4K USB medical camera for c-mount attachment

When details matter. The scopeCam gives scope users more functionality and communication options, with the smallest 4K C-mount medical camera on the market. The standard attachment type means most systems can be upgraded with a dedicated camera system. Hands-free image capture adds no time to treatments, allowing the doctor to use images with every patient to explain treatment need and progress. Everyday communication increases treatment acceptance rates, patient satisfaction and patient retention.



scopeCam in grey anodized finish Product No.: CMPX01\_GR

- > The smallest multi-mount 4K medical camera for microscope use
- > Standard c-mount attachment allows use with existing microscopes and DSLR camera lenses.
- Supports attachment to most microscope brands and styles.
- > Always ready to use, USB plug-and-play simplicity
- Hands-free operation with foot pedal
- > Includes futudent recording software and MyDentalBook to share images with patients and colleagues
- 4K / 1080p / 720 p @ 30fps
- 8.3MP images



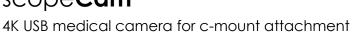
scopeCam in black anodized finish Product No.: CMPX01\_BL

#### **OEM** products - Our camera, your brand.

OEM clients may request customizations such as: OEM logo / labelling on the camera, the surface finish type and colour, OEM company information in the camera firmware.

## **TECHNICAL DATA**

Sensor	SONY IMX 415 sensor					
Video res. & framerate	4K (3840 x 2160p) @ 30 fps Full HD (1920 x1080p) @ 30 fps HD (1080 x 720p) @ 30 fps					
Image size (aspect ratio)	8.3MP (16:9) maximum					
Lens options	Lenses are on the microscope and the image size / magnification depends on the microscope. There is no lens provided with the scopeCam.					
Examples of image size based on proCam XS.	proCam XS lens size	At distance	Image width ratio	Magnification	Depth of field (@45 cm)	
	8 mm	40 cm	32	1.3x	> 20 cm	
Similar results expected from scopeCam.	16 mm	40 cm	14	2.9x	15cm	
	25 mm	40 cm	8	5.0x	9 cm	
jrom scopecum.	35 mm	40 cm	6	6.9x	5 cm	
Materials	Aluminum, brass, electronics					
Dimensions	37mm diameter x 26mm tall without sensor cover 37mm diameter x 32.5mm tall with sensor cover					
Weight	46g without sensor cover / 56g with sensor cover					
Degree of protection	IPX0 – no protection					
Mounting options	Standard c-mount described in specification 1-32UN-2A in the ANSI B1.1 standard: Imperial: 1" x 32 threads per inch					
Camera control options	mera control options  PC software / keyboard interface  USB Foot pedal (standard hands-free image capture)					



Cable and Signal	USB 2.0 Hi-Speed (480Mbit/s) Ø4mm cable with braided shield microUSB left-hand connector standard
Cable lengths	5m with USB cable (4mm dia.), up to 10m with active USB extension cable (4.75mm dia).
IEC 60601-1	Class I Type B protection class.  OEM clients are responsible to verify IEC 60601-1 for their installation.
IEC 60601-1-2	CISPR 11 Group 1 Class B classification OEM clients are responsible to verify IEC 60601-1-2 for their installation.
Rated power	5 V d.c. / 100mA nominal / 150mA maximum
Mode of Operation	Continuous operation as a USB device when PC is ON.  OFF when USB port is disabled or PC is off.
Compliance	Class I EU MDR / FDA Class I Exempt / CE Marked / RoHS compliant

## **COMPUTER CONFIGURATION**

COLLICIENT							
	8GB RAM or higher						
	Intel graphics card						
Basic	USB2 or USB3 port + additional port for USB foot pedal						
requirements for	Identified as UVC driver camera device						
all systems	Network / internet if used for sharing images						
	CPUBenchmark.net rating of 3000 (see video quality below)						
	IEC 60601-1 compliant PC fo						
Windows basic	Windows 10 or later operating system						
requirements	NET Framework 4.5						
requirements	Hardware encoding with QuickSync technology						
MacOS basic	OS X version 10.13 (High Sierra) or newer						
requirements	Recommended MacBook Pro, iMac, Mac-mini from 2018 or newer.						
requirements	Possible to use FullHD use MacBook Pro/Air, iMac, Mac-mini from 2017 or newer.						
	HD (720p) mode	Full HD (1080p) mode	4K (2160p)				
Video quality	> Screen resolution of	> Screen resolution of	> 16GB RAM				
requirements	1024x768 or higher.	1920x1080 or higher.	> Screen resolution of 3840x2160 or more.				
	> CPU rating over 3000.	> CPU rating over 5000.	> CPU rating over 10000.				
	The following controls and s	tandard with every camera:					
Controlling the	> Foot pedal to capture images and video						
system	> Camera software GUI						
	> PC Keyboard & Mor	use					

# **INTEGRATION RECOMMENDATIONS**

Electrical recommendations	<ul> <li>Check the camera for interference from equipment leakage currents. Electrical interference may show as a signal interruption, image jumps or flickers.</li> <li>Additional grounding and isolation / insulation may be required for OEM installations.</li> <li>Install away from other electrical devices, especially mains power parts.</li> <li>Strain relief cables to prevent damaging the USB port of the camera.</li> <li>Hi-speed USB port protection is required to the following specification:         <ul> <li>500mA (internal DC/DC) / ESD protection (20kV) / Isolation withstands 5kV<sub>RMS</sub></li> </ul> </li> </ul>
Mechanical recommendations	<ul> <li>Install the scopeCam and check the image focus in the working range of the microscope.</li> <li>Use the shim disks provided to adjust the scopeCam focal distance.</li> <li>The shim depth depends on the microscope model.</li> <li>Once known, clients may request that all scopeCams be shipped with the shim disks installed to the correct depth.</li> <li>The sensor must be kept covered when the camera is not attached to the microscope.</li> <li>If there is dirt on the sensor, use dry air blower pump to remove.</li> <li>The camera may be mounted to any external c-mount attachment including:         <ul> <li>microscopes</li> <li>endoscopes</li> <li>camera lenses</li> </ul> </li> </ul>

## **PRODUCT PHOTOS**

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As delivered. The scopeCam is available in two colour options.



The scopeCam is delivered with a protective sensor cover. The sensor cover is removed for installation.



Example installation.

Some microscopes require an adapter for the beam splitter to accommodate a cmount camera. Check with your microscope distributor / manufacturer.



Serial number of camera	SN
Manufacturer Name, Address, Date of Manufacture	•••
CE mark	C€
Read Instructions / QR code to access instructions	[]i
Medical Device symbol	MD