



Moticam  
Wi-Fi

Moticam  
800x600  
Pix

Moticam  
1.3  
MP

Moticam  
2.0  
MP

Moticam  
3.0  
MP

# Moticam

DIGITAL MICROSCOPY SOLUTIONS





For more than a decade, Motic has been leading the market in affordable, High Quality Digital Microscopy solutions. The Moticams are known around the globe for their ease-of-use and their adaptability to a number of applications. Whether for Educational, Industrial or Clinical use, the Moticam's unique "All In One Box" design assures each user that this camera can fit almost any microscope.

Digital technology is evolving at an exceptional rate, offering the market continuous innovations and new developments and Motic is not standing back. In this catalogue you will find a complete selection of all our Moticams, as well as the latest additions to our range: the High Definition Cameras and the Wi-Fi camera.

At Motic, we believe in making quality Digital Microscopy affordable for everyone.

*Your Motic Europe Team*

## THE [All in One BOX] CONCEPT



At Motic, we strive to ensure that everything that you may need to attach the Moticam to your Microscope is included in one box. Supported by our own In-House team of Software and Mechanical Engineers, **each Moticam has the necessary equipment to help you turn your images into knowledge.** See what your Moticam box includes.

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Standard Live Resolution Cameras

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Wi-Fi Camera





An **attachable camera** containing a sensitive professional imaging chip housed inside a C-Mount case including a removable IR cut-off filter.



A **Macro Viewing Tube** that used together with the focusable lens is ideal for using the camera without a microscope.



A **focusable coated glass lens** matched to the size of the imaging chip.



All **necessary cables** and power supplies.



Two **adjustable size Eyepiece Adapters** that allow you to attach the camera onto almost any microscope without having to remove the Eyepiece.



A **full version of Motic Images Plus application software** provides all you need to quantify, measure, annotate, teach, learn... and much more.



A **4-dot calibration slide** with micrometer cross-hairs that ensures accurate calibration for precise measurements.

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Technical Data



# Standard Live Resolution Cameras

**The Entry Model.** An ideal and affordable introduction to Digital Microscopy, great for schools or small laboratories.

**Meeting you halfway.** The best resolution for laptop screens. Use this camera with Interactive White Boards for exceptional integrated teaching.

**More details at a fair price.** A great combination of high-resolution live imaging, while still remaining fast and affordable. The ideal choice for the more demanding user of Basic Digital Microscopy.



 0.5MP



 1.3MP



 2.0MP

**General Specifications:** CMOS Sensor • Focusable Lens • Software : Motic Images Plus for PC and Mac • Others: Direct Show, TWAIN and Media Cybernetics Image Pro Plus 7 Driver compatibility (SDK: available for Moticam 1SP and 2 only)



# Optimal Performance & High Resolution Cameras

**The all-rounder.** This model has it all: speed, resolution and quality. This camera offers something for everyone: Colleges, Universities, clinics and veterinary centers.

**Documentation.** This model allows you to convert your digital images into documentation files for professional printing.

**Advanced Documentation.** The premium choice for specialists looking for the smallest details. Convert captured images into 300 dpi documentation files and print A4 size images without losing quality.



 3.0MP

 5.0MP

 10.0MP

**General Specifications:** CMOS Sensor • Focusable Lens • Software : Motic Images Plus for PC and Mac • Others: Direct Show, SDK, TWAIN and Media Cybernetics Image Pro Plus 7 Driver compatibility





# Streaming Wi-Fi Camera

**The Moticam X** will turn almost any microscope into a wireless tablet ready, shareable device. This camera sends streaming images up to 6 Wi-Fi enabled devices without the need of a router. By creating its own wireless network simply logon with your Android or iOS tablet and view, capture, edit live images from your microscopes with our free App MotiConnect.



Moticam X, a unique solution to turn your old microscope into a Wi-Fi station

 1.3MP

**General Specifications:** CMOS Sensor • Focusable Lens • Viewing Devices: WiFi enabled computer: Motic Images Plus ML for PC and Mac / Tablet or Smartphone Devices: Freely downloadable App MotiConnect / Universal Viewer: Almost any HTML 5 supported Web browser







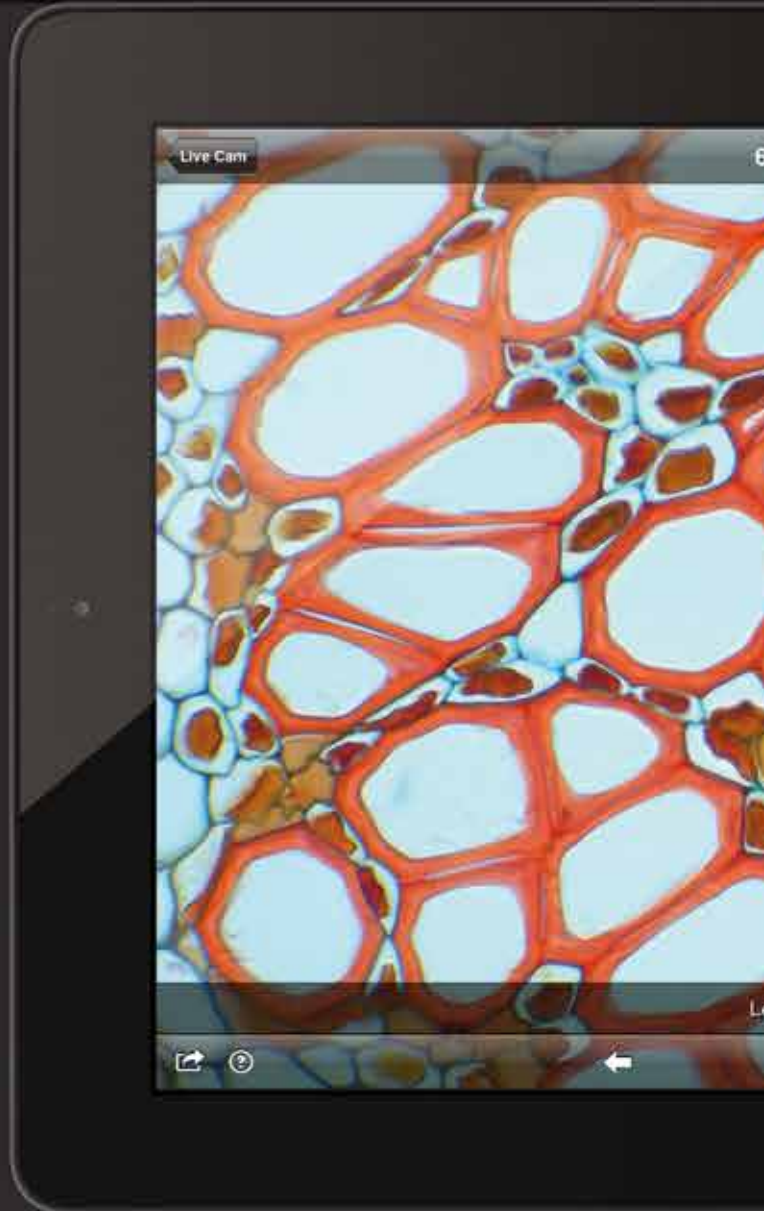
# MotiConnect

motiC's free app

View, capture and store your images  
in the blink of an eye

Easily edit your images by making  
measurements, by selecting an area with  
different shape options or by writing notes

In just a few clicks,  
share your work with anyone!



# High Definition Cameras

The **Moticam 580 and 580INT** embody Motic's new generation of HD digital cameras. Its true talent is showcased by HD live images displayed at 1080 resolution through the HDMI output port (Moticam 580) or through the built-in LCD monitor (Moticam 580INT) setting it as a new benchmark for scientific microscopy cameras.



**Moticam 580INT**

The Moticam 580INT has been designed for easy integration with BA Elite microscopes. The 580INT features a large, 10" LCD monitor built onto the camera's arm, enabling real-time observation and sharing of the microscope's image.



**Moticam 580**

As an affordable multi-tasking microscopy camera, the Moticam 580 is in a class of its own. This camera does not require a computer for standard operation, since the image processing is done inside the camera itself, offering fast live images.

 5.0MP

 10" LCD

 5.0MP

**General Specifications:** Output Possibilities: HDMI, USB, RCA Video • CMOS sensor • 1/2,5" Sensor format • Total pixels 2592x1944 (Capture) • Active resolution (HDMI) 1080i (HD) • Active resolution (USB) 800x600 pixels • Capture format on SD Card 5.0Mp (2592x1944) • Video capture 1080p (Full HD) • Remote Control • Software Motic Images Plus 2.0 for PC and MAC, Twain and Direct Show driver



# 1080 HD

The 1080 HD signal multiplies the amount of details of your digital image up to 5 times compared to Standard Definition (SD) or to an analogue video.

Original picture

1080 HD resolution

SD resolution



◀ Moticam 580 INT

▼ Moticam 580

# Image Analysis Software

Motic Images Plus for PC is a software suite for live microscopy imaging that aims to be at the same time professional in its features and simple in its operation. It is the result of more than a decade of close cooperation with end-users and professionals around the world.

Our multi-language interface offers several choices for either basic or more advanced image control options, filters and color correction. Measurement tools can be used both on live images as well as on captured ones, and measurement data can be exported at any time for further analysis. Video recording or time lapse capturing are other significant integrated features.

At Motic, we do our best to ensure that our Moticom cameras are compatible with the latest technology available (Windows, MAC, Linux). With our Direct Show and Twain compatibility, the Moticom cameras can also be integrated into third-party application programs.

Motic offers other software packages. Motic Assembly or Motic Multi-focus for Image Stitching and Image Stacking. MoticNet, a multi-user observation and supervision platform that gives you the option to connect up to 100 digital microscopy stations together with the supervision from the teacher's platform. Motic Trace for teaching forensic and first-level evidence processing centers.



# How to connect your Moticam

## Onto the trinocular tube

Attach the Moticam to the c-mount adapter and then fix it to the trinocular port. This combination will give you the freedom to continue observing with both eyes, while having the Moticam connected.

The c-mount adapter needs to be chosen according to the chip size of the camera. To ensure choosing the correct adapter don't hesitate to contact one of our specialists.

## Onto the eyepiece

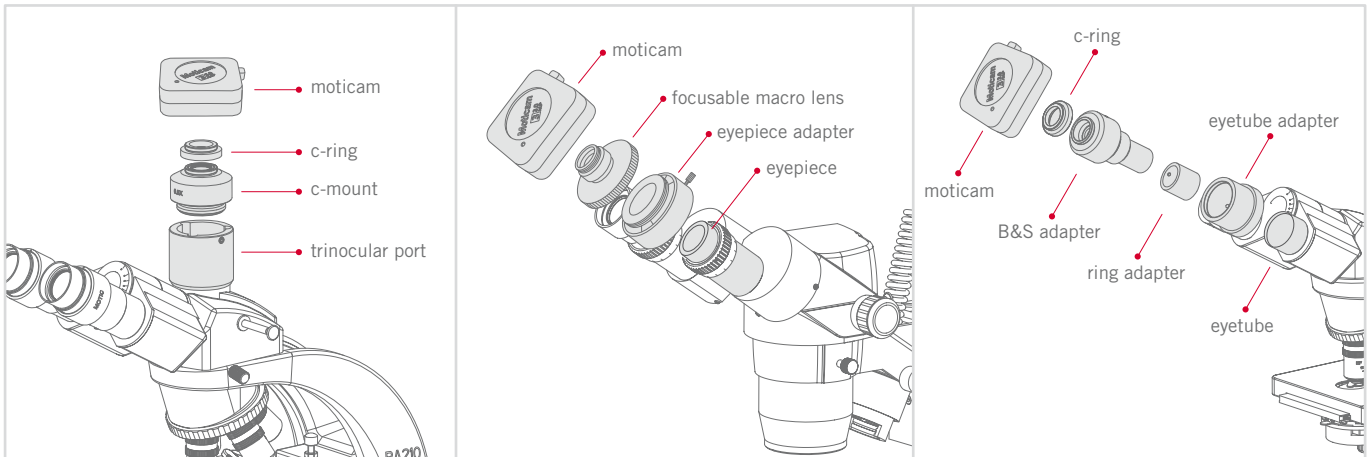
Simply attach the camera to the focusable macro lens and select the correct eyepiece coupler for your microscope. Once this has been done put the complete combination onto the eyepiece, and you have turned your conventional microscope into a digital microscope.

This solution is also applicable for non-Motic microscopes.

## Into the eyetube

Simply attach the Eyetube adapter on the Moticam. Remove an eyepiece from the microscope and replace it with the Moticam-Eyetube adapter combination. You have turned your conventional microscope into a digital microscope.

The special Eyetube adapter (B&S) is optional. This solution is also applicable for non-Motic microscopes.





Moticam	1	1SP	2	3
<b>Sensor Type</b>	CMOS	CMOS	CMOS	CMOS
<b>Optical Format</b>	1/4"	1/3,2"	1/3"	1/2"
<b>Capture format</b> (on SD-card)	-	-	-	-
<b>Active Resolution</b> (through USB)	800 x 600 (0.5 MP) @ 10 fps*	1280 x 1024 (1.3 MP) @ 13fps*	1600 x 1200 (2 MP) @ 5 fps*	2048 x 1536 (3 MP) @ 6 fps*
<b>Active Resolution</b> (through HDMI)	-	-	-	-
<b>Interface connection</b>	USB	USB	USB	USB
<b>Pixel Size</b>	5.6µm x 5.6µm	3.2µm x 3.2µm	3.2µm x 3.2µm	3.2µm x 3.2µm
<b>Imaging Area</b>	3.58mm x 2.69mm	4.10mm x 3.28mm	5.12mm x 3.84mm	6.55mm x 4.92mm
<b>Scan Mode</b>	Progressive			
<b>Operating Temp</b>	From -30 to +70 Degrees Celsius non condensing			
<b>Max.Signal to Noise Ratio</b>	45dB	43dB	43dB	43dB
<b>Dynamic Range</b>	60dB	61dB	61dB	61dB
<b>Exposure Time min/max</b>	-	0,08 msec / 5 sec	0,09 3msec / 6 sec	0,11 msec / 7 sec
<b>Sensitivity</b>	1,0V/Lux-sec (550nm)	1,0V/Lux-sec (550nm)	1,0V/Lux-sec (550nm)	1,0V/Lux-sec (550nm)
<b>Slot</b>	-	-	-	-
<b>Supported OS</b>	Microsoft Windows XP / Vista / 7 / 8 and MAC OSX			
<b>Support Device</b>	TWAIN and Direct Show Driver	TWAIN, SDK and Direct Show Driver	TWAIN, SDK and Direct Show Driver	TWAIN, SDK and Direct Show Driver
<b>Focusable lens</b>	8 mm	12 mm	12 mm	16 mm

*\*frames per second under optimal illumination conditions*

5	10	580 / 580INT	X	Moticam
CMOS	CMOS	CMOS	CMOS	<b>Sensor Type</b>
1/2,5"	1/2,3"	1/2,5"	1/3,2"	<b>Optical Format</b>
-	-	still image 2592x1944 (5.0MP) Video HD 1080p	-	<b>Capture format (on SD-card)</b>
2592 x 1944 (5 MP) @ 4 fps*	3664 x 2748 (10 MP) @ 2.2 fps*	1280 x 960 (1.3 MP) @ 15 fps*	1280 x 1024 (1.3 MP) (Wi-Fi only)	<b>Active Resolution (through USB)</b>
-	-	1920 x 1080 (HD) @ 30 fps*	-	<b>Active Resolution (through HDMI)</b>
USB	USB	HDMI (1080i), AV and USB	Wi-Fi	<b>Interface connection</b>
2.2µm x 2.2µm	1.67µm x 1.67µm	2.2µm x 2.2µm	2.8µm x 2.8µm	<b>Pixel Size</b>
5.70mm x 4.28mm	6.12mm x 4.59mm	5.70mm x 4.28mm	4.48mm x 3.36mm	<b>Imaging Area</b>
Progressive				<b>Scan Mode</b>
From-30 to +70 Degrees Celsius non condensing				<b>Operating Temp</b>
38.1dB	34dB	38.1dB	42dB	<b>Max.Signal to Noise Ratio</b>
70.1dB	66.5dB	70.1dB	68dB	<b>Dynamic Range</b>
0,15 msec / 5 sec	0,16 msec / 10 sec	0,03 msec / 0,03 sec	0,05 msec / 0,07 sec	<b>Exposure Time min/max</b>
1,4V/Lux-sec (550nm)	0,31V/Lux-sec (550nm)	1,4V/Lux-sec (550nm)	1,0V/Lux-sec (550nm)	<b>Sensitivity</b>
-	-	SD Card (max 32Gb)	-	<b>Slot</b>
Microsoft Windows XP / Vista / 7 / 8 and MAC OSX			Windows XP / Vista / 7 / 8 and MAC OSX; Android 4,0 and higher; iOS5 and higher	<b>Supported OS</b>
TWAIN, SDK and Direct Show Driver	TWAIN, SDK and Direct Show Driver	TWAIN and Direct Show Driver	Universal Webbrowser (HTML5)	<b>Support Device</b>
12 mm	12 mm	12 mm	12 mm	<b>Focusable lens</b>



## Looking for more?

Ask for our Moticam Pro range of cameras



# Motic®

Canada | China | Germany | Spain | USA



[www.moticeurope.com](http://www.moticeurope.com)

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