

New

NIR-300

Near-infrared Camera with 320 x 256 pixels



Features

- 320 (H) x 256 (V) pixels
- Spectral response **900nm – 1700nm** (NIR)
- InGaAs sensor
- 30 μm x 30 μm pixels
- 14 bit digital output
- Frame rate 50 Hz
- Different interfaces available (LVDS, IEEE1394, CL, GigE)
- Adapted for C-Mount optical lenses
- **Optional:** Peltier Cooling for longer exposure times

VDS Vosskuhler

By means of the **NIR-300** VDS Vosskühler offers for the first time a camera for the NIR area from 900 to 1700nm. The camera has an InGaAs sensor with a resolution of 320 x 256 pixels.

InGaAs detectors are known to be very sensitive with good linearity and high damage threshold against intense illumination.

At a frame rate of 50 frames/sec. the **NIR-300** camera delivers excellent, low noise images with a 14 bit resolution.

In addition to a continuous image capture with 50 Hz, the camera has an Image on demand mode, enabling to exposure all pixels at the same time and to output them in the following.

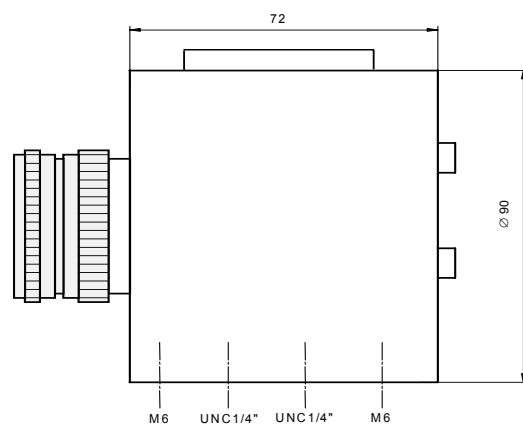
Except for the standard connection LVDS, the **NIR-300** camera is also offered with diverse Interfaces (Camera-Link, IEEE1394, Gigabit Ethernet).

As an option the camera is available with a Peltier cooling for longer exposure times or in order to enable an exact temperature measuring within the image.

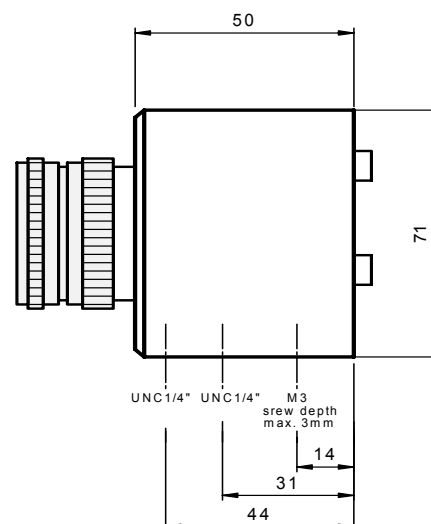
Applications:

- Near-infrared imaging
- Thermal imaging of hot objects (in a range of 150°C to 800°C)
- Imaging spectroscopy
- Laser beam profiling
- Sorting according to plastic
- Semiconductor inspection
- Water or moisture detection
- Medical science and biology
- Vision enhancement

Cooled Version



Non cooled Version



Technical Data

- Resolution: 320 (H) x 256 (V) pixels
- Pixel size: 30 x 30 μm
- InGaAs sensor
- Spectral response: 0.9 - 1.7 μm (NIR)
- Quantum efficiency: > 70% @ $\lambda = 1.0 - 1.6 \mu\text{m}$
- Sensitive area: 9.6 mm x 7.68 mm
- Electronic full-frame shutter
- Exposure times from 100 μs up to 100ms (without cooling)
- Progressive scan
- Frame rate up to 50 Hz
- Full-well > 150ke
- 14 bit digital output
- Option: stabilized cooling
- C-Mount optical interface
- Power supply + 12V (SELV), max. 0.3 A, (max. 1.5 A with cooling)
- Ambient air temperature 10° - 30°C
- CE standard
- Made in Germany