

Digital microscope cameras

# dhs-MicroCam<sup>®</sup> CMOS/CCD



The choice of source in the digital world of images is enormously important. This is why our dhs Solution offering comes with its **own digital microscope camera series** – dhs-MicroCam<sup>®</sup>. dhs-MicroCam<sup>®</sup> is used in light microscopy, stereo microscopy and macroscopy. Our cameras can be adapted as an image source to all optical systems using the **standardised C-mount thread**.

## Digital cameras CMOS

The signals from all CMOS-Models are transferred to the PC via **USB 3.0 interface**. A **high frame rate** and the **fast live image** allows professional positioning and focusing of your analysis specimens.

With a **variety of CMOS-sensor sizes** (1/4", 1", 1/1.2") and **resolution variants** (1.3, 2.2, 4 and 5 Mpix) we feature the right image source for each scenario.

## Digital cameras CCD

The signals are transferred to the PC via **USB 2.0 interface**. The **high-quality 1/1.8" CCD-sensor** provides **optimal images** which represent your specimens' most **subtle color nuances** and detailed structures.

The connection to PC (of all dhs-MicroCams<sup>®</sup>) is realised with a **3-metre USB-cable** (image transfer and power supply). The cable is **included in delivery**.



All dhs-MicroCams<sup>®</sup> are **integrated into dhs Image Data Base** through their software. As a result, all convenient tools such as

- **live image functions** and
- **parameter setting and saving**

are available to you.

## Information in the overview

- Professional microscope cameras with a range of different resolutions
- Large and fast live image via direct interfacing with the **dhs Image Data Base**
- C-mount thread enables connection to standard microscopes, macroscopes, endoscopes and lenses
- PC connection via fast USB 3.0 interface (3-metre cable included)
- Compact dimensions
- MC 2213 with Sony-sensor and 16:9 aspect ratio on monitor

## Technical details of all dhs-MicroCams® in the overview

	dhs-MicroCam® 1313	dhs-MicroCam® 2213
Sensor technology	Color-CMOS	Color-CMOS
Sensor size	1/2"	1/1.2"
Resolution (h x v)	1280 x 1024 Pixel	1936 x 1216 Pixel
Resolutionscategory	1.31 Megapixel	2.23 Megapixel
Pixel size	4.80 µm	5.86 µm <sup>2</sup>
Color depth	8bit (10bit ADC)	8 bit (12bit ADC)
Exposure time	4 µs - 2000 ms	19 µs - 30.000 ms
Objectiveadapter	C-Mount	C-Mount
Shuttersystem	Global	Global
Max. Framerate	60 fps	161 fps
Datatransfer	USB 3.0	USB 3.0
Dimensions (H x B x T)	29 x 29 x 29 mm	29 x 29 x 29 mm
Weight	52 g	52 g
	Applicable off Version 16 dhs Image Data Base	

	dhs-MicroCam® 4013	dhs-MicroCam® 5013	dhs-MicroCam® 2022
Sensor technology	Color-CMOS	Color-CMOS	Color-CCD
Sensor size	1"	1/2"	1/1.8"
Resolution (h x v)	2048 x 2048 Pixel	2560 x 1920 Pixel	1600 x 1200 Pix.
Resolutionscategory	4 Megapixel	5 Megapixel	2 Megapixel
Pixel size	5.50 µm	2.20 µm	4.40 µm
Color depth	8bit (12bit ADC)	8bit (12bit ADC)	8bit (12bit ADC)
Exposure time	7 µs - 500 ms	75 µm - 2745 ms	96 µs - 1572 ms
Objectiveadapter	C-Mount	C-Mount	C-Mount
Shuttersystem	Global	Global+Rolling Start	Global
Max. Framerate	75 fps	15 fps	12 fps
Datatransfer	USB 3.0	USB 3.0	USB 2.0
Dimensions (H x B x T)	29 x 29 x 29 mm	29 x 29 x 29 mm	34 x 32 x 34.4mm
Weight	44 g	43 g	74 g

We like to advise you personally which camera is suitable for your application - speak to us!

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**dhs**  
Image Data Base

**dhs**  
Micro Cam

**dhs**  
Cleanalyzer

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