

FOCUS ON

Motic[®]

MORE THAN MICROSCOPY



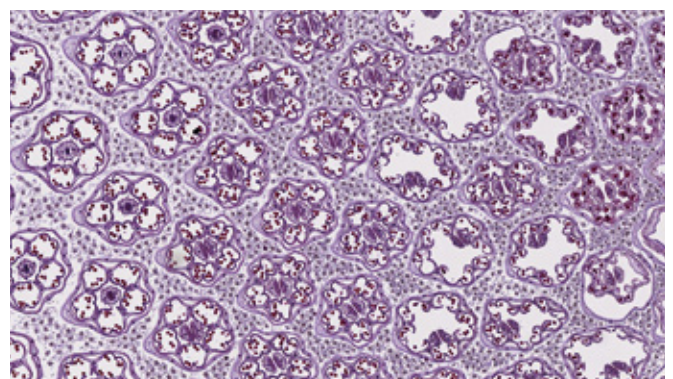
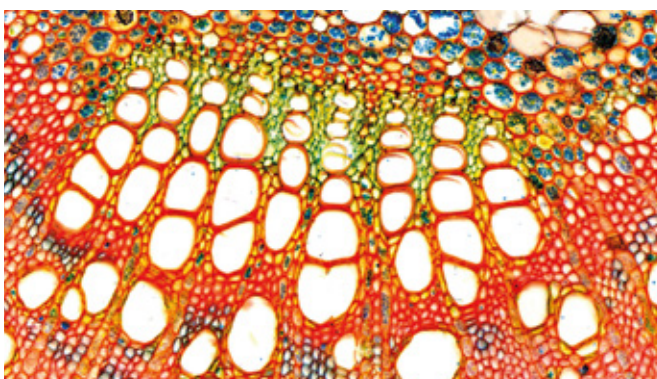
DIGITIZING MICROSCOPY

UNMATCHED ADAPTABILITY AND VERSATILITY
MOTICAM MICROSCOPY CAMERAS



DIGITIZING MICROSCOPY

Unlock the power of digital microscopy with the Moticam range, now accessible to everyone! Whether you're running a small laboratory, collecting coins and stamps, teaching at a school, conducting research, or working in veterinary or clinical fields, Moticam has the perfect solution for you. Experience the unmatched adaptability, ease of use, and versatility that has made Moticam a trusted name. Explore our extensive portfolio of digital microscopy cameras and discover the perfect Moticam to elevate your work and meet your specific needs.





USB STARTER LINE

MOTICAM A SERIES

04



USB EXPERT LINE

MOTICAM S SERIES

06



WI-FI

MOTICAM X5 PLUS
MOTICAM BTI

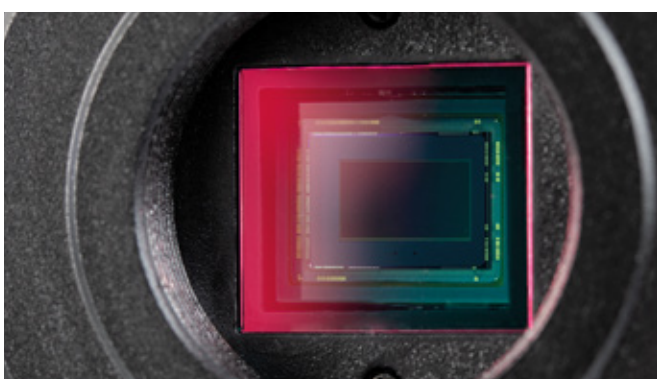
08



HDMI

MOTICAM 1080N
MOTICAM 1080N BMH
MOTICAM 1080N INT
MOTICAM 4000X

10



TECHNICAL SPECIFICATIONS

CONNECTIVITY
COMPARISON CHART

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USB STARTER LINE

MOTICAM A SERIES



USB 2.0
DATA TRANSFER

Our Starter Line cameras are designed with microscopy beginners, teaching environments, hobbyists, and small labs in mind. Use them with a computer with the easy-to use MotiConnect App for computers.



sCMOS
Sensor



Auto
White Balance



Windows and OSX
Compatibility



Accessories
Included



UVC Driver
Easy installation



MotiConnect App
for computers





MODEL	Moticam A1	Moticam A2	Moticam A5	Moticam A8	Moticam A16
RESOLUTION	1MP	2MP	5MP	8MP	16MP



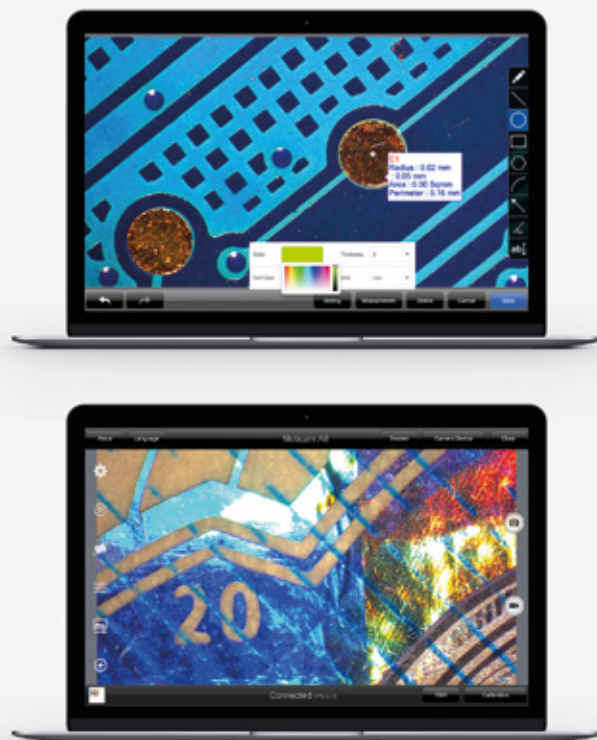
All-In-One-Box Concept

With the included accessories you can convert almost any conventional microscope into a digital microscope.



Our App in desktop version

Capture, edit, annotate, measure and share easily thanks to its intuitive and user-friendly interface.



USB EXPERT LINE

MOTICAM S SERIES



USB 3.1
DATA TRANSFER

The right choice for challenging tasks in professional fields. The Moticam S-Line offers smooth navigation, high color fidelity, and crisp images. Their big sensors allow to capture large sample areas by a single shot.



sCMOS
Sensor



Manual
White balance (pro)



Windows, OSX and Linux
Compatibility



Fast
Frame rates



Advanced Sensitivity
& color reproduction



Motic Images Plus
Software





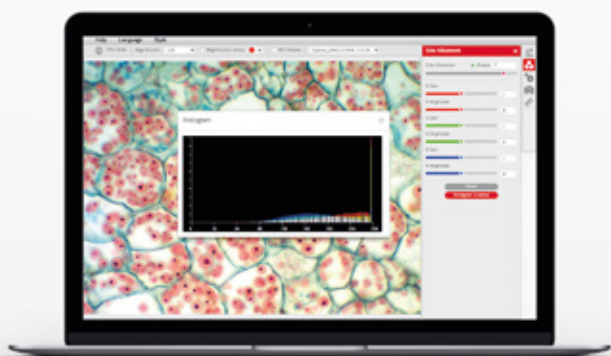
MODEL	Moticam S1	Moticam S3	Moticam S6	Moticam S12	Moticam S20	Moticam ProS5 Lite	Moticam ProS5 Plus
RESOLUTION	1.2MP	3MP	6MP	12MP	20MP	5MP	5MP



Motic Images Plus

The well-known Motic Images Plus is probably the most versatile, free digital microscopy software in the market today and it is given free of charge with most of the models of the Moticam range.

With tools such as image adjustments, advanced settings, live measurements, annotations, and counting, this software allows everyone to quantify the images their microscope provides, turning images into knowledge.



Main differences between Moticam A and Moticam S



Moticonnect App
For computers



Motic Images Plus
Image Analysis Software



USB 2.0
Data transfer



USB 3.1
Data transfer



Accessories
Included



Bigger sensors
For a bigger field of view



Auto
White balance



Manual
White balance (Pro)



UVC Driver
Easy installation



Advanced Sensitivity
Low light conditions
True color reproduction



WI-FI DATA TRANSFER

Turn your microscope into a Wi-Fi station, share your images with up to 6 devices at the same time. Simply logon with your tablet or smartphone and get ready to capture, edit and share your microscope images with the free App MotiConnect.



CMOS
Sensor



Accessories
Included

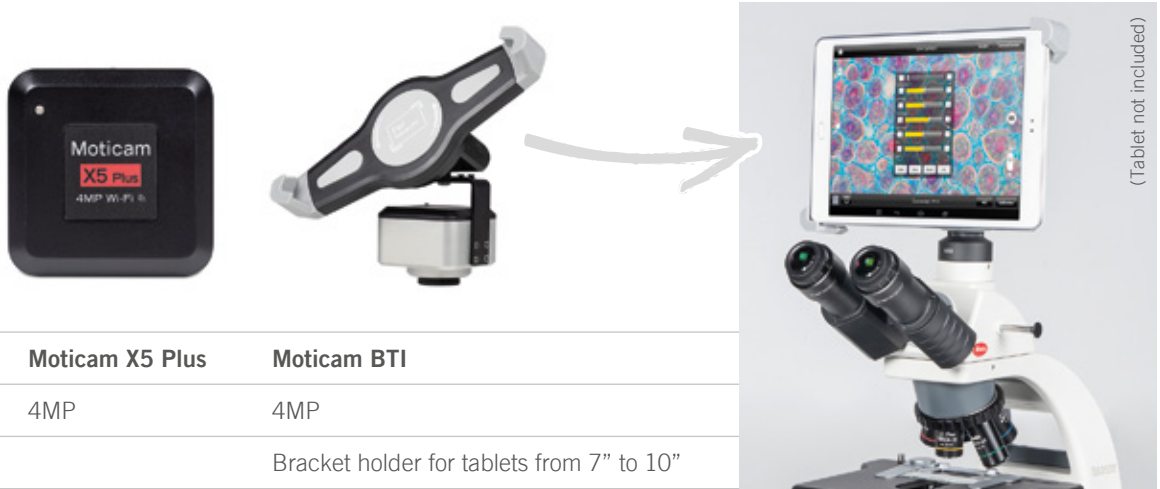


iOS and Android
Compatibility



MotiConnect App
Software





(Tablet not included)

MODEL	Moticam X5 Plus	Moticam BTI
RESOLUTION	4MP	4MP
OTHERS		Bracket holder for tablets from 7" to 10"



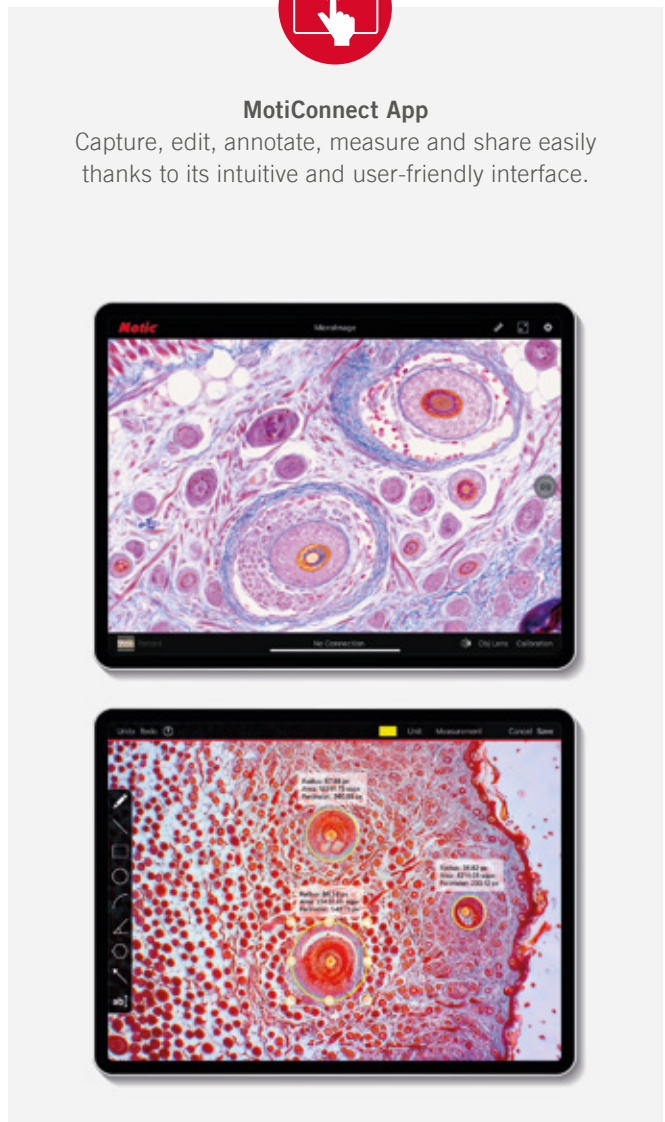
All-In-One-Box Concept

With the included accessories you can convert almost any conventional microscope into a digital microscope. **Applies to Moticam X5 Plus*



MotiConnect App

Capture, edit, annotate, measure and share easily thanks to its intuitive and user-friendly interface.



HDMI

MOTICAM 1080N / BMH / INT MOTICAM 4000X



HDMI
DATA TRANSFER

Display Full HD or 4K live images on your screen via HDMI port. A mouse is all you need to work with the cameras' embedded software, no computer needed. Make live measurements, image adjustments, annotations, and more, on-the-go.



CMOS
Sensor



Accessories
Included



Windows & OSX
Compatibility



On-board
Software

LIVE 
MEASUREMENTS





Intermediate body for BA Series



MODEL	Moticam 1080N	Moticam 1080N BMH	Moticam 1080N INT	Moticam 4000X
LIVE RESOLUTION	Full HD	Full HD	Full HD	4K
DATA TRANSFER	HDMI, USB, MicroSD card	HDMI, USB, MicroSD card	HDMI, USB, MicroSD card	HDMI, Wi-Fi, USB, LAN, MicroSD card
SCREEN		Included Full HD	Included Full HD	



All-In-One-Box Concept*

With the included accessories you can convert almost any conventional microscope into a digital microscope. *Applies to Moticam 1080N and 4000X.

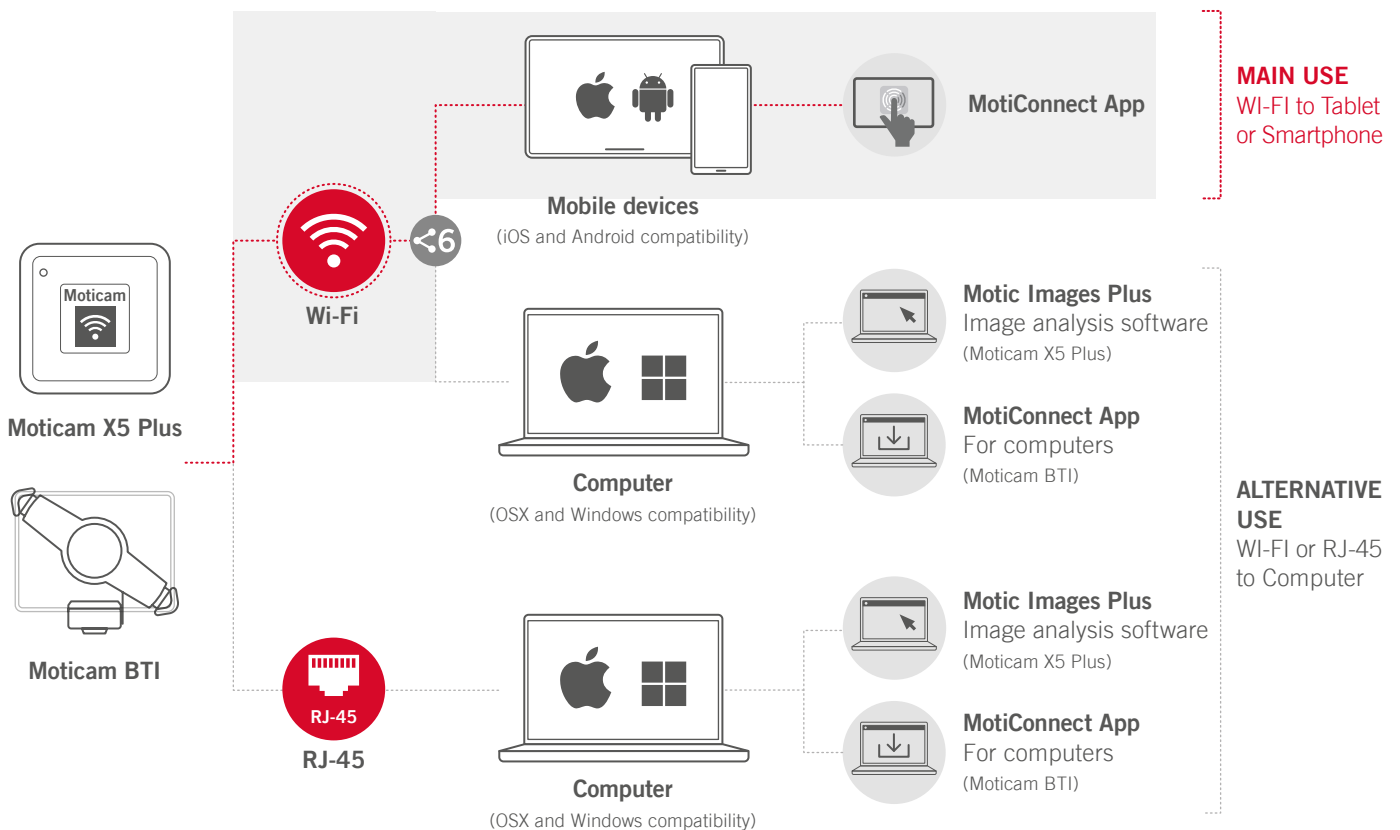
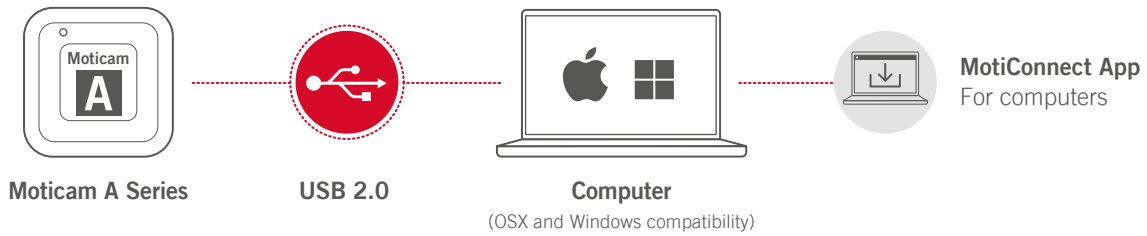


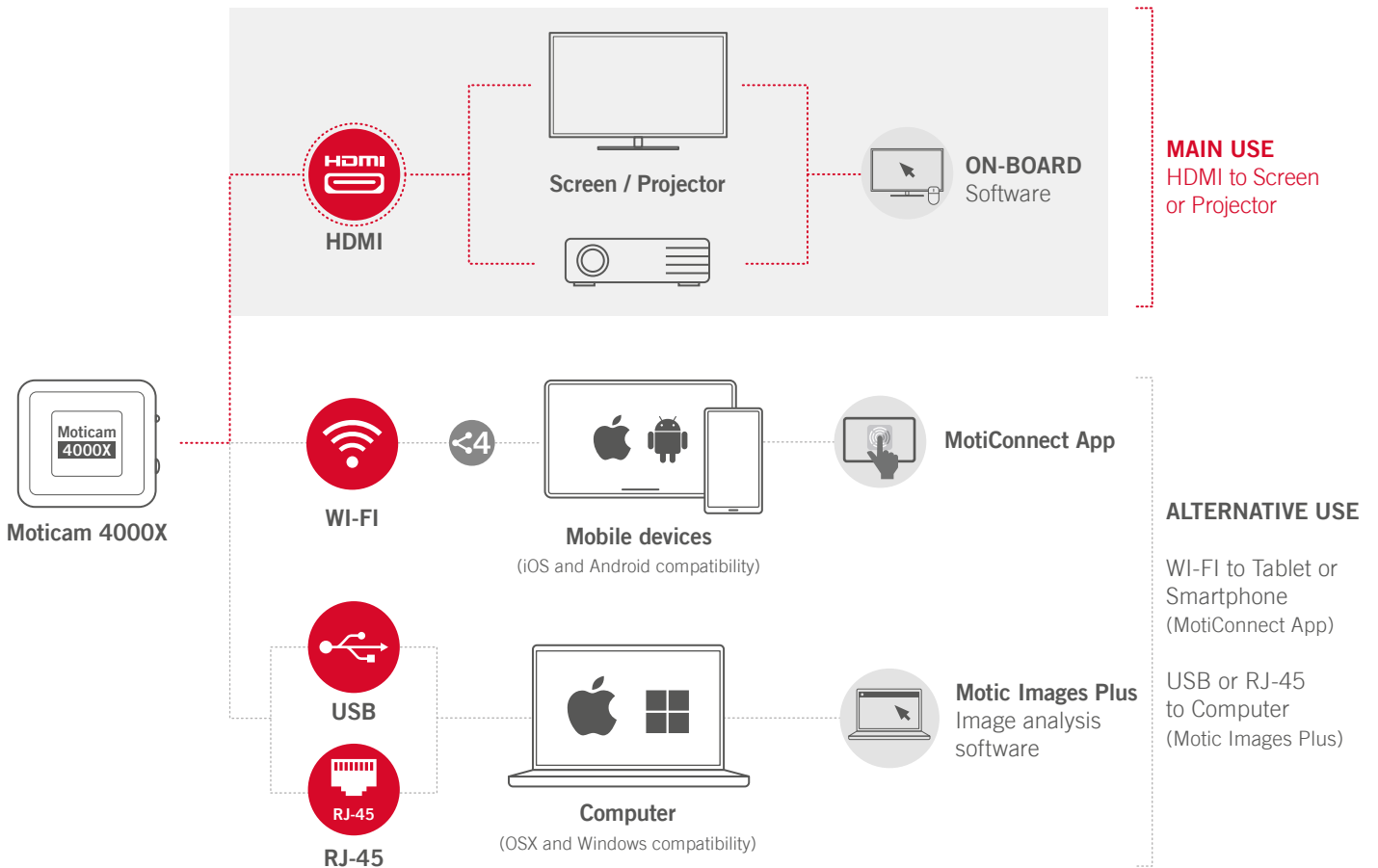
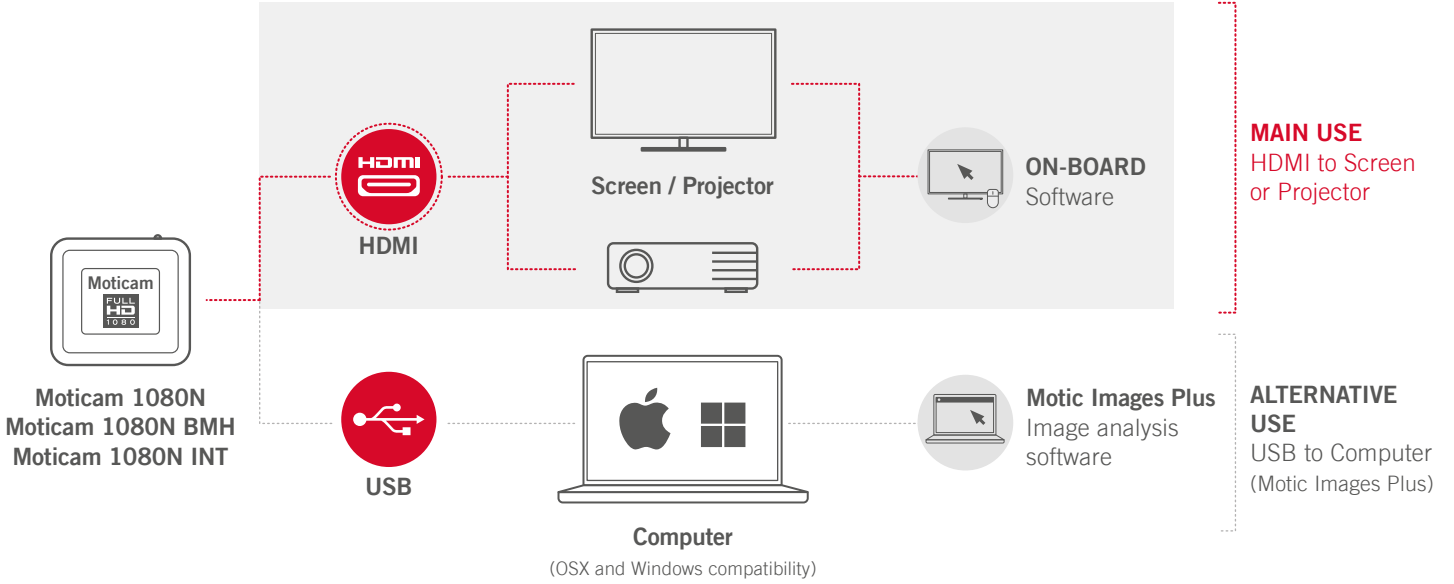
On-board Software

Display your live images on a screen by connecting the camera through the HDMI port. Make live measurements, notes, image adjustments and more without a computer, the on-board software can be controlled through the screen by connecting a USB mouse to the camera.



CONNECTIVITY





COMPARISON CHART

USB STARTER LINE | MOTICAM A SERIES



SKU	1100600101412	1100600101192
Name	Moticam A1	Moticam A2
Sensor type	sCMOS	
• Sensor size	1/3.1"	1/3.1"
• Imaging area	5.95 mm (Diagonal)	5.95 mm (Diagonal)
• Capture resolution	1 MP	2 MP
Image capture resolution (on SD-card)	-	-
Video capture resolution (on SD-card)	-	-
• Live display mode through USB	1280 x 720, 1024 x 768 px	1920 x 1080, 1280 x 720 px
Live display mode through Wi-Fi	-	-
Live display mode through Ethernet	-	-
Live display mode through HDMI	-	-
• Pixel size	4.1 x 4.1 µm	2.7 x 2.7 µm
Scan mode	Progressive	
Shutter mode	Rolling Shutter	
Data transfer	USB 2.0	
• Max. frames per second (fps)	1280 x 720 @ 30 fps, 1024 x 768 @ 30 fps (*)	1920 x 1080 @ 30 fps, 1280 x 720 @ 30 fps (*)
Exposure time	-	-
Operating temperature	From -10 to +60 degrees Celsius non condensing	
Max. signal to noise ratio	-	-
Dynamic range	-	-
Sensitivity	>2000 mV	
Slot	-	-
Buttons	-	-
Support device	TWAIN, SDK and DirectShow Driver	
Supported OS	-	-
Minimum computer requirements	2 GHz dualcore - RAM memory 2 GB	
Lens mount	C-Mount	
Focusable lens	12 mm	
Screen	-	-
Software	MotiConnect for Windows 10, MAC OSX 10.9 or higher (download only)	
Functions	Still image and video capture, still image measurement, image adjustments, automatic and manual white balance, automatic and manual exposure, individual objective calibration system.	
Power supply	5 V (USB supply)	
Tablet bracket holder	-	-
Package includes	CS ring adaptor, focusable lens, 30 mm and 38 mm eyepiece adapters, USB 2.0 cable, Motic 4-dot calibration slide, macro tube, Calibration card	
Other features	Motic Images Plus Compatibility (Not included)	
Tablet specifications	-	-

(*) Frames per second under optimal lighting conditions and in compliance with computer technical requirements.



1100600101302	1100600101443	1100600101463
Moticam A5	Moticam A8	Moticam A16
	sCMOS	
1/2.8"	1/3"	1/2.3"
6.52 mm (Diagonal)	5.91 mm (Diagonal)	7.77 mm (Diagonal)
5 MP	8 MP	16 MP
-	-	-
-	-	-
2592 x 1944, 2048 x 1536, 1920 x 1080 px	3840 x 2160, 1920 x 1080 px	4608 x 3456, 3264 x 2448, 1920 x 1080 px
-	-	-
-	-	-
2 x 2 µm	1.34 x 1.34 µm	1.34 x 1.34 µm
	Progressive	
	Rolling Shutter	
	USB 2.0	
1280 x 720 @ 30 fps, 1024 x 768 @ 30 fps (*)	3840 x 2160 @ 15 fps, 1920 x 1080 @ 30 fps (*)	4608 x 3456 @ 15 fps, 3264 x 2448 @ 15 fps, 1920 x 1080 @ 30 fps (*)
-	-	-
	From -10 to +60 degrees Celsius non condensing	
-	-	-
-	-	-
	>2000 mV	
-	-	-
-	-	-
	TWAIN, SDK and DirectShow Driver	
-	-	-
	2 GHz dualcore - RAM memory 2 GB	
	C-Mount	
	12 mm	
-	-	-
	MotiConnect for Windows 10, MAC OSX 10.9 or higher (download only)	
	Still image and video capture, still image measurement, image adjustments, automatic and manual white balance, automatic and manual exposure, individual objective calibration system.	
	5 V (USB supply)	
-	-	-
	CS ring adaptor, focusable lens, 30 mm and 38 mm eyepiece adapters, USB 2.0 cable, Motic 4-dot calibration slide, macro tube, Calibration card	
	Motic Images Plus Compatibility (Not included)	
-	-	-

COMPARISON CHART

USB EXPERT LINE | MOTICAM S SERIES



SKU	1100600101081	1100600101091	1100600101111
Name	Moticam S1	Moticam S3	Moticam S6
Sensor type	sCMOS		
• Sensor size	1/3"	1/2.8"	1/1.8"
• Imaging area	6.09 mm (Diagonal)	6.44 mm (Diagonal)	8.92 mm (Diagonal)
• Capture resolution	1.2 MP	3 MP	6 MP
Image capture resolution (on SD-card)	-	-	-
Video capture resolution (on SD-card)	-	-	-
• Live display mode through USB	1280 x 960, 640 x 480 px	2048 x 1536, 1920 x 1080 px	3072 x 2048, 1536 x 1024 px
Live display mode through Wi-Fi	-	-	-
Live display mode through Ethernet	-	-	-
Live display mode through HDMI	-	-	-
• Pixel size	3.75 x 3.75 µm	2.5 x 2.5 µm	2.4 x 2.4µm
Scan mode	Progressive		
• Shutter mode	Rolling Shutter		
Data transfer	USB 3.1		
• Max. frames per second (fps)	1280 x 960 @ 120 fps 640 x 480 @ 240 fps (*)	2048 x 1536 @ 60 fps 1920 x 1080 @ 60 fps (*)	3072 x 2048 @ 30 fps 1536 x 1024 @ 50 fps (*)
• Exposure time	15 µs to 2 s	21 µs to 2 s	16 µs to 2 s
Operating temperature	From -10 to +60 degrees Celsius non condensing		
• Max. signal to noise ratio	-	0.15 mV @ 1/30 sec	-
Dynamic range	-	-	-
• Sensitivity	2350 mV(G) @ 1/30 s	600 mV(G) @ 1/30 s	425 mV(G) @ 1/30 s
Slot	-	-	-
Buttons	-	-	-
Support device	TWAIN, SDK and DirectShow Driver		
Supported OS	-	-	-
Minimum computer requirements	2 GHz dualcore - RAM memory 2 GB - Video memory min. 512 MB		
Lens mount	C-Mount		
Focusable lens	-	-	-
Screen	-	-	-
Software	Motic Images Plus for Windows 10, MAC OSX 10.9, Linux UBUNTU1604 or higher		
Functions	Still image and video capture, still image measurement, image adjustments, automatic and manual white balance, automatic and manual exposure, individual objective calibration system.		
Power supply	5 V (From USB Port)		
Tablet bracket holder	-	-	-
Package includes	CS ring adaptor, USB 3.1 cable, Motic 4-dot calibration slide, Motic Images Plus		
Other features	-	-	-
Tablet specifications	-	-	-

(*) Frames per second under optimal lighting conditions and in compliance with computer technical requirements.



1100600101211	1100600101401	1100600101101	1100600101121
Moticam S12	Moticam S20	Moticam Pro S5 Lite	Moticam Pro S5 Plus
sCMOS			
1/1.7"	1"	2/3"	
9.33 mm (Diagonal)	15.86 mm (Diagonal)	11.1 mm (Diagonal)	
12 MP	20 MP	5 MP	
-	-	-	-
-	-	-	-
4000 x 3000, 2048 x 1080 px	5472 x 3648, 2736 x 1824 px	2448 x 2048, 1224 x 1024 px	
-	-	-	-
-	-	-	-
3.75 x 3.75 µm	3.75 x 3.75 µm	3.45 x 3.45 µm	
Progressive			
Rolling Shutter		Global shutter	
USB 3.1			
1280 x 960 @ 120 fps 640 x 480 @ 240 fps (*)	1280 x 960 @ 120 fps 640 x 480 @ 240 fps (*)	2448 x 2048 @ 37.5 fps 1224 x 1024 @ 88.4 fps (*)	32448 x 2048 @ 68.3 fps 1224 x 1024 @ 175.8 fps (*)
15 µs to 2 s	15 µs to 2 s	14 µs to 2 s	7 µs to 2 s
From -10 to +60 degrees Celsius non condensing			
0.1 mV @ 1/30 s			
-	-	-	-
2350 mV(G) @ 1/30 s	2350 mV(G) @ 1/30 s	1146 mV(G) @ 1/30 s	
-	-	-	-
-	-	-	-
TWAIN, SDK and DirectShow Driver			
-	-	-	-
2 GHz dualcore - RAM memory 2 GB - Video memory min. 512 MB			
C-Mount			
-	-	-	-
-	-	-	-
Motic Images Plus for Windows 10, MAC OSX 10.9, Linux UBUNTU1604 or higher			
Still image and video capture, still image measurement, image adjustments, automatic and manual white balance, automatic and manual exposure, individual objective calibration system.			
5 V (From USB Port)			
-	-	-	-
CS ring adaptor, USB 3.1 cable, Motic 4-dot calibration slide, Motic Images Plus			
-	-	-	-
-	-	-	-

COMPARISON CHART

WI-FI & HDMI



SKU	1100600101322	1100600101491
Name	Moticam X5 Plus	Moticam BTI
Sensor type	CMOS	
• Sensor size	1/3"	
• Imaging area	6.25 mm (Diagonal)	
• Capture resolution	4 MP (2560 x 1440 pixels)	
• Image capture resolution (on SD-card)	-	-
• Video capture resolution (on SD-card)	-	-
• Live display mode through USB	-	Depending on tablet display resolution
• Live display mode through Wi-Fi	1280 x 720, 1920 x 1080 pixels (Full HD)	
• Live display mode through Ethernet	1280 x 720, 1920 x 1080 pixels (Full HD)	
• Live display mode through HDMI	-	-
• Pixel size	2.0 x 2.0 µm	
Scan mode	Progressive	
Shutter mode	Rolling shutter	
• Data transfer	Wi-Fi (2.4 & 5 GHz), Ethernet	
• Max. frames per second (fps)	1920 x 1080 @ 30 fps, 1280 x 720 @ 30 fps (depending on Wi-Fi strength) (*)	
• Exposure time	0,03 ms to 0,03 s	
Operating temperature	From -10 to +50 degrees Celsius non condensing	
Max. signal to noise ratio	38.3 dB	
Dynamic range	64.6 dB	
Sensitivity	1.9 V/Lux-sec (550 nm)	
• Slot	-	-
• Buttons	-	-
• Support device	Universal Web browser (HTML5)	
• Minimum computer requirements	2 GHz dualcore - RAM memory 2 GB - Video memory min. 512 MB	
• Lens mount	C-Mount	
• Focusable lens	12 mm	-
• Screen	-	-
• Software	MotiConnect App for iOS and Android and Motic Images Plus for Windows 10, MAC OSX 10.9 or higher	MotiConnect App for iOS and Android
• Functions	Still image and video capture, live and still image measurement, image adjustments, white balance, automatic & manual exposure, individual objective calibration system.	Still image and video capture, still image measurement, image adjustments, white balance, automatic & manual exposure, individual objective calibration system.
Power supply	12 V (External Power supply)	
• Tablet bracket holder	-	For tablets from 7" to 10"
• Package includes	CS ring adaptor, focusable lens, 30 mm and 38 mm eyepiece adaptors, Motic 4-dot calibration slide, macro calibration card, macro-tube, Motic Images Plus, universal power supply 100V-240V (CE)	CS ring adaptor, Motic 4-dot calibration slide, macro calibration card, universal power supply 100V-240V (CE)
• Other features	USB 5 V for power supply of external devices	
• Tablet specifications	-	Tablet not included. Users can use their own tablet and connect through Wi-Fi

(*) Frames per second under optimal lighting conditions and in compliance with computer technical requirements.



1100600101651	1100600101671	1100600101681	1100600101641
Moticam 1080N	Moticam 1080N BMH	Moticam 1080N INT	Moticam 4000X
CMOS			
1/2.8"			
6.46 mm (Diagonal)			
6 MP (3264 x 1836)		8MP (3840 x 2160 pixels)	
6 MP (3264 x 1836)		8MP (3840 x 2160 pixels)	
Full HD (1920 x 1080 pixels)		1080P (1920 x 1080 pixels)	
Full HD (1920 x 1080 pixels)		4K (3840 x 2160 pixels)	
-	-	-	4K (3840 x 2160 pixels)
-	-	-	4K (3840 x 2160 pixels)
Full HD (1920 x 1080 pixels)		4K (3840 x 2160 pixels)	
2.9 x 2.9 µm		1.45 x 1.45 µm	
Progressive			
Rolling shutter			
HDMI, USB, microSD card		HDMI, USB, Wi-Fi, Ethernet, microSD card	
USB: 1920 x 1080 (Full HD) @ 30 fps, HDMI: 1920 x 1080 (Full HD) @ 60 fps (*)		HDMI: 4K (3840 x 2160) @ 30 fps, USB3.0: 1920 x 1080 @ 30 fps, 3840 x 2160 @ 25 fps, Wi-Fi: 1920 x 1080 @ 25fps, 3840 x 2160 @ 12 fps	
20 ms ~ 10 s		0.03 ms ~ 1000 ms	
From -10 to +60 degrees Celsius non condensing		From -10 to +50 degrees Celsius non condensing	
-	-	-	-
-	-	-	-
-	-	-	300 mV with 1/30 s
microSD Card			
On/Off			
TWAIN, SDK and DirectShow Driver			
2 GHz dualcore - RAM memory 2 GB - Video memory min. 512 MB		Core2, 2.8 GHz, RAM memory 8 GB	
C-Mount		C-Mount	
12 mm	-	-	12 mm
-	11.6" Native 1920 x 1080 pixels Full HD Screen with Bracket		-
On-board Software and Motic Images Plus for Windows 10 and MAC OSX or higher		On-board Software, Motic Images Plus for Windows 10 and MAC OSX or higher and MotiConnect App for iOS and Android	
Including exposure, gain, white balance, color adjustment, sharpness and denoising control, zoom, mirror, comparison, freeze, measure, cross, browse function			
12 V (External Power supply)			
-	-	-	-
CS ring adaptor, focusable lens, 30 mm and 38 mm eyepiece adapters, Motic 4-dot calibration slide, macro tube, universal power supply, HDMI cable, USB cable, USB pendrive with Motic Images Plus	CS ring adaptor, Motic 4-dot calibration slide, universal power supply, HDMI cable, USB cable, USB pendrive with Motic Images Plus	Motic 4-dot calibration slide, universal power supply, HDMI cable, USB cable, USB pendrive with Motic Images Plus	CS ring adaptor, focusable lens, 30 mm and 38 mm eyepiece adapters, Motic 4-dot calibration slide, macro calibration card, macro tube, universal power supply, HDMI cable, USB 3.0 cable, Motic Images Plus
USB port for connecting a mouse to enable software control			
-	-	-	-

