

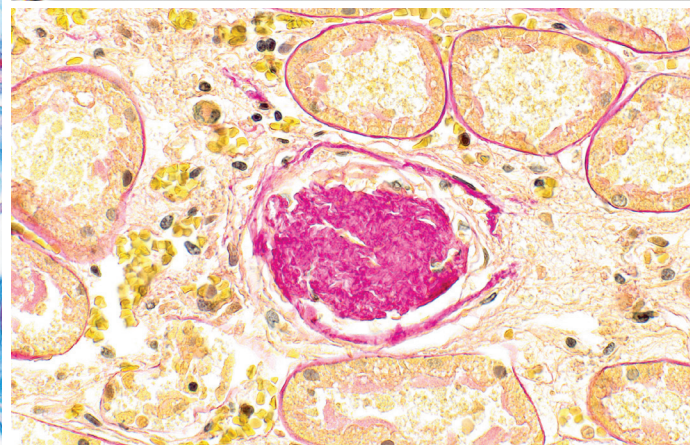
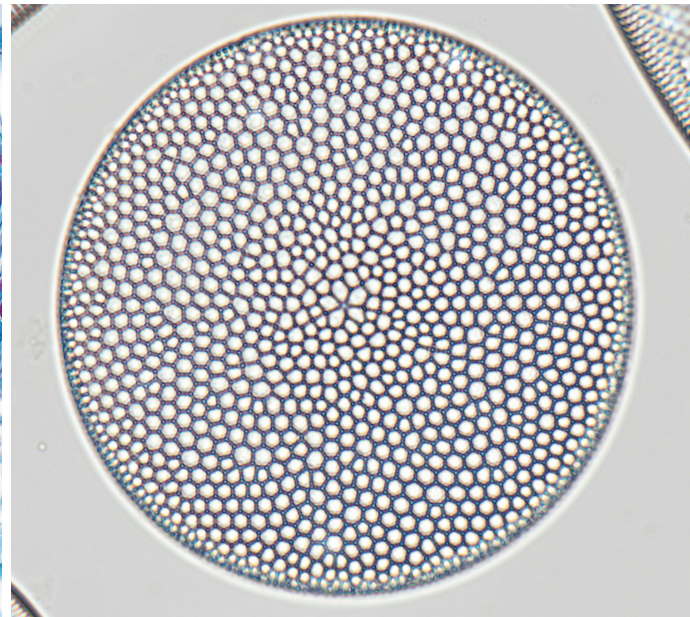
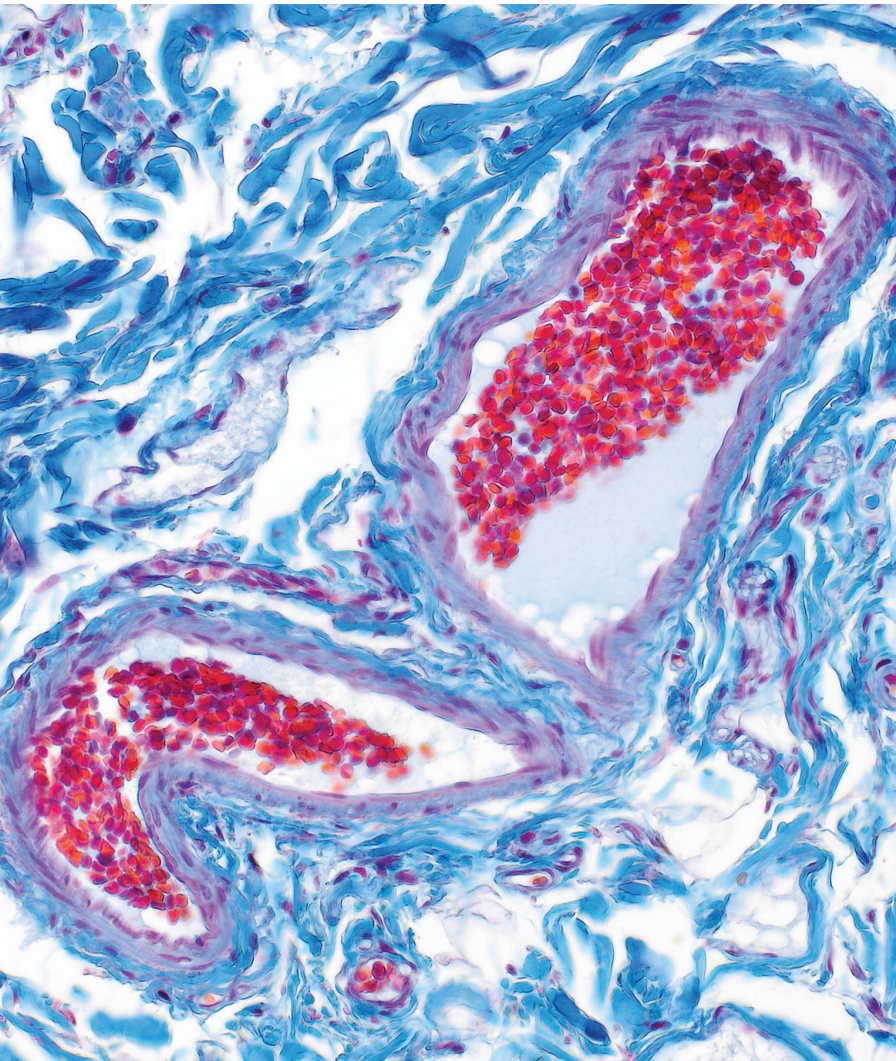
OLYMPUS[®]

Your Vision, Our Future

Microscope Digital Camera

SC180

True-to-Life On-Screen Imaging



High Resolution for True-to-Life On-Screen Microscopy

The high-resolution, 18-megapixel Olympus SC180 color camera reveals a sample's fine details and structures. The excellent spatial resolution provided by the camera's sensor element combined with a pixel count of 18 million (18 megapixels) exploits the full optical resolution of the objectives and enables users to make observations exclusively on-screen without using the eyepieces, fostering collaboration and audience engagement during full-screen presentations. With excellent performance for brightfield applications, the SC180 camera accelerates routine work, increases throughput in various applications through fast live focusing and noise cancellation, and makes the screen the standard for documentation, evaluation, and discussion.

4K Microscopy

Fast 4K UHD live image enables users to make observations exclusively on-screen without using the eyepieces

One-Click Imaging

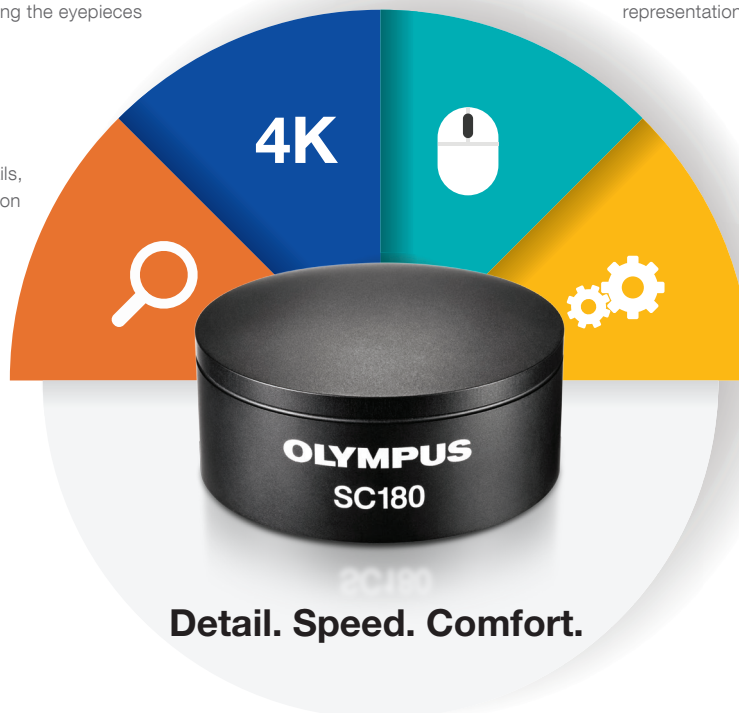
Easily acquire high-quality, true-to-life images thanks to noise cancellation and accurate color representation

Resolving Power

With 18 megapixels, clearly image the structures and details, especially with low magnification objectives

Fast and Easy to Use

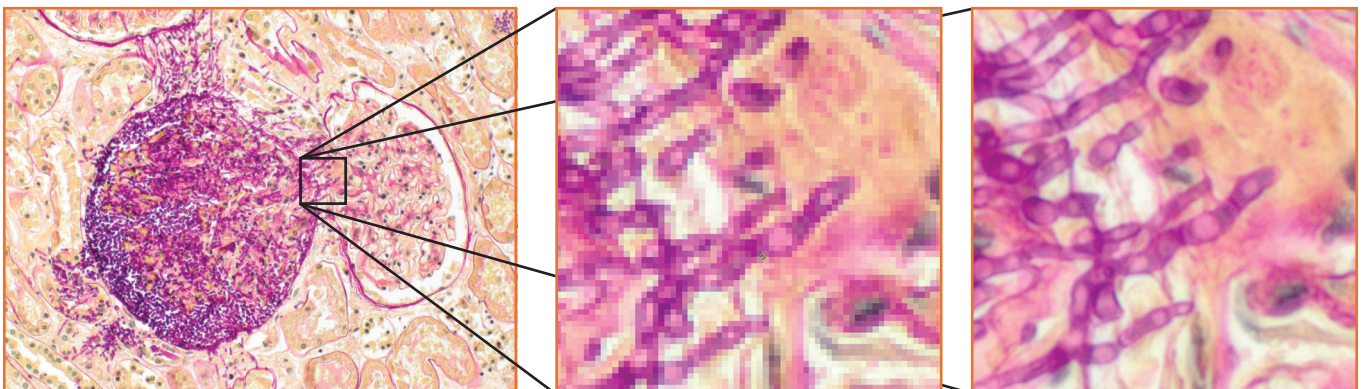
High frame rates provide fluid sample navigation and real-time image processing delivers high throughput



Resolving Power

Capture and document tiny details even at very low magnification

With almost four times more pixels than a standard microscope camera, the SC180 camera utilizes the full optical resolution of the objectives, making it a suitable choice for any application that requires display, measurement, and analysis to document a sample's details and structures.



Cross section of a human kidney

Detail zoom of an image acquired with a standard camera, UPlanSApo 10x, 1x TV-adaptor

Detail zoom of an image acquired with an SC180 18-megapixel camera, UPlanSApo 10x, 1x TV-adaptor

4K 4K Microscopy

Wide-Screen Presentations and Consultations

Digital imaging has revolutionized sharing microscope images. The SC180 camera offers even more, with a fast 4K UHD live image which makes the screen the new standard for documentation, evaluation, and discussion. This enables user-friendly on-screen operation that enhances sample observation, facilitates effective collaborations, and engages the audience during presentation.

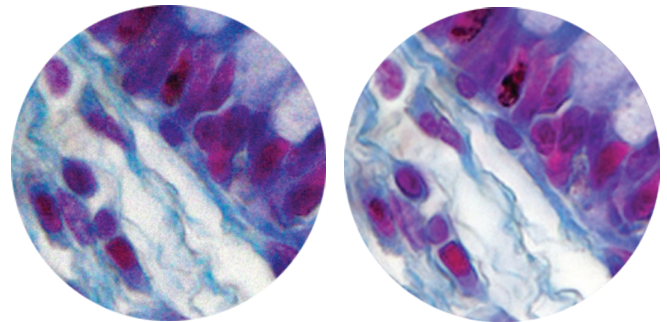


Experience how 4K digital technology is revolutionizing microscope cameras. The 4K UHD SC180 microscope camera enables users to view a sample's fine details live on-screen.

One-Click Imaging

Vivid, low-noise images

Real-time image processing capabilities create low-noise images for acquisitions with excellent color reproduction. Olympus Smart Image Averaging (OSIA) helps capture the sample's details regardless of imaging conditions. The automatic white balance (AWB) removes unwanted color casts automatically during live image acquisition, while high-fidelity colors are represented immediately using Olympus' dedicated color reproduction technology. Predefined color modes are supported, enabling the operator to tailor the camera to the requirements of different applications.



Standard camera without OSIA

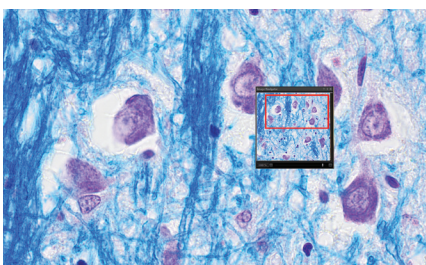
SC180 camera with OSIA

Active noise reduction helps make hidden details that would otherwise be blurred by noise visible. OSIA cancels image noise without reducing the frame rate or introducing artifacts, delivering clear images. (Specimen: Human colon)

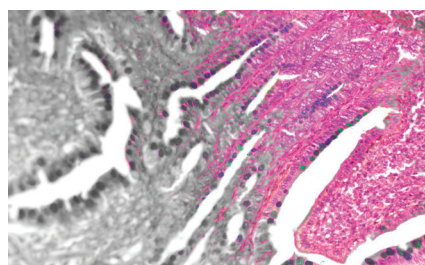
Fast and Easy to Use

Accelerate your daily work

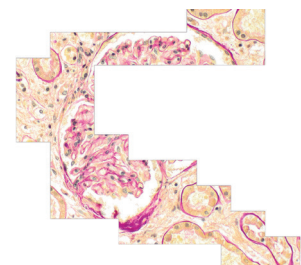
When controlled by Olympus imaging software, working with the SC180 camera is convenient and intuitive, helping increase productivity and throughput. The Focus Peaking technology shows in real-time which parts of the sample are focused, enabling users to rapidly acquire images with excellent sharpness and quality. High frame rates enable users to navigate through their samples quickly, while the Fast Live function maintains a high frame rate no matter the exposure. This makes fluid sample navigation and precise focusing easier, even in low light levels. Automatic and manual image stitching quickly combines images from multiple sample regions into a single high-quality brightfield panoramic image. Images can be further processed for documentation and then easily shared.



Fast and fluid navigation across the samples

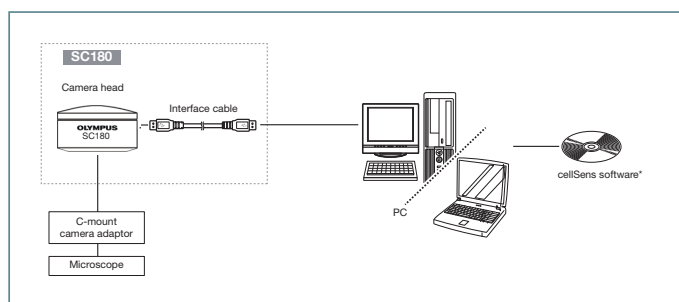


Using the focus peaking technology, the desired area can be easily brought into focus



Digital image stitching (manual or automatic) can expand the field of view to analyze large areas of interest

SC180 SYSTEM DIAGRAM



* cellSens software is not for clinical diagnostic use.

SC180 SPECIFICATIONS

Image Sensor	Color CMOS
Sensor Size	1/2.3 inch (6.140 mm × 4.605 mm) 4912 × 3684 pixels (4:3)
Resolution (max.)	3840 × 2160 pixels (4K UHD 16:9) 1920 × 1080 pixels (Full HD 16:9)
Pixel Size	1.25 × 1.25 μm
Binning	2 × 2, 4 × 4
A/D Converter (Bit Depth)	12 bits
Exposure Times	22 μs–1s 10.5 fps at 4,912 × 3,684 pixels (4:3) 23.6 fps at 2,456 × 1,842 pixels (4:3) 45 fps at 1,224 × 920 pixels (4:3)
Live Frame Rates	14 fps at 4,912 × 2,762 pixels (16:9) 25 fps at 3,840 × 2,160 pixels (4K UHD 16:9) 31 fps at 1,920 × 1,080 pixels (Full HD 16:9) 59 fps at 1,224 × 688 pixels (16:9)
Cooling System	Passively cooled
External Trigger	-
Data Transfer	USB 3.0
Color Profiles	Olympus real-time ICC color profiles
Partial Readout	√
Remarks	USB 3.0 interface 4K UHD and Full HD support, 16:9 aspect ratio Automatic White Balance (AWB) Focus Peaking Manual Focus Assist OSIA - Olympus Smart Image Averaging (active noise reduction) Fast Live (high frame rate in low light conditions)
PC Control	Microsoft® Windows® 10 (64 bit only) Microsoft® Windows® 8/8.1 (64 bit only) Microsoft® Windows® 7 (64 bit only)
Dimensions (W × D × H)	58 mm × 58 mm × 32 mm
Weight	Approx. 188 g
Camera Mount	C-mount

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- OLYMPUS CORPORATION is ISO9001 certified.

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