

SPEEDCAM

MegaVis

*High-resolution high-speed camera with
the most modern 4-megapixel sensor technology
12-bit dynamics for accurately detailed recordings*



The new SpeedCam MegaVis offers the most modern CMOS sensor technology with high light sensitivity and excellent image quality at high recording speeds.

The extremely light-sensitive and noise optimised CMOS sensor in the SpeedCam MegaVis offers a true-to-life image quality with a resolution of up to 2,016 x 2,016 pixels. In full resolution a recording frequency of 1,100 images per second is reached, at 56,000 fps an impressive 144x 128 pixels. Electronic shutter speeds of up to 2 µsec mean that motion blur can be eliminated.

For particularly demanding image quality, the image data can be downloaded in 12-bit dynamic mode.

The SpeedCam MegaVis is connected to a standard PC or laptop computer using gigabyte Ethernet or USB 2.0 interface. The optionally available DVI or HDSDDI interface enables image data to be viewed directly from the camera memory with a speed of 25 images per second.

The basic software contained in the delivery enables easy slow motion analysis and supports export of the recorded sequences as a BMP single frame series or AVI video file. Also available is the optional Visart and Mobile Control software packet. Visart has been designed for users who wish to operate several cameras together and therefore want to use the numerous image-processing functions the software has to offer. Mobile Control has been especially developed to enable touch-screen operation; making it possible to perform camera operation simply using an ultra-mobile PC.

Highlights

- 2,016 x 2,016 pixels, CMOS sensor
- Max. 1,100 fps at full resolution
- 144 x 128 pixels at 56,000 fps
- Exposure time up to 2 µs
- Double shutter operation
- Up to 32 GB internal memory
- 12-bit dynamics for accurately detailed recordings
- Highest light sensitivity
- Colour 800 ASA, monochrome 2,500 ASA
- Gigabyte-Ethernet interface and USB 2.0
- Simple incorporation into existing MS-Windows® computer systems
- Optional DVI or HDSDDI interface
- Rechargeable battery operation (optional) for operation independent of mains power supply for up to 1 hour and memory support for up to 6 hours



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The **SPEEDCAM** Company

Spezifikationen

CMOS-SENSOR

Sensor properties:	Fast CMOS sensor, colour or monochrome
Sensor size:	22.18 x 22.18 mm; diagonal 31.36 mm
Pixel size:	11 x 11µm
Sensor resolution:	2,016 x 2,016 active pixels to 1,100 fps
Dynamic range:	12-bit monochrome or colour
Light sensitivity:	Colour 800 ISO / ASA, monochrome 2,500 ISO / ASA

RECORDING FREQUENCY AND IMAGE MEMORY

Image memory:	Ring buffer 16 GB (32 GB optional)
Recording frequency:	Up to 56,300 fps at partial resolution

CAMERA CONTROL

Shutter:	Electronic shutter time up to 2 µs
Resolution / Image format:	Freely definable
Recording time:	3.6 seconds at full resolution and 1,100 fps Optional to up 7.2 seconds
Trigger:	Freely definable pre- and post-trigger

INPUTS / OUTPUTS

Output signals:	Optional DVI or HDSI
Trigger:	External TTL trigger and sync input optically coupled
Sync Output:	TTL sync output, strobe signal optically coupled
Ethernet:	1000 / 100 Ethernet and USB 2.0

SOFTWARE

Control software:	Basic software (optional: SpeedCam Visart / Mobile Control)
Operating system:	MS-Windows® Vista and MS-Windows® XP Professional
Functions:	Camera control & image archiving
Camera system:	SpeedCam MacroVis, SpeedCam MiniVis
Image output:	BMP, AVI, TIF, JPEG

MECHANICAL DIMENSIONS

Camera housing:	170 x 185 x 290 mm (W x H x D), 7 kg
Lens mount:	F-mount (Nikon)

AMBIENT CONDITIONS

Power supply:	10 - 30 V external or internal rechargeable battery
Rechargeable battery (opt.):	Capacity: 1 hr recording / 6 hr memory retention
Power supply:	100 W maximum
Ambient temperature:	+5° C to +40° C

AVAILABLE OOPTIONS

Image memory:	32 GB to 7.2 seconds at full resolution@ 1,100 fps
Rechargeable battery:	1hr recording / 6 hr memory retention
DVI interface:	Live image or download memory with 25 fps
HDSI:	Live image or Download Memory with 25 fps

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Recording speed

RESOLUTION	MAX. IMAGE FREQUENCY
2.016 x 2.016	1.100 fps
1.034 x 1.024	4.000 fps
528 x 512	10.900 fps
288 x 256	27.000 fps
144 x 128	56.300 fps

Recording time at full resolution

FRAMERATE	MEMORY	TIME
1.100 fps	16 GB	3,6 s
1.100 fps	32 GB	7,2 s



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