MOTICAM

THE**NEW**moticam

FASTER IMAGING – GREATER DETAILS

Moticams are the preferred accessory for small and medium professional labs around the world.

? Did You Know?

2016 is another turning point in our Moticam range. With more than a decade of experience in Moticam technology, we have been able to make a mark as a leading provider of universally attachable digital microscopy. The Moticams are known around the globe for their ease of use and their adaptability to a number of applications. Whether for Educational, Indistrial or Clinical use, the Moticam ‘s unique “All In One Box” design assures each user that this camera can fit almost any microscope.

With this new generation, we have listened to our fans from around the world and across a wide spectrum of users. The new generation of Moticams includes tablet systems as well as high-speed cameras making the whole Moticam range even more flexible, powerful and user-friendly than before. All this at more attractive prices than before.

At Motic, we believe in making quality Digital Microscopy affordable for everyone and we know that you will enjoy this new line.

THE [AllinOneBOX] 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.

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

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

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

A 4-dot calibration slide with micrometer cross-hairs that ensure accurate calibration for accurate measurements.

The Macro Viewing Tube together with the focusable lens is great for using the camera without a microscope.

All cables and power supplies as needed are of course inside the box.

A full version of Motic Images Plus application software provides all tools you need to quantify, measure, annotate, teach, learn and much more. This software comes with unlimited updates and does not require any license fees

Did you know? Each camera has a **standard tripod mount** so that you can secure your camera inside your own installation.

Table of Contents

Contents

Moticam 1 & 2

Our range starts with the Moticam 1 series, which are great for Schools or Small Laboratories. With a live resolution of 800x600 or 2.0MP use these cameras with Interactive White Boards for exceptional integrated teaching. The live resolution along with great color-balance make these cameras an ideal and affordable introduction to Digital Microscopy across the board.

Moticam 1 Specifications:

- Live Resolution: 800x600 pixels
- Sensor Type: CMOS
- Optical Calculation: 1/4”
- Focusable Lens: 12mm
- Software Included: Motic Images Plus for PC and Mac
- Others: Driver installs automatically in Windows Vista and higher

Moticam 2 Specifications:

- Live Resolution: 2.0MP
- Sensor Type: CMOS
- Optical Calculation: 1/3”
- Focusable Lens: 12mm
- Software Included: Motic Images Plus for PC and Mac
- Others: Direct Show, TWAIN and Media Cybernetics Image Pro Plus 7 Driver compatibility

Moticam 3+ & 5+

The USB3 speed Moticam 3+ and 5+ offer a great package combining both high resolution (up to 5MP live) as well as fast frame rates through the high speed USB3 connection while still remaining affordable. Idea for use not only in Colleges and Universities but also in Clinics and Veterinary Centres. These cameras offer something for everyone.

Moticam 3+ Specifications:

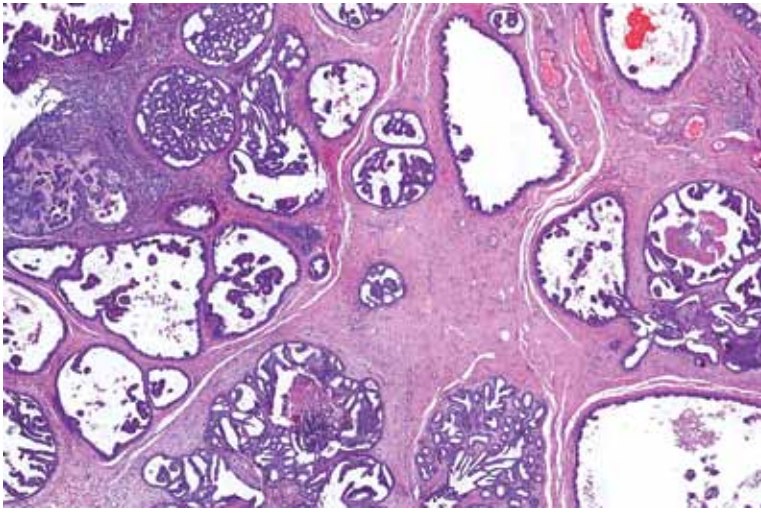
3.0 SUPER SPEED

- Live Resolution: 3.0MP
- Sensor Type: CMOS
- Optical Calculation: 1/2”
- Focusable Lens: 16mm
- Software Included: Motic Images Plus for PC, OSX and Linux
- Others: Direct Show, TWAIN and Media Cybernetics compatibility

Moticam 5+ Specifications:

3.0 SUPER SPEED

- Live Resolution: 5.0MP
- Sensor Type: CMOS
- Optical Calculation: 1/3”
- Focusable Lens: 12mm
- Software Included: Motic Images Plus for PC, OSX and Linux
- Others: Direct Show, TWAIN and Media Cybernetics compatibility



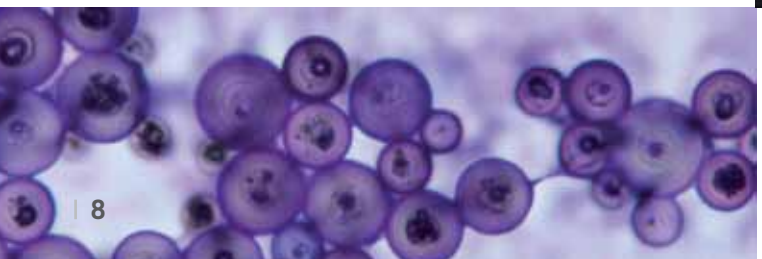
Moticam 10+

Do you require the ability for documentation? The Moticam 10+ offers up to 10MP live and capture resolution. With such a high resolution range at your disposal, you can easily and professionally convert captured images into 300dpi documentation files. As with all Moticams, the Moticam 10+ contains our Rapid View algorithm allowing the user to display a faster frame rate at full screen while still being able to capture an image at maximum resolution. The flexibility of this USB3 camera makes the Moticam 10+ a sound investment.

Moticam 10+ Specifications:

3.0 SUPER SPEED

- Live Resolution: 10.0MP
- Sensor Type: CMOS
- Optical Calculation:1/2.5”
- Focusable Lens: 12mm
- Software Included: Motic Images Plus for PC, OSX and Linux
- Others: Direct Show, TWAIN and Media Cybernetics compatibility



Moticam 1080 & 1080BMH

As an affordable multi-taksing microscopy camera, the Moticam 1080 is in a class of its own. This camera does not require a computer for standard operation as the user can make image adjustments and capture straight through the camera's on-board software. Capture images directly onto an SD card or connect an external monitor through the true HDMI output and this Moticam 1080 allows you to view details as you have not seen before. Should you wish to use a computer at the same time, simply connect the camera through the USB port and enjoy simultaneous image transmission.

If you are looking for an all-in-one solution, the 1080 BMH comes with an attached high-resolution screen boasting native 1920x1080 pixel resolution on just a 10" space allowing for crisp, clear and true colour images.

Whether used in an Educations, Industrial or Clinical area, the Moticam 1080 line is the Jack of all Trades in our Moticam lineup.

Moticam 1080 Specifications & Moticam 1080BMH Specifications:

- Sensor Type: Dedicated HDMI CMOS
- Sensor Resolution: 2.0MP
- Optical Calculation: 1/2,5"
- Focusable Lens: 12mm (Moticam 1080 only)
- Output Possibilities: Simultaneous HDMI, USB, SD Card
- Software Included: On-board computer-free image processing software; Motic Images Plus for PC, OSX and Linux
- Screen: 10" 1920x1080 high resolution monitor (Moticam 1080 BMH only)

BTU8 & BTU10

The BTU8 and BTU10 offers the user the opportunity to upgrade a trinocular microscope into a fully independent digital microscopy workstation. These solutions come in two parts. The 8" or 10" android tablet can easily be separated and use on its own. The camera contains a 5MP CMOS chip dedicated for microscopy use and can be directly connected to the provided tablet. Once connected to the high-resolution tablet, the user can view, capture, edit and measure the live microscope image through Motic's free App MotiConnect. Should you wish to connect the BTU to a computer, you can easily do so using the USB adapter.

Having an interactive device on your microscope not only allows many people to view the live microscope image at the same time, but also enables easy and immediate sharing of ideas and experiences.
If you want to share your microscope image, why not switch on the tablet's WiFi and immediately transmit a live image stream to other WiFi devices.

BTU8 & BTU10 Specifications:

- Sensor Type: Dedicated Microscopy CMOS
- Sensor Resolution: 5.0MP
- Optical Calculation: 1/2.5"
- Output Possibilities:
  - From Tablet: WiFi, HDMI, SD Card
  - From Camera: USB
- Software Included
  - MotiConnect App for Android preloaded
  - Motic Images Plus for PC, OSX
- Tablet
  - Android 8" high resolution IPS tablet (BTU8)
  - Android 10" high resolution IPS tablet (BTU10)

Moticam X & Moticam X²

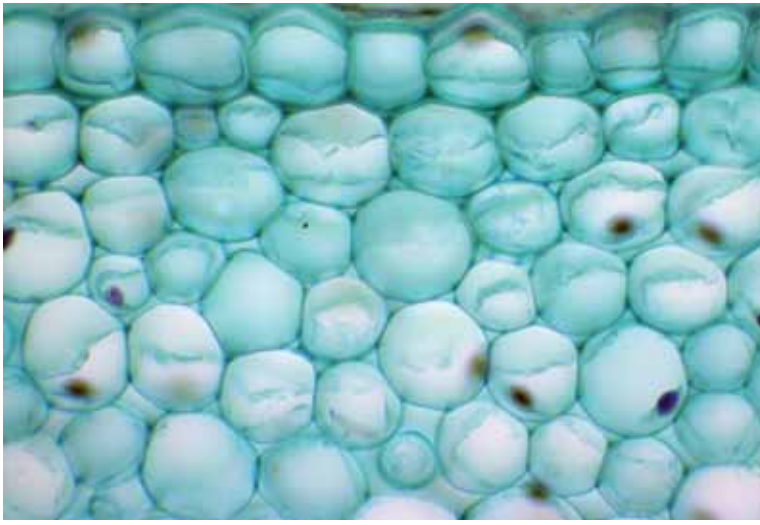
Welcome to the future of Wireless Digital Microscopy. The Moticam X is a next generation microscope camera that will transform almost any old conventional microscope into a wireless device capable of sending live high resolution images to your WiFi Laptop or tablet devices. This revolutionary device sends streaming images to up to 6 WiFi enabled devices without the need for a router. The WiFi enabled devices include Tablets, Phones or computers running on iOS, Android or Windows. The Moticam X generates its own WiFi signal, this camera can be used separate from your existing network. No additional routers are required.

Unlock and unplug the power of your microscope with our new Moticam X. The possibilities are endless.

The Moticam X2 adds an additional level of flexibility by including a removable rechargeable battery as well as an RJ-45 LAN port allowing truly wireless digital microscopy

Moticam X Specifications &
Moticam X² Specifications:

- Sensor Type: CMOS
- Sensor Resolution: 2.0MP
- WiFi Resolution: 1280x1024
- Optical Calculation: 1/3”
- Focusable Lens: 12mm
- Calibration Slide
- Macro Tube
- Power Supply: Through provided switching power adapter (Moticam X)
- Power Supply: Rechargeable Battery; switching power charger (Moticam X2)
- Software: Motic Images Plus for PC, OSX, Linux
- Other viewing options: View the WiFi signal through other devices with our MotiConnect app for iOS and Android or through almost any HTML5 supported browser.



Motic Images Plus

Motic Images Plus for PC is a software suite that has evolved through more than a decade of close cooperation with end-users and professionals around the world. At Motic, we believe that actions speak louder than words, and this is why **a full version of Motic Images Plus is included in every Moticam box**. Once installed, you will not be asked to pay license fees or upgrade fees, simply register your Moticam online and get access to **free updates** when they become available.

Motic Images Plus consists of two main components, the Image Capture Interface (MI Devices) and the actual **captured image application program.**

The Image Capture Interface is a separate program through which the live image can not only be perfected with the multitude of adjustment features, but it can also be used as a teaching device thanks to its calibrated scale bars, grid and cross bars.

Capturing the perfect image is vital for all applications. For this reason, the **MI Devices interface** is also available whether the Moticam is used as a Direct Show or a TWAIN device. Whether you are using the Moticam in its easy-to-use Automatic mode or you are controlling each aspect of your image stream, this interface will satisfy all users.

Once the image has been captured it is automatically transferred to the Images Plus application program where Measurement, Annotation and Reporting Tools can be used to **turn images into knowledge.** With the proliferation of touch-screen monitors and interactive whiteboards, we have also optimized our interface to make it easier to use these technologies with our Moticams.

MI Devices interface

MI Devices interface Video

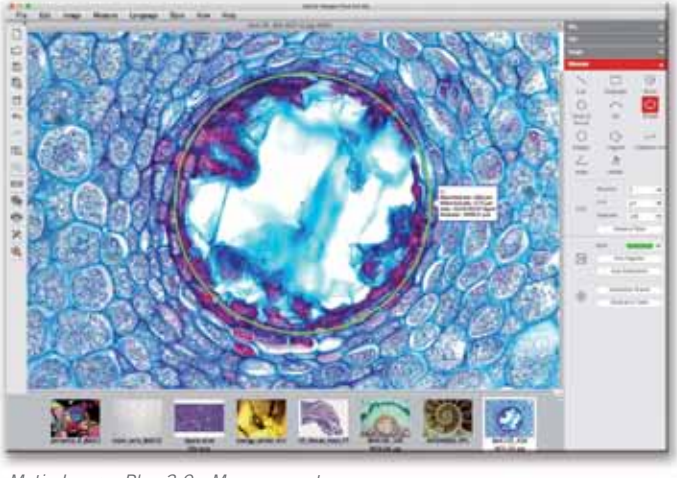
MI Devices interface Color correction

MI Devices interface Adjustments

MI Devices interface Capture

MI Devices interface Measure

Motic Images Plus 3.0 - Measurements



Motic Images Plus 3.0 - Measurements

Compatibility

At Motic, we do our best to ensure that **our Moticams are compatible with the latest in technology available**. Currently all our cameras are compatible with **Windows XP and higher**. Most cameras are also compatible with **Apple's OSX** including Lion. If you are a Linux user, please ask us for our free Linux compatible software and drivers.

With our **Direct Show and Twain compatibility**, the Moticams can also be integrated into third-party application programs. The tools and services of our MI Devices interface are still accessible through **Direct Show and Twain.** In response to growing demand, Moticams are now able to be fully integrated into **Media Cybernetics' Image Pro Plus 7**. Please download the relevant plugin from the Media Cybernetics or Motic support pages.

For those who are interested in a little more advanced Digital Microscopy, our Moticams are also fully compatible with:

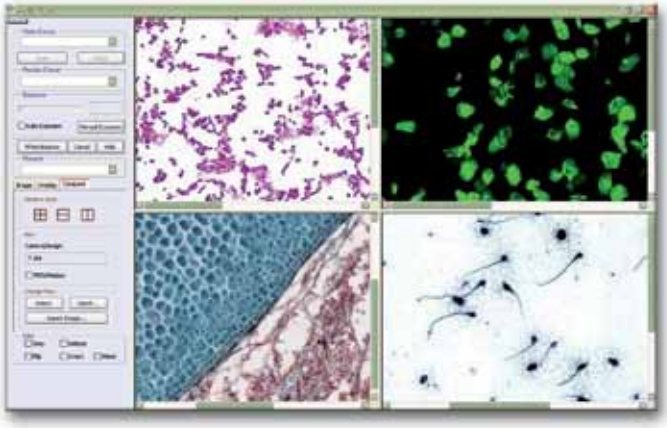
MoticNet

Our comprehensive **multi-user observation and supervision platform.** Connect up to 100 digital microscopy stations together and supervise and control them from a single teacher's platform; hand out and collect homework and let an individual student take control of the class. **MoticNet puts the Teacher back in control.**

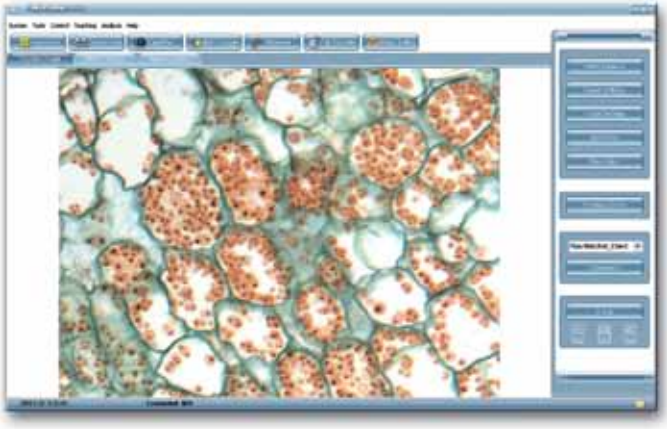
MoticTrace

Forensic imaging does not have to be expensive. Simply connect up to four Moticams to a single computer and control simultaneous feeds from each camera. You can attach the cameras to your stereo or your compound microscopes and in a matter of seconds, you have created a **digital forensic comparison scope.** Digitally resize, overlap and rotate your feeds. This is a great tool not only for teaching forensics but also for the **first-level evidence processing centers.**

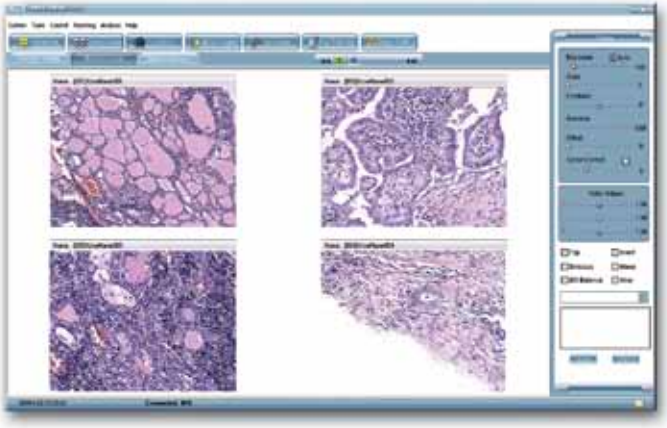
Motic Trace



Motic Trace



Motic Net - Student



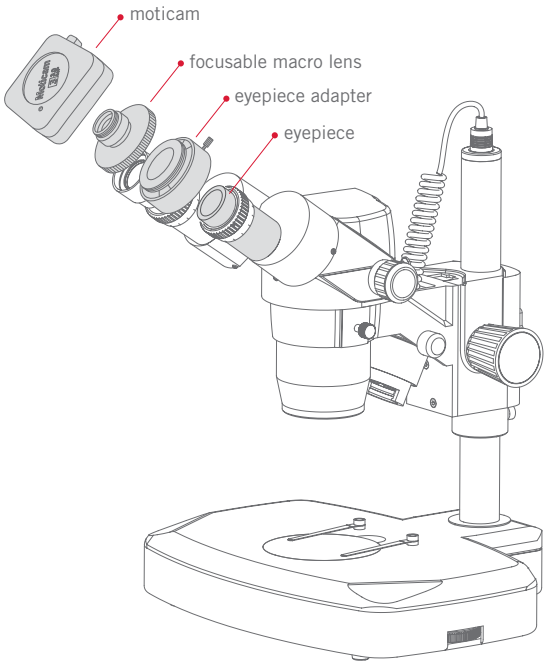
Motic Net - Teacher

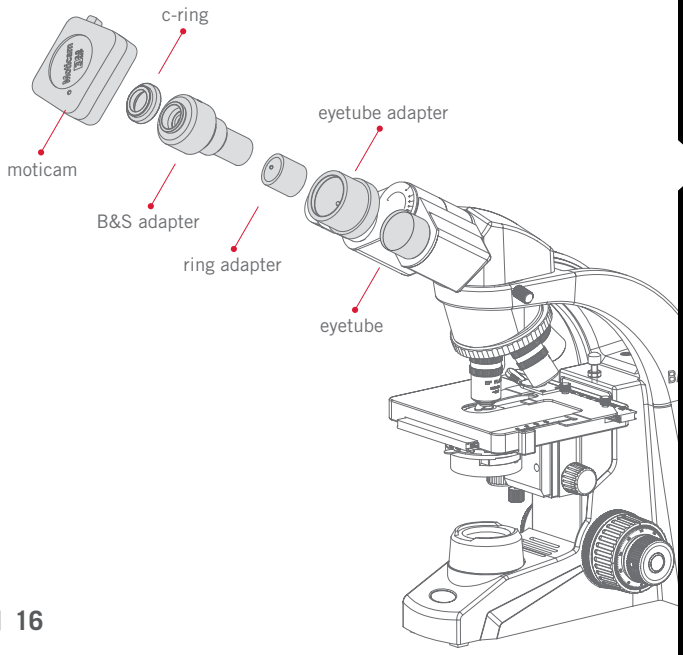
Connect your moticam

Onto the eyepiece

With each **Moticam** we supply two eyepiece couplers (30mm and 38mm in diameter). Simply **connect the focusable macro lens to the camera and select the correct eyepiece coupler** for your microscope. 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. In case of any doubts please contact your local **Motic** distributor.





Connect your moticam

Into the eyetube

The special Eyetube adapter (B&S) is optional.

Simply screw 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.

This solution is also applicable for non-Motic microscopes. In case of any doubts please contact **Motic**.

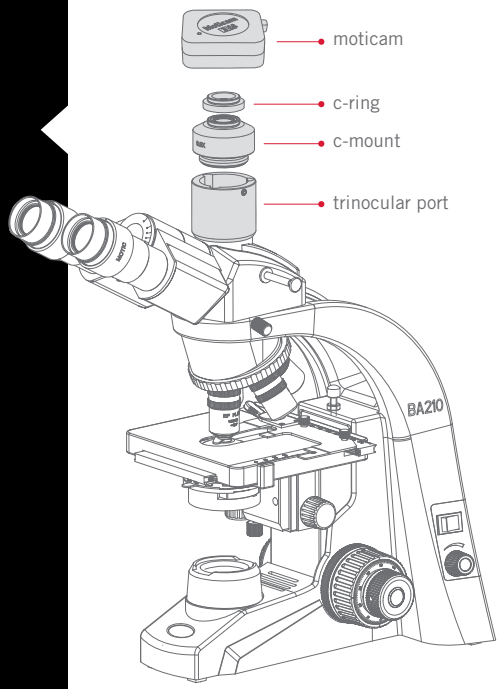
Connect your moticam

Onto the trinocular tube

For all Motic trinocular microscopes we have several c-mount adapters available. The **c-mount adapter needs to be chosen according to the chip size of the camera.** Each **Moticam** (excluding the gooseneck cameras) comes standard with a CS/C-mount connection; the **c-ring** is included in the package.

Just **fix the c-mount adapter on the trinocular port and connect the Moticam to the c-mount adapter.** This combination will give you the freedom to continue observing with both eyes, while having the **Moticam** connected.

Our **Moticam** cameras can also be used on non-Motic microscopes, via the **universal c-mount connection.** Just remember that you will need the c-mount adapter from the manufacturer of your microscope.



Technical data

Moticam	1	2	3+	5+	10+
Sensor Type	CMOS	CMOS	CMOS	CMOS	CMOS
Optical Format	1/4”	1/3"	1/2"	1/2.5"	1/2.3"
Capture format (on SD-card)	-	-	-	-	-
Active Resolution (through USB)	800 x 600	1600 x 1200	2048 x 1536	2592 x 1944	3664 x 2748
Active Resolution (through HDMI)	-	-	-	-	-
Interface connection	USB2.0	USB2.0	USB3.0	USB3.0	USB3.0
Pixel Size	5.6µm x 5.6µm	3.2µm x 3.2µm	3.2µm x 3.2µm	2.2µm x 2.2µm	1.67µm x 1.67µm
Imaging Area	3.58mm x 2.69mm	5.12mm x 3.84mm	6.55mm x 4.92mm	5.70mm x 4.28mm	6.44mm x 4.62mm
Scan Mode	Progressive				
Operating Temp	-10°C to +60°C non condensing				
Max.Signal to Noise Ratio	45dB	43dB	43dB	38.1dB	34dB
Dynamic Range	60dB	61dB	61dB	70.1dB	66.5dB
Slot	-	-	-	-	-
Supported OS	Microsoft Windows XP / Vista / 7 / 8 / 10; Apple Mac OSX; Linux				
Support Device	TWAIN, SDK and Direct Show Driver				

**frames per second under optimal illumination conditions*

1080 / 1080 BMH	BTU8 / BTU10	X	X²	Moticam
CMOS	CMOS	CMOS	CMOS	Sensor Type
1/2.8"	1/2.5"	1/4"	1/4"	Optical Format
Still Image: JPEG Movie Clip: AVI	-	-	-	Capture format (on SD-card)
1920 x 1080	2592 x 1944 (Camera)	1280 x 960	1280 x 960	Active Resolution (through USB)
1920 x 1080	1920 x 1080 (Tablet)	-	-	Active Resolution (through HDMI)
USB2.0 & HDMI	USB2.0 (Camera) USB2.0 & HDMI (Tablet)	Wi-Fi	Wi-Fi and RJ45	Interface connection
2.8µm x 2.8µm	2.2µm x 2.2µm	2.8µm x 2.8µm	2.8µm x 2.8µm	Pixel Size
5.46mm x 3.46mm	5.70mm x 4.28mm	3.83mm x 2.84mm	3.83mm x 2.84mm	Imaging Area
Progressive				Scan Mode
-10°C to +60°C non condensing				Operating Temp
41dB	38.1dB	42.3dB	42.3dB	Max.Signal to Noise Ratio
69dB	70.1dB	-	-	Dynamic Range
SD Card	TF Card	-	-	Slot
Microsoft Windows XP / Vista / 7 / 8 / 10; Apple Mac OSX; Linux				Supported OS
TWAIN, SDK and Direct Show Driver				Support Device

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