CinCam InGaAs
- Technical Data -

	CinCam-InGaAs-320	CinCam-InGaAs-640
	Standard Series	***Standard Series***
SENSOR DATA		
Type:	InGaAs, progressive scan	InGaAs, progressive scan
Active area (without cover glass):	1”, 9.6mm x 7.7mm	1”, 9.6mm x 7.7mm
Number of pixel:	320 x 256	640 x 512
Pixel size:	30µm x 30µm	15µm x 15µm
Spectral response:	0.9µm - 1.8µm	0.9µm - 1.8µm
Beam diameter min / max (recommended):	300µm / 5.7mm	150µm / 5.7mm
Quantum efficiency:	>70% (1000nm-1640nm)	>75% (1000nm-1640nm)
Pixel operability:	>99.5%	>99.5%
Sensor cooling:	TEC (stabilized +5°C, -20K relative)	TEC (stabilized +5°C, -30K relative)
CAMERA FEATURES		
Mount:	Filter-Mount	Filter-Mount
Bit depth (output):	12Bit (A/D 14Bit)	12Bit (A/D 14Bit)
Frame rate:	up to 100Hz (300Hz)	up to 60Hz (100Hz)
Exposure time:	10µs-20ms	10µs-100ms
Dynamic range:	60dB (gain 1)	59dB (gain 0)
Interface:	GigE	GigE
Mode:	cw and pulsed	cw and pulsed
SPECIFICATIONS		
Mechanical dimensions (W x H x L):	55mmx55mmx78mm	55mmx55mmx78mm
Weight:	340g	370g
Electrical requirements:	10.8V to 30.0V or via PoE	10.8V to 30.0V or via PoE
Storage temperature*:	-30°C…+60°C	-30°C…+60°C
Operating temperature*:	-20°C…+50°C	-20°C…+50°C
Regulations:	CE, RoHS	CE, RoHS

* Without condensation

Design and specification of the described product(s) are subject to change without notice.

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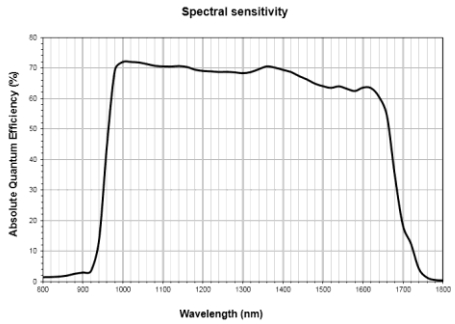
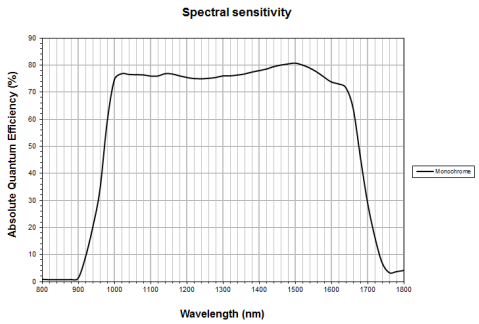
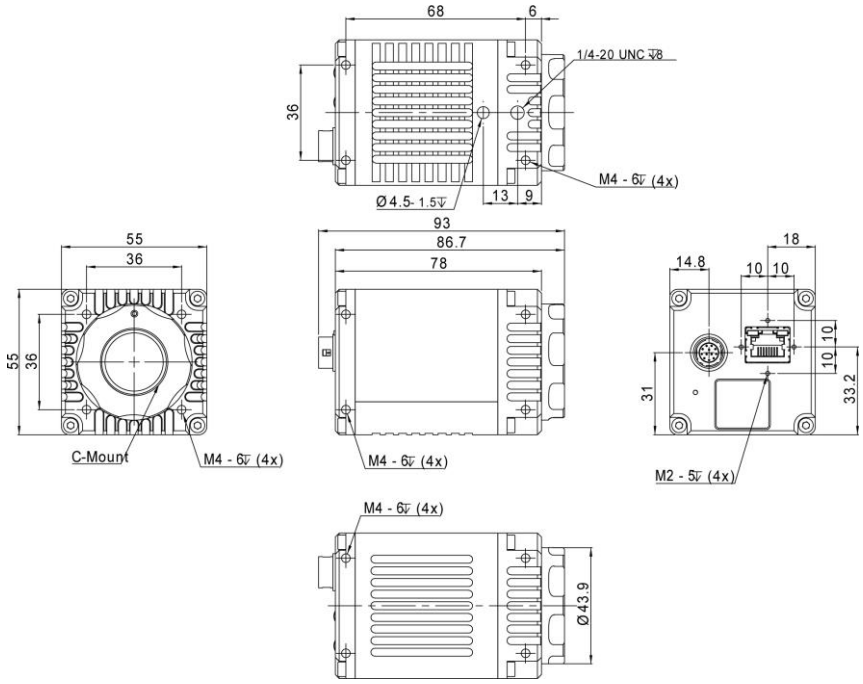
CinCam InGaAs
- Sensor Response -
- Dimensions -



CinCam InGaAs-320



CinCam InGaAs-640



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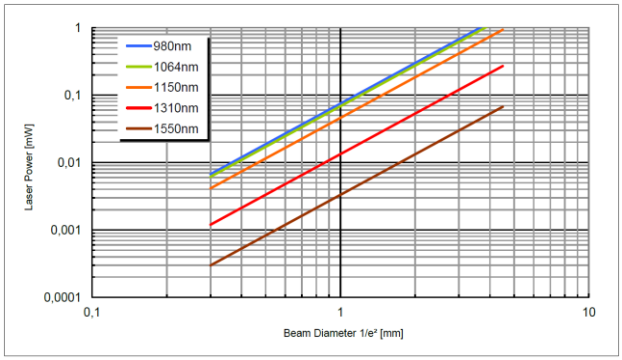
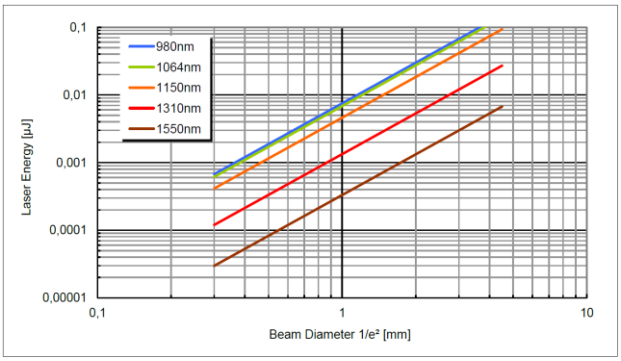
CinCam InGaAs
- Operational Range -

Maximum CW power for saturation limit

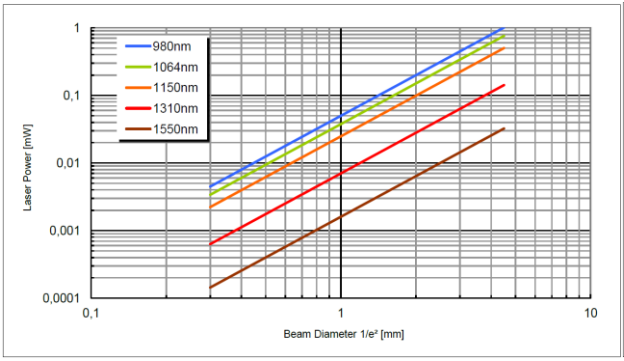
Maximum PULSE energy for saturation limit (single pulse during the exposure time)

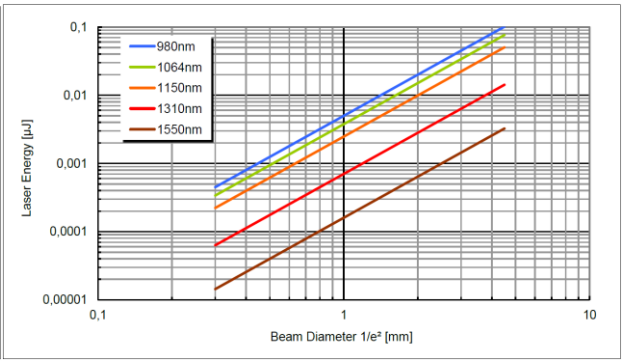
CinCam InGaAs-320





CinCam InGaAs-640





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CinCam InGaAs
- Operational Range -

Saturation limit assumes:

Saturation level:	90%
Built-in ND-Filter:	OD4.0
Exposure time:	100µs (lowest value)
Gain:	1 (lowest value)
Maximum beam power:	<1W

A higher power level is possible with additional ND filter:

Optical density	**Higher limit**
OD 1.0	10 x Saturation limit
OD 2.0	100 x Saturation limit
OD 3.0	1000 x Saturation limit
OD 4.0	10000 x Saturation limit

By longer exposure times a lower power level is apply:

Exposure time	**Lower limit**	
100µs	See chart for cw saturation limit	
1ms	0.1 x Saturation limit	
10ms	0.01 x Saturation limit	Only for cw laser!
100ms	0.001 x Saturation limit	
1000ms	0.0001 x Saturation limit	

Max. pulse repetition rate / pulse length for single pulse measurement:

See chart for pulse saturation limit

Exposure time	**Pulse repetition rate / pulse length**	
100µs	10kHz / <100µs	
1ms	1kHz / <1ms	
10ms	100Hz / <10ms	Only for pulsed laser!
100ms	10Hz / <100ms	
1000ms	1Hz / <1000ms	

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