



Lynceus-320 InGaAs Camera

The Lynceus-320 is a fast and lightweight InGaAs camera with high sensitivity and a wide dynamic range. The InGaAs focal plane array has a resolution of 320×256 pixels and offers a full framerate of 192 fps. A USB 2.0 interface serves as power supply and guarantees convenient compatibility with PC driven operations.

Possible applications involve water and moisture detection, profiling infrared laser beams and analyzing NIR spectra or lasers, testing silicon wafers, seeing through glass, viewing objects with temperature $> 400^\circ\text{C}$ and sorting objects according to their NIR reflection behaviour.

- Digital framerate: 192 fps
- Spectral range: 0,9 - 1,7 μm
- Size: 89 x 63 x 79 mm
- Weight: 380 g
- Dynamic range: 47 dB
- Passive cooling
- Interface & power supply via USB 2.0
- Windows 2000 and later



Ångström



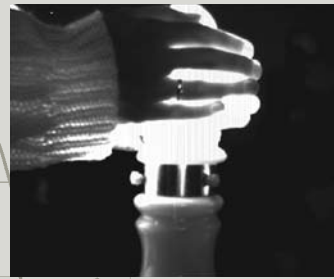
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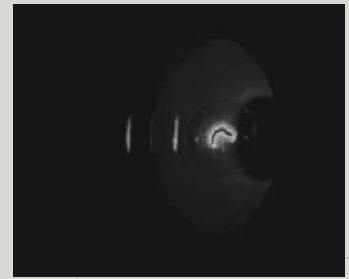
IR filter testing –
looking through glass



Water absorption –
fluid level monitoring

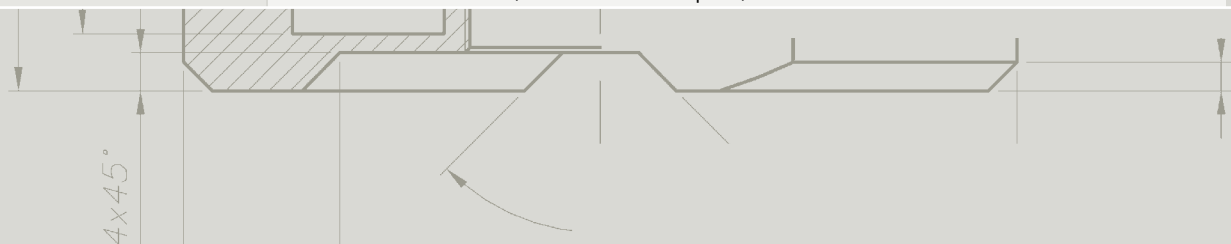


Radiation insulation analysis



Thermal imaging

Camera specifications	
Dimensions	89 × 63 × 78 mm (L × W × H)
Weight	380 g – without lens
Lens mount	C-mount
Power consumption	Power supply via USB 2.0
Camera cooling	Passive cooling
Ambient operating temperature	ca. 0 – 50 °C
Humidity	non condensing
Array specifications	
Type of sensor	InGaAs (Focal Plane Array)
Wavelength range (spectral band)	0.9 – 1.7 μm
Resolution	320 × 256 pixels
Pixel size	30 × 30 μm
Framerate	Fullframe 192 fps digital
Windowing	in development
Dynamic range	47 dB
Array cooling	uncooled
Exposure time range	40 μs – 40 ms
Nonlinearity capacity (max. deviation)	< 2 %
Gain low/high	0.77 / 14.38 μV / e-, 25 °C
Interface	
Operation mode	PC driven
Camera control	USB 2.0
Image acquisition	USB 2.0
Triggering	TTL
Software	Demonstration software and SDK for camera
Software features	storing images and videos, image histogram, line profiles, image correction algorithms (brightness, contrast, gamma correction), dynamic image transposition (top-to-bottom + left-to-right), time control, image live view, array control
Compatibility	Windows 2000 and later
Accessories	
Interface cable	USB 2.0 cable included
Lens	16.2 mm f/1.4 included (other lenses on request)



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