camera offers a real-time image correction enabling to make available excellent images at the Camera Link (or Gigabit Ethernet) output.

The image correction consists of a background subtraction, an error pixel and shading correction as well as of a linearization of temperature values.

By means of a temperature reference element, temperatures within the image can precisely be determined.

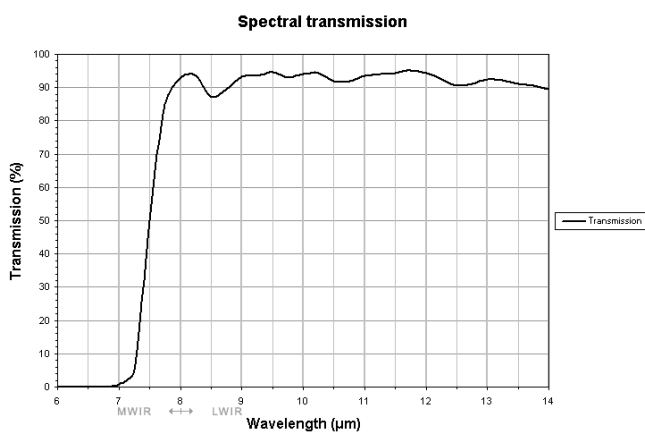
The camera specific data being required for the adjustment functions are stored within the camera.

Due to its compact design the IRC-320CL/GE is very suitable for the integration in systems for process monitoring or for quality control.

First and foremost the IRC-320CL/GE is an OEM-camera, which can very easily be installed in existing software, due to its integrated image adjustment and the Camera Link (Base) or Gigabit Ethernet (1000Base-T) output.

Furthermore the camera offers a mechanical shutter system which can be adapted to several LWIR lenses.

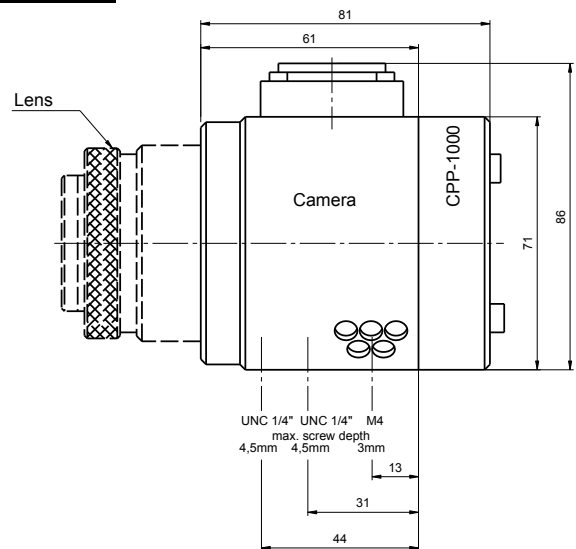
Supported lenses			
Focal length [mm]	F	min. Focus [m]	FOV [°]
12	0.85	0.5	50.0 x 38.6
18	1	0.5	34.6 x 26.3



### Technical Data

- Resolution: 320 (H) x 240 (V)
- Uncooled microbolometer sensor
- NETD: ≤ 80 mK
- Thermal sensitivity typical 80 mK @ F/1.0, 30 °C
- Spectral response: 8 - 14 µm (LWIR)
- Temperature range: 20°C to 80°C @ F/1.0
- Temperature stabilized sensor
- Sensor time-constant approx. 4 ms
- Sensitive area of 11.2 mm x 8.4 mm
- Pixel size: 35 x 35 µm
- Frame rate: 40 Hz
- 12 bit Camera Link (Base) or Gigabit Ethernet (1000Base-T) output
- Power supply: + 12V (SELV), max. 1.2 A
- Ambient air temperature: 10° - 30°C
- CE standard
- Made in Germany

#### IRC-320CL:



#### IRC-320GE:

