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

scopeCam in black anodized finish
Product No.: CMPX01_BL

> 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

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. *Similar results expected from scopeCam.*	*proCam XS lens size*	*At distance*	*Image width ratio*	*Magnification*	*Depth of field (@45 cm)*
	8 mm	*40 cm*	*32*	*1.3x*	*> 20 cm*
	16 mm	*40 cm*	*14*	*2.9x*	*15cm*
	25 mm	*40 cm*	*8*	*5.0x*	*9 cm*
	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	PC software / keyboard interface USB Foot pedal (standard hands-free image capture)

Cable and Signal	USB 2.0 Hi-Speed (480Mbit/s) ⌀4mm 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

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

INTEGRATION RECOMMENDATIONS

Electrical recommendations	− Check the camera for interference from equipment leakage currents. Electrical interference may show as a signal interruption, image jumps or flickers. − Additional grounding and isolation / insulation may be required for OEM installations. − Install away from other electrical devices, especially mains power parts. − Strain relief cables to prevent damaging the USB port of the camera. − Hi-speed USB port protection is required to the following specification: o 500mA (internal DC/DC) / ESD protection (20kV) / Isolation withstands 5kV$_{RMS}$

Mechanical recommendations	− Install the scopeCam and check the image focus in the working range of the microscope.
	    o Use the shim disks provided to adjust the scopeCam focal distance.
	    o The shim depth depends on the microscope model.
	    o Once known, clients may request that all scopeCams be shipped with the shim disks installed to the correct depth.
	− The sensor must be kept covered when the camera is not attached to the microscope.
	    o If there is dirt on the sensor, use dry air blower pump to remove.
	− The camera may be mounted to any external c-mount attachment including:
	    o microscopes
	    o endoscopes
	    o camera lenses

PRODUCT PHOTOS

	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 c-mount camera. Check with your microscope distributor / manufacturer.

	Serial number of camera	**SN**
	Manufacturer Name, Address, Date of Manufacture	🏭
	CE mark	$\mathsf{C}\,\mathsf{E}$
	Read Instructions / QR code to access instructions	📖ℹ️
	Medical Device symbol	**MD**