

IRC-300CL/GE

Infrared Camera with 320 x 240 pixels for LWIR
with Preprocessing module and Camera Link or
Gigabit Ethernet output



Features

- 320 (H) x 240 (V) pixels
- Uncooled microbolometer sensor
- NETD \leq 80 mK
- Spectral response 8 - 14 μ m (LWIR)
- Temperature range +20°C to +200°C @ F/1.0
- 35 μ m x 35 μ m pitch
- Frame rate 40 Hz
- Preprocessing functions including:
 - Background subtraction, error pixel correction, shading correction, LUT
- 12 bit Camera Link or Gigabit Ethernet output
- Optional: temperature reference element in front of the microbolometer.

VDS Vosskuhler

In case of the IRC-300CL/GE a robust and very **compact** LWIR infrared camera is concerned, which is especially suitable for applications in the automation, quality- and process control as well as for scientific research and development.

The IRC-300CL/GE camera disposes of 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 realtime image correction in order 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 an optional 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-300CL/GE is very suitable for the integration in systems for process monitoring or for quality control.

First and foremost the IRC-300CL/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 disposes of an universal screw thread (M55x0.75), in order that the exchange of LWIR lenses with diverse focal lengths can easily be managed.

Supported lenses

Focal length	F	min. Focus	FOV in [°]
18 mm	0.87	0.5 m	34.6 x 26.3
35 mm	1	0.5 m	18.2 x 13.7
50 mm	1	1.0 m	12.8 x 9.6
75 mm	1	5.0 m	8.6 x 6.4

Technical Data

- Resolution 320 (H) x 240 (V) Pixels
- 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 200°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. 0.7 A
- Environmental temperature 10° - 30°C
- CE standard
- Made in Germany

