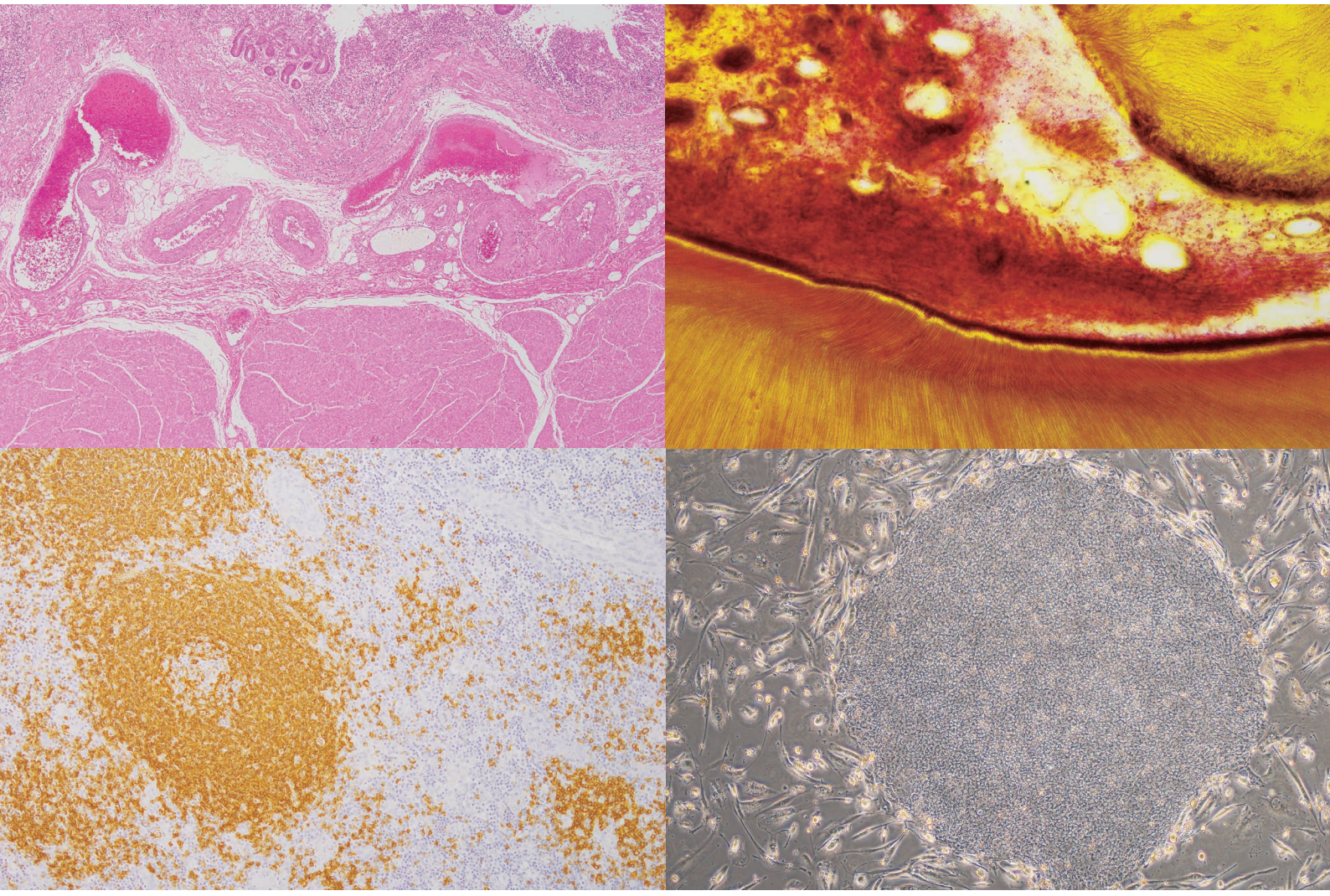
OLYMPUS

Microscope Digital Camera

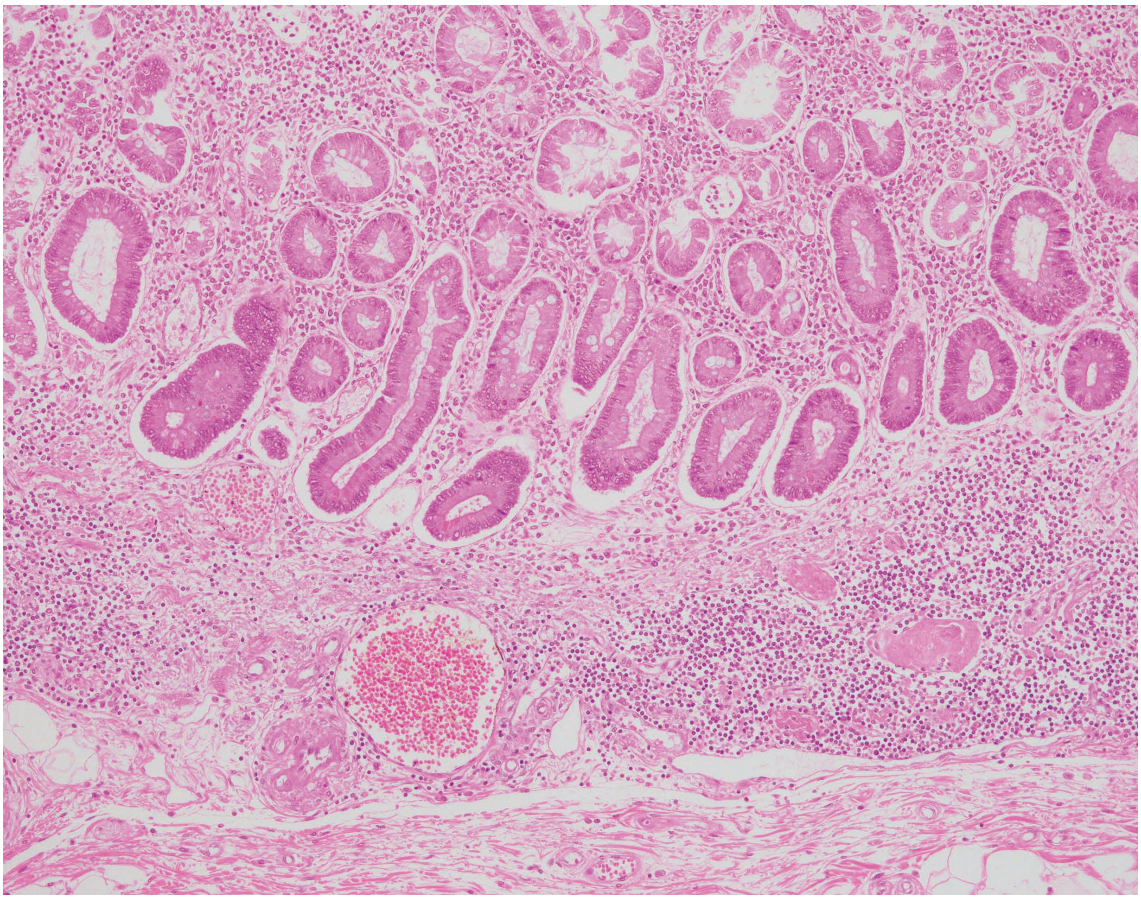
DP27

High Resolution and Accurate Colors for Documentation



Not for clinical diagnostic use.

High Image Quality and Reliable Color Reproduction with 5.05-Megapixel High-Resolution CCD. Streamline Documentation Procedures with High Frame-Rate Live Capture.



High Quality Image Design Optimized for Documentation

◎ 5.05-Megapixel High-Definition CCD

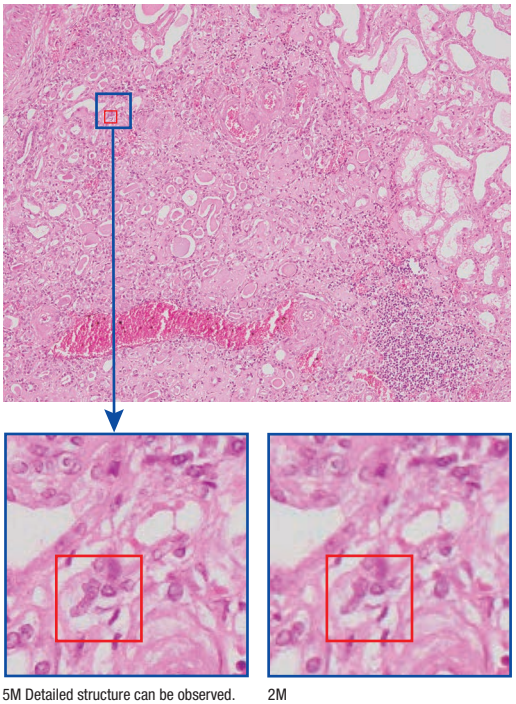
Equipped with an exceptional 5.05-megapixel CCD, the DP27 digital camera captures images at up to 2448 x 1920 pixel resolution. Large areas captured at low magnification offer exceptionally vivid clarity, even when enlarged several times.

◎ Excellent Color Reproduction

Precise reproduction of fine structures and subtle color differences allows areas of interests on the monitor to be identified with an accuracy equivalent to observation through microscope.

◎ 15 Frames Per Second Under High Resolution

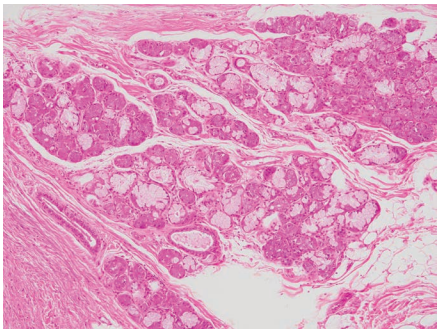
DP27 provides a fast and smooth live image at the 5.05 megapixel resolution, for quick and effortless panning and focusing. Even when working at Full HD resolution, a comfortably fast live image at 22 frames per second is available. As the non-compressed image is able to reproduce images with absolutely no degradation in quality, operators make simple focusing and framing.



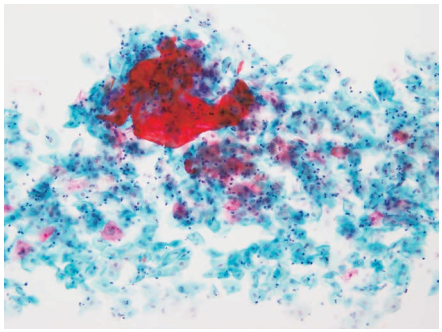
5M Detailed structure can be observed. 2M

◎ Three Color Modes

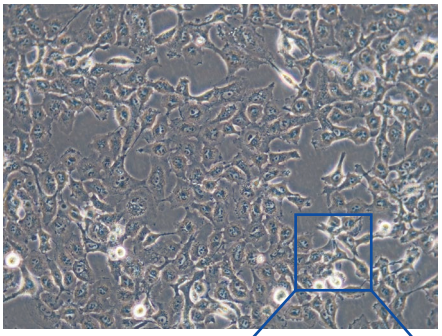
Three color modes are provided, enabling the operator to tailor the image to suit the requirements of different applications. By selecting one of the three preset modes, optimum images can be acquired under various samples and observations without having to change all the settings each time.



High fidelity mode

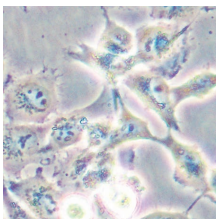


Normal mode

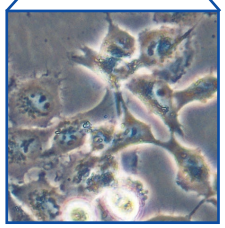


Cell culture mode

- **High fidelity mode :** Reliable color reproduction equivalent to microscope observation.
- **Normal mode :** Enhanced color facilitates acquisition of even pale stained specimens.
- **Cell culture mode :** Dedicated to phase contrast and DIC observations.



Conventional mode



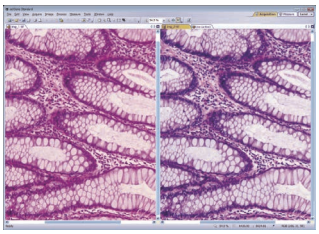
Cell culture mode:
Halation is reduced to allow clear observation of cell shapes.

Superior Functionality and Enhanced Scalability Give You More Flexibility and Operational Convenience

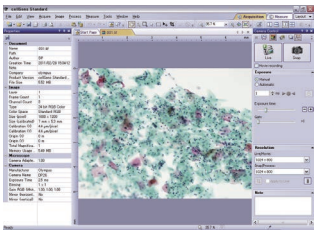
◎ cellSens Imaging Software

(Not for Clinical Diagnostic Use.)

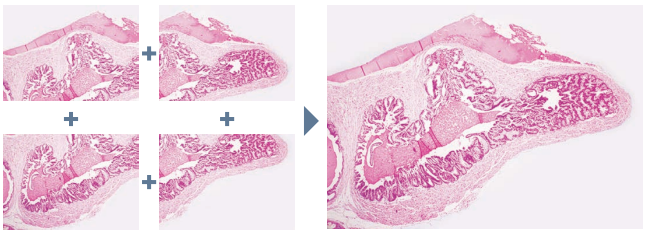
Adjust white balance, switch to live display and capture images, all at the touch of a button. cellSens offers an array of image processing capabilities, including a versatile shading function that enables real-time correction for variations in peripheral field illumination intensity. In addition, exposure settings, magnifications, and other parameters are saved with acquired images for easy storage and retrieval.
The innovative cellSens software offers a wide array of useful and easy-to-use functions. Split-screen display, for example, provides simultaneous viewing of multiple images, or a live image and the most recently captured image. Pictures taken at adjacent locations can also be stitched together to create a single image using the Multi-Image Array functionality. cellSens software has the capability to store user comments with captured images, which can be referred to as necessary or searched using the cellSens Database.



Split-screen Display



File management



Automatic & Manual Image Stitching

◎ Easy USB 3.0 Connection

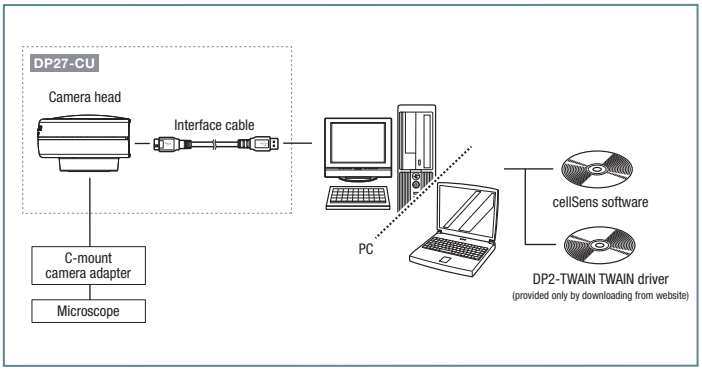
The DP27 is compliant with the USB 3.0 standard for quick connection to compatible computers and fast transfer of image data.

Flexible Design with Stand-Alone Operation Capability

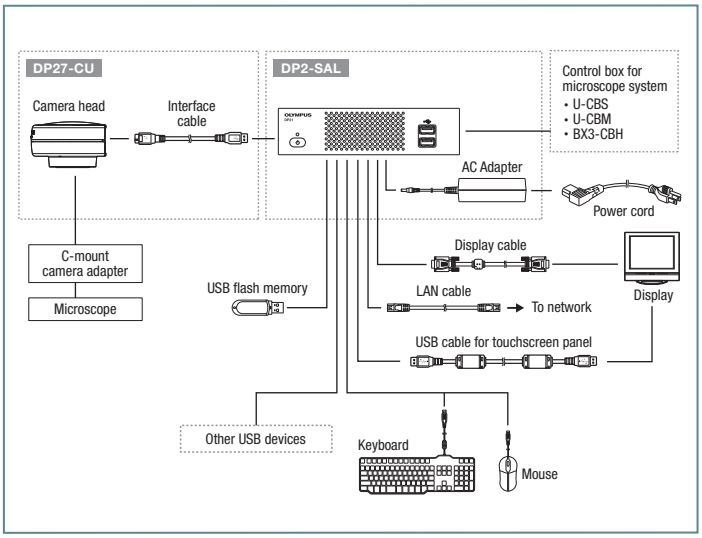
◎ Simple, Space-Saving Stand-Alone Connectivity

While PC-connected operation provides optimal functionality and scalability, the DP27 can also function effectively in a stand-alone configuration, which features simple operation and easy control from mouse, keyboard or touchscreen monitor.

DP27 PC configuration system diagram



DP27 stand-alone configuration system diagram



DP27 Specification

Type		Single chip color CCD camera
Imaging sensor	Size	2/3 inch color CCD
	Effective pixels	5.05 megapixels (total: 5.24 megapixels)
	Scanning method	Progressive scanning
	Color filter	RGB primary color on-chip filters
	Recording area	8.4(H) × 6.62(V) mm, diagonal length 10.73 mm
	Maximum recorded pixels	4.7 megapixels (2448 × 1920)
Mount		C-mount
Sensitivity		Equivalent to ISO 100/200/400
Metering Area		Full image / 30% / 1%
Exposure control		Auto/Manual AE lock (enabled when Auto Exposure is selected) Exposure compensation: Area -2EV to +1EV, +side:1/6EV step, - side:1/3EV step (enables when Auto Exposure is selected.)
Exposure time		Auto: 1/20,000s to 2s Manual: 1/20,000s to 8s
Camera I/F		USB3.0 Micro-B
Dimension	Camera Head	77 (W) × 69.5 (D) × 42.5 (H) mm
	Control Unit	180 (W) × 200 (D) × 47 (H) mm

	PC connection	Stand-alone
Image size	2448 × 1920 1920 × 1080 (Full HD) 1224 × 960	2448 × 1920 1920 × 1080 (Full HD) 1224 × 960 1224 × 960 (AVI File)*1
Live image display (frame rate)	15fps (2448 × 1920) 22fps (1920 × 1080) 30fps (1224 × 960)	15fps (2448 × 1920) 22fps (1920 × 1080) 30fps (1224 × 960)
Compatible image display	—	1920 × 1200 WUXGA 1920 × 1080 Full HD 1680 × 1050 WSXGA+ 1600 × 1200 UXGA 1280 × 1024 SXGA 1280 × 960 QVGA 1280 × 854 WXGA 1280 × 768 WXGA 1024 × 768 XGA 1024 × 600 WSVGA 800 × 480 WVGA
Storage media	—	USB flash memory, USB-HDD
Controller interface	USB 3.0 (+5V / 900mA power output)	Camera I/F: USB 3.0 Type-A Display output: DVI-I (Digital/Analog RGB) I/F: USB 2.0 × 4, USB 3.0 × 1 Wired LAN: 100Base-TX/10Base-T Serial port: RS-232C D-Sub 9-pin Audio: Mic in, Line out
Scale display	According to cellSens*2 specifications	Scale view & burn in can be selected Available microscope total magnification: 0.01× to 9999.99× Up to 28 total magnifications can be memorized
Measuring functions	According to cellSens*2 specifications	Distance of 2 Points, 3 Points Circle, Distance between 2 Circle Centers, 3 Points Angle, 4 Points Angle, Perpendiculars, Polygon Area, Boundary Length, Distance of Parallel Lines, XY Distance, Count, Poly Line, and Cross Line

*1 With system limitations, skipping of frames may occur in the acquired movie depending on the specimen.
*2 cellSens software is not for clinical diagnostic use.

Image data courtesy of:
"Human iPS Cell colony"
Isao Asaka
Center for iPS Cell Research and Application, Kyoto University
(lower right, cover page)

- **OLYMPUS CORPORATION is ISO14001 certified.**
- **OLYMPUS CORPORATION is ISO9001 certified.**

OLYMPUS®
OLYMPUS CORPORATION
Shinjuku Monolith, 2-3-1 Nishi-Shinjuku, Shinjuku-ku, Tokyo 163-0914, Japan

Printed in Japan N8600028-012019

WolfLabs

Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct.
If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

www.wolflabs.co.uk

Tel : 01759 301142

Fax : 01759 301143

sales@wolflabs.co.uk

Please contact us if this literature doesn't answer all your questions.