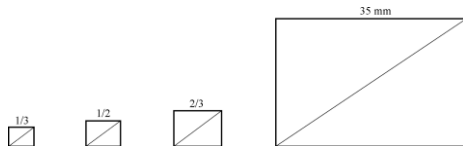


CinCam CCD / CMOS - Product Description -

CINOGY's CinCam is optimized to provide excellent sensitivity from the VIS to NIR spectral range. Thanks to its high resolution and its small pixel size, the CinCam is a high performance tool for laser beam analysis of continuous wave (cw) and pulsed laser modes. Due to its high dynamic range the CinCam captures even higher laser modes with outstanding detail.

The passive cooled sensor of the CinCam is constructed without cover glass to avoid interference patterns. For sensor protection a low distortion neutral density filter is integrated. The ultra-fast FireWire IEEE 1394b interface transfers the 14Bit data with up to 26 fps. The plug and play design facilitates easy and flexible integration and operation.

- Pixel size: 3.45 μ m² - 9.0 μ m²
- Number of pixel: 1.2MPixel - 16MPixel
- CCD / CMOS sensor: 1/3" / 1/2" / 2/3" / 35mm
- Dynamic range: up to 68dB
- Data output: 8Bit / 14Bit



NEW - CinCam CMOS

A particular cost-effective entry-level beam profiler is available now. This high-speed USB 2.0 compatible beam profiler based on a megapixel CMOS sensor provides accurate laser beam analysis. The compact design permits easy integration in optical assemblies.

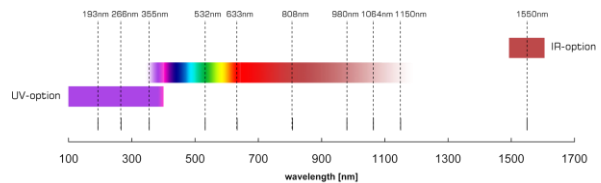
The CinCam includes the specifically designed analysis software, RayCi, which supports XP / Vista / Windows 7 operating systems. It is available in three versions: RayCi-Lite for basic beam analyses, RayCi-Standard with an extensive range of laser beam analysis techniques and RayCi-Professional for unique measuring options including the Beam Quality M² tool.

RayCi's sophisticated software architecture opens up new opportunities in laser beam analysis according to ISO standards. Beam quality, beam parameters and beam stability are just a few of the many possible opportunities determinable by RayCi. Incomparable visualization modes simplify the laser beam analysis.

CINOGY is able to customize a variety of converter types to fulfil almost any beam profiling requirement.

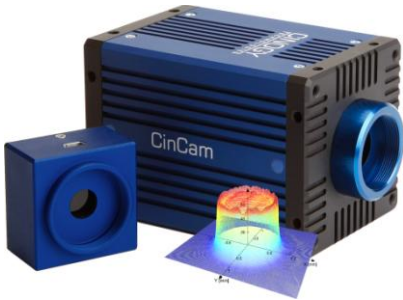
- UV-Converter / Phosphor Coating: 100nm-320nm
- IR-Converter / Phosphor Coating: 1495nm-1595nm

LASER



- UV-range: Excimer-Laser
- VIS-range: HeNe-Laser, Diode-Laser
- NIR-range: Nd:YAG-Laser, Fiber-Laser
- Extended NIR-range: Diode-Laser, Fiber Laser



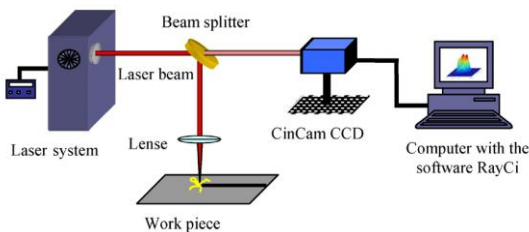
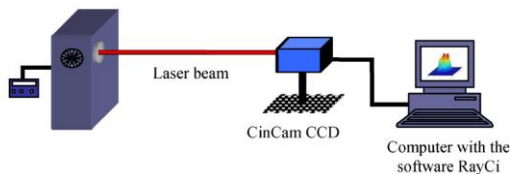


CinCam CCD / CMOS - Product Description -

APPLICATIONS

The portable CinCam is designed to be used in a variety of applications in industry, science, research and development, including:

- Laser beam analysis of cw and pulsed lasers,
- Quick control of laser modes and adjustment errors,
- Test equipment for scientific research,
- Near-Field and Far-Field analyses of lasers, LED devices and other light sources.



The enhancement of product quality, process reliability and efficiency are just a few of the many benefits of CINOGY's unique beam profiler cameras.

ACCESSORIES

Optical Components

The concept of the CinCam enables easy adaption to standard optical imaging systems, attenuators and opto-mechanical components ensuring highest flexibility. This includes:

- Fixed and variable attenuators,
- Microscope lens and beam expander, ect.

Neutral Density Filter

To expand the power range of the CinCam several absorptive and metallic-coated neutral density filters are available, which are specified by optical densities ranging from OD 1.0 to OD 4.0.

FireWire Components

CINOGY offers different FireWire PCI / PCI Express cards for installation direct into the PC. Standard FireWire cables are suitable for industrial applications and are available in various lengths.

Trigger Device

To synchronize the CinCam with pulsed laser systems, CINOGY's trigger device is perfectly suited. This frequency and delay generator is software controllable and enables the synchronization of up to four beam profilers with different delay times simultaneously.





CinCam CCD - Technical Data -

	CCD-1201	CCD-1301	CCD-2301	CCD-2302
SENSOR DATA				
Format:	1/2"	1/3"	2/3"	2/3"
Active area:	6.5mm x 4.8mm	4.8mm x 3.6mm	9.0mm x 6.7mm	8.5mm x 7.1mm
Number of pixel:	1388 x 1038 (1.4MPixel)	1292 x 964 (1.2MPixel)	1388 x 1038 (1.4MPixel)	2452 x 2056 (5MPixel)
Pixel size:	4.65µm x 4.65µm	3.75µm x 3.75µm	6.45µm x 6.45µm	3.45µm x 3.45µm
Spectral response without cover glass:	350nm - 1100nm	350nm - 1100nm	350nm - 1100nm	350nm - 1100nm
Laser beam diameter min / max:	46.5µm / 4mm	37.5µm / 3mm	64.5µm / 5mm	34.5µm / 5.5mm
Sensor cooling:	passive	passive	passive	passive
CAMERA FEATURES				
Lens mount:	C-Mount	C-Mount	C-Mount	C-Mount
Bit depth (output):	14Bit	14Bit	14Bit	14Bit
Dynamic:	60dB (1:1000)	59dB (1:900)	67dB (1:2200)	54dB (1:500)
Frame rate:	up to 15Hz	up to 26Hz	up to 16Hz	up to 6Hz
Exposure time:	100µs-1s	100µs-1s	100µs-1s	100µs-1s
Interface:	FireWire (IEEE1394b)	FireWire (IEEE1394b)	FireWire (IEEE1394b)	FireWire (IEEE1394b)
I / O connector:	12-Pin Hirose	12-Pin Hirose	12-Pin Hirose	12-Pin Hirose
Mode:	cw or pulsed	cw or pulsed	cw or pulsed	cw or pulsed
Trigger:	TTL-signal	TTL-signal	TTL-signal	TTL-signal
Combinable with:	IR- / UV-Converter Beam expander Attenuator	Microscope lens Beam expander Attenuator	Beam expander Attenuator	Beam expander Attenuator
SPECIFICATIONS				
Mechanical dimensions (W x H x L):	60mm x 60mm x 103.8mm	60mm x 60mm x 103.8mm	60mm x 60mm x 103.8mm	60mm x 60mm x 103.8mm
Weight:	300g	300g	300g	300g
Electrical requirements:	DC 8V-36V	DC 8V-36V	DC 8V-36V	DC 8V-36V
Storage temperature*:	-10°C...+60°C	-10°C...+60°C	-10°C...+60°C	-10°C...+60°C
Operating temperature*:	+5°C...+45°C	+5°C...+45°C	+5°C...+45°C	+5°C...+45°C
Regulations:	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS

* without condensation

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





CinCam CCD - Sensor Response - - Dimensions -

