

## USB5DPX

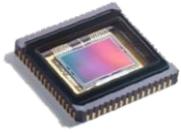
Global Shutter - Professional scientific CMOS Color Camera

- 01 Precision color reproduction      Algorithm ensures the best possible color fidelity
- 02 Global shutter technology        Rapid global shutter results in undistorted image capture
- 03 Professional software              Revolutionary computing software features

## Excellent imaging performance

for both brightfield and fluorescence imaging needs

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Sony professional CMOS sensor

Uses a Sony 5 megapixel CMOS 2/3" sensor-IMX264, with 3.45 x 3.45  $\mu\text{m}$  pixels. The resolution of the captured image can reach 2448 x 2048. Images taken at low magnification readily resolved.

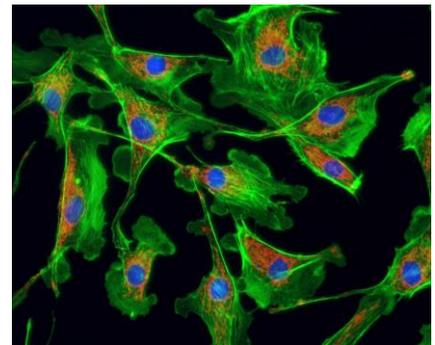
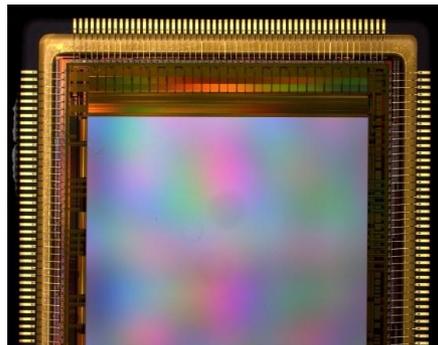
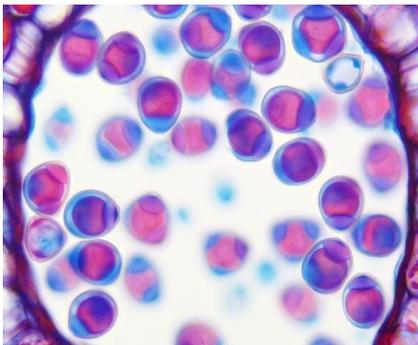


Stable high-speed transmission

USB 3.0 high-speed transmission interface, simple and convenient while ensuring a stable High transmission rate which allows fast focusing at high resolution. Imaging can be performed at a rate of 35 fps.

### ○ Excellent color reproduction

The use ISP color-interpolation algorithm effectively corrects the color deviation of the sensor's spectral response, to simulate the human eye's sensitivity to color. The true color in the eyepiece, whether it is a biological bright field, stereo or fluorescence image.



### ○ Advanced Global Shutter Technology

With global shutter technology, all pixels are exposed simultaneously, which allows accurate tracking and capture of dynamic samples and provides, crisp, undistorted, clear images of fast moving specimens.



Global shutter



Rolling shutter

# Capture V 2.0

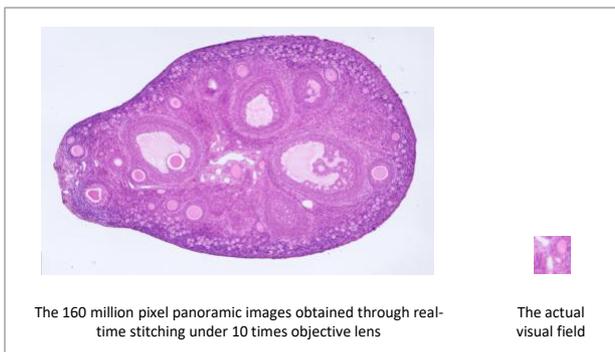
## Revolutionary computational imaging software

○ Innovative interface, workflow-based design, with a dramatically improved user experience!

From the user's point of view, taking into account the best operating procedures, through modular design, redefining the image acquisition - editing - measurement - report output workflow process.



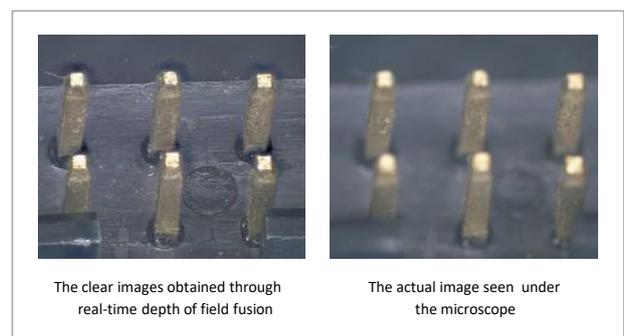
○ Core Technology I: "Real-time" image stitching



Capture 2.0 provides a breakthrough new technology with "real-time image stitching", which completely removes the limitation of a microscope's field of view. This is achieved through continuously stitching the image while the stage is moving. Enjoy the stunning experience of unlimited horizons with just one click!

○ Core Technology II: "Real-time" depth-of-field fusion

General microscopes focus only on shallow depth planes. To acquire large depth-of-field images, multiple static images of different focal points need to be post-processed. Reason, the operation is difficult and cumbersome. Capture V 2.0 revolutionizes the "real-time depth of field fusion", which produces perfect results just by turning the focus knob to switch the depth.



# Quality within reach

- Meticulous CNC arc processing
- Environmental protection spraying
- Stainless steel C ring with no debris



## USB5DPX specification

Product Model	USB5DPX
Sensor Model	IMX264LQR-C
Sensor Type	CMOS
Sensor Size	2/3"
Color/Mono	Color
Pixel Size	3.45 x 3.45(μm)
Resolution	2448(H) x 2048(V)
Frame	35fps(2448x2048) 35fps(1224x1024 2x2bin) 88fps(1224x1024)
Shutter Mode	Global
Exposure Time	0.13ms-15s
Automatic Set	Exposure, Color Scale, White Balance
Manually Set	Exposure, Gain, Noise Reduction, Gamma, Flat Field Correction
Color Temperature	2000-15000K
ADC Depth	12Bit
PC Software	Capture V2.0
Picture Format	JPG / PNG / TIFF
Operating System	Windows is supported and Linux/Mac is under development
PC Configuration	CPU: Intel Core i5 or better(Quad or more Core), RAM: 8G or more, OS: Windows 7/8/10 64bit
Multiple Cameras	Supports 4 Cameras Simultaneously in SDK
Data Interface	USB 3.0
Optical Interface	Standard C Mount
Camera Size	68 x 68 x 46 mm
Camera Weight	330 g

## Capture V2.0 software feature function

Intelligent 12-bit ISP color reproduction

Real-time depth of field fusion (Option)

Real-time image stitching (Option)

Real-time fluorescence image synthesis and editing

HDR image synthesis

Micro-imaging-based intelligent automatic exposure

Smart measurement workflow

Implements multiple iterations of workflow execution

Supports single shot, delayed camera

Automatic video and delay video generation

Output format selection

User parameter group save and load

Dynamic \ static measurement, layered measurement

Supports measuring gauges, layers, precision, naming, style

Implements drawing: points, lines, rectangles, polygons, circles, arcs,  
angles

Data export as TXT or Excel

Report generation and printing