

## Equipement pour l'enseignement expérimental, scientifique et technique

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Caméra USB 2.0 / 3MP CMOS Kit



## Camera, USB2.0, 3MP CMOS kit

This BMS 3MP digital camera for microscopes is designed to capture still images, as well as stream and record live video on Windows, Mac, and Linux computers. The user-friendly, stand-alone software for Windows XP/Vista/7/8/10 offers advanced features, including stitching, EDF (Extended Depth of Focus), video-recording and measurement functions. It allows you to make notes, shapes, watermarks, and precise measurements with ease. Preview and capture resolutions can be set independently, allowing you to simultaneously view high-speed, low-resolution live video, while capturing higher-resolution images or video. The software for Linux and Mac allow you to capture still images and record video, as well as control color and exposure.

Designed using the C-mount standard, the camera with the included reduction lens and two sizing-adapters can fit 23 mm, 30 mm, and 30.5 mm photo ports and ocular ports. The reduction lens increases the field-of-view to better match what is seen through the eyepieces. Using a standard USB 2.0 connection, the camera is easy to install. Drawing power from the USB connection, no additional connections are needed. The included calibration slide allows you to take accurate measurements in the software by creating baseline measurements at multiple magnifications.

Camera Specifications:

Sensor: Aptina MT9T001 CMOS (color)

Sensor size: 1/2" (6.55 mm(H) x 4.92 mm(V), diagonal 8.19 mm)

Reduction lens: 0.5x

Resolution: 2048 x 1536 (approx. 3.2 MP)

Pixel size: 3.2 µm x 3.2 µm

G Sensitivity: 1.0 V/lux-sec (550 nm)

SN ratio: 43 dB Dynamic range: 61 dB Scan mode: Progressive Binning: 1x1, 2x2, 3x3

Frame rate: 43 fps @ 680x510, 22 fps @ 1024x768, 8 fps @ 2048x1536

Exposure: 0.128~2000 ms, ROI Auto & Manual A/D converter: 12-bit Parallel, 8-bit R.G.B to computer

Spectral range: 380-650 nm (with IR-filter)

White balance: ROI White Balance/ Manual Temp-Tint Adjustment

Color rendering Technique: Ultra Fine Colour Engine

Capture/Control API: Native C/C++, C++, Directshow, Twain, Labview

Recording system: Still Picture and Movie

Cooling system: Natural

Operating temperature: -10 °C ~ 50 °C Storage temperature: -20 °C ~ 60 °C Operating humidity: 30 ~ 80% RH Storage humidity: 10 ~ 60% RH



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Power supply: DC 5 V over USB Port

Operating system: Windows XP/Vista/7/8/10 (32 & 64 bit), Mac OS X, Linux

PC requirements: CPU equals to Intel Core2 2.8 GHz or higher, Memory: 2 GB or more, USB2.0 port

Advanced BMS\_pix3 software for Windows:

- offers Stitching, EDF, video recording and measurement functions conducts measurements for lengths, angles, arcs, areas and etc.
- saves still images in BMP, TIFF, JPG, PICT, PTL or other formats
- edit and process microscopy images in a manner similar to PhotoShop
- live video and still image capture can be set in different resolutions simultaneously

More features: add layers, watermarks, mosaics, tiles; adjust color balance, exposure, saturation, contrast, orientation; change resolution, histogram, granulation, diffusion; transform images via edge detection, digital image warping; conducts measurements for single, parallel or perpendicular lines and rectangular, elliptical and irregular areas; adds notes, measurements, text, arrows, labels, and etc. using customizable text with different sizes and colors; conducts measurements in microns, millimeters, centimeters, inches, feet, and etc. under any magnification powers with desired tolerances.

## Catégories / Arborescence

Sciences > Biologie > Produits > Microscopy > Microscopes